This **CHARTER** is entered into by and between **St. Aloysius** ("**Sponsor"**) and **Broadway Academy** (**"School Governing Authority")**, the governing board of a new start-up Ohio public community school established as a public benefit corporation under Ohio Revised Code (R.C.) Chapter 1702.

WHEREAS, R.C. Chapter 3314 permits Ohio public community schools; and

WHEREAS, **St. Aloysius** is an authorized **Sponsor** under R.C. Chapter 3314; and

WHEREAS, the **School Governing Authority** is an Ohio public benefit corporation with its corporate principal place of business located at: 3398 East 55th Street, Cleveland, Ohio 44127 ("**School**") in Cuyahoga County, Ohio; and

WHEREAS, the **School** is located in the Cleveland Municipal School District; and

WHEREAS, the **School Governing Authority** wishes to fully state or restate its agreement to operate an Ohio community school;

NOW THEREFORE, the **School Governing Authority** and the **Sponsor** enter into this Charter pursuant to the following terms and conditions. All Attachments and Recitals to this Charter are incorporated by reference and made a part of this Charter.

ARTICLE I

Purpose

1.1 **Purpose**. This Charter authorizes the operation of the **School** pursuant to R.C. Chapter 3314. Such school shall be a public school, independent of any School District and is part of the State of Ohio Program of Education. Pursuant to R.C. Section 3314.01, the **School Governing Authority** may sue and be sued, acquire facilities as needed, and charter for services necessary for the operation of the School. The **School Governing Authority** may carry out any act and ensure the performance of any function that is in compliance with the Ohio Constitution, R.C. Chapter 3314, other statutes applicable to community schools and the terms of this Charter. The **School Governing Authority** covenants and agrees to Sections 1.2 through 1.6 below.

1.2 **Non-Profit Corporation**. The **School** is established and operated as a non-profit corporation under R.C. Chapter 1702 if established prior to April 8, 2003. The **School Governing Authority** shall maintain in good standing the **School's** status as a non-profit corporation. The **School Governing Authority** shall hold all rights to the name of the **School** and any trade names or fictitious names.

1.3 **Public Benefit Corporation**. The **School Governing Authority** must be an Ohio Public Benefit Corporation under R.C. 1702.01(P), if formed after April of 2003. Attached as Attachment 1.3 are the Certificate of Incorporation, Articles of Incorporation, and Code of Regulations. Any changes or updates in any of these documents must be reported in

writing to the **Sponsor** within three (3) business days of the effective date of such changes, along with a copy of all documentation and filings.

No later than December 31 of the year the school opens, the **School Governing Authority** shall apply to qualify as a federal tax exempt entity under Section 501(c)(3) of the Internal Revenue Code. The **School Governing Authority** shall submit a copy of the application as submitted to the IRS to the **Sponsor** within three (3) business days of submission. Any change in tax status of the **School** must be reported in writing to the **Sponsor** within three (3) business days after notice to the **School** or the **School Governing Authority**, with a copy of any documentation and official/governmental notices or letters.

1.4 **Sponsor**. The **Sponsor** shall carry out the responsibilities established by law, including:

(a) Monitor the **School's** compliance with the laws applicable to the **School** and with this Charter;

(i) Conduct site visits to the **School** as necessary, but at least twice annually while classes are in session; and

(ii) Report on an annual basis the results of the site visits to the Ohio Department of Education and to the parents of students enrolled in the community school; and

(b) Monitor and evaluate the academic performance and the organization of the **School** as delineated in Attachment 6.4 on at least an annual basis;

(i) The **Sponsor** recommends that all **Schools** complete the Ohio Improvement Process or equivalent.

(ii) If a **School** serving grades K-3 does not maintain a B in performance indicators and K-3 literacy the **School** shall complete the Ohio Improvement Process or equivalent; and

(iii) If a **School** serving grades 4-8 does not maintain a B in value added and performance index, it shall complete the Ohio Improvement Process or equivalent; and

(iv) If a **School** serving grades 10-12 does not maintain a B in performance index and annual measurable objectives, it shall complete the Ohio Improvement Process or equivalent; and

(v) If a **School** qualifies as a drop-out recovery school under R.C. 3314.35, it shall annually complete the Ohio Improvement Process or equivalent.

(c) Provide reasonable technical assistance to the **School Governing Authority** in complying with this Charter and with applicable laws (provided, however, the **Sponsor** shall not be obligated to give legal advice to the **School Governing Authority** (*See* 2.7 below); and

(d) Declare the **School Governing Authority** to be on probation pursuant to R.C. 3314.073. The **Sponsor** shall monitor the actions taken by the **School Governing Authority** to remedy the conditions that have warranted probationary status as specified by the **Sponsor.** The **Sponsor** may take over the operation of the **School,** including replacing the entire **School Governing Authority,** or any member of the **School Governing Authority**, should the **School Governing Authority** or any of its members abandon or be in material breach of its duties hereunder or at law, if the conditions are not remedied to the satisfaction of the **Sponsor**. The **Sponsor** may also take steps to terminate the charter with the **School Governing Authority** or to suspend operation of the **School** if the **Sponsor** at any time finds that the **School Governing Authority** is no longer able or willing to remedy those conditions to the satisfaction of the **Sponsor**.

(e) Monitor and evaluate the **School's** fiscal performance and establish and/or require a plan of action to be undertaken if the **School** experiences financial difficulties or losses before the end of the school year;

(i) Upon learning of financial difficulties or losses, the **Sponsor** shall provide the **School Governing Authority** with a reasonable time frame to submit a plan of action; and

(ii) The **Sponsor** shall review and approve the plan within 10 business days of receipt; and

(f) Provide in writing the annual assurances for the **School** no later than ten (10) business days prior to the opening of the **School**, as required in R.C. Section 3314.19; and

(g) Abiding by the requirements in its contract with the Ohio Department of Education, even should those requirements affect the **School** and/or the **School Governing Authority.**

ARTICLE II

School Governing Authority

2.1 **Governing Authority Members**. The **School Governing Authority** (its Board of Directors "Directors" or "Board") must contain at least five (5) Directors, who are not owners or employees, or relatives of owners or employees, of any employee of the **School** or any for-profit company that operates or manages the **School**. Further, **School Governing Authority** members shall be disinterested parties as defined by R.C. 102.03, 2921.42 and 2921.43. Attached as **Attachment 2.1** is a **School Governing Authority** roster including names, home and/or work addresses (not the address of the **School**), a valid telephone number where the member can be reached, and electronic mail addresses of the current members of the **School Governing Authority.** Current resumes for each **School Governing Authority** member will be provided to the **Sponsor** within thirty (30) days of the member being appointed to the **School Governing Authority**.

The **School Governing Authority** agrees to comply with the procedures by which the members of the **School Governing Authority** of the **School** will be selected in the future as set forth in the by-laws or code of regulations. The **Sponsor** shall be notified of any changes in members in writing (members, Directors or trustees of the Board) including names, notices of new names, addresses, e-mail, resumes and telephone numbers, within three (3) business days of such change.

The **School Governing Authority** must meet at least six (6) times per year and must send notice of all regular meetings to the **Sponsor** at least three (3) business days prior to the meeting. If the **School Governing Authority** calls a special meeting, notice must be sent twenty-four (24) hours prior to the meeting. If the **School Governing Authority** calls an emergency meeting, notice must be sent immediately. The **School Governing Authority** must maintain a policy regarding how it will notify the public of all meetings. The **School Governing Authority** shall submit a meeting schedule to the **Sponsor** no later than July 1st of each school year.

2.2 **Training of Governing Authority Members.** All new **School Governing Authority** members are required to attend Board training. If the member chooses to complete the training offered by the **Sponsor**, the member shall begin the training within thirty (30) days of appointment and complete the training within six (6) months. If the member chooses to complete training not offered by the **Sponsor**, this training must at least four (4) hours in length and be completed within ninety (90) days of appointment to the Board. Additionally, the training must be approved by the **Sponsor** prior to completion of the training. Existing Board members are encouraged to participate in Board training on an annual basis to remain current regarding their responsibilities as a member of the **School Governing Authority.** The **Sponsor** reserves the right to require additional training of any **School Governing Authority** member(s) at the **Sponsor's** discretion.

2.3 **Criminal Background Checks of Governing Authority Members**. Under R.C. 3314.19(I), all Board Members are required to obtain a clean criminal background check, including both a BCI and a FBI. The BCI and FBI background checks must have been completed within one (1) year prior to the Board Member being appointed to the **School Governing Authority**. A copy of both the BCI and FBI must be submitted directly to

the **Sponsor** or the **School Governing Authority**'s legal counsel within thirty (30) days of being approved as an official voting member of the **School Governing Authority**. Each Board Member shall sign consent to release their background check to the **Sponsor**. Background checks will not be accepted if submitted by the **School Governing Authority** member or sent to the **School Governing Authority** member's address.

2.4 **Material Adverse Effect**. The **School Governing Authority** shall deliver to the **Sponsor** promptly upon any director, trustee, officer, employee, management company employee or agent of the **School Governing Authority** obtaining knowledge of any event or circumstance that could reasonably be expected to have a material adverse effect on the operation, properties, assets, condition (financial or otherwise), prospects or reputation of the **School** including, but not limited to:

(a) Any material breach of any covenant or agreement contained in this Charter, or

(b) Any notice given to the **School Governing Authority** or any other action taken with respect to a claimed default under any financing obtained by the **School Governing Authority**, or

(c) The failure of the **School Governing Authority** to comply with the terms and conditions of any certificates, permits, licenses, governmental regulations, a report in reasonable detail of the nature and date, if applicable of such event or circumstance and the **School Governing Authorities'** intended actions with respect thereto; or

(d) The institution of or threat of any action, suit, proceeding, governmental investigation or arbitration against or affecting the **School Governing Authority** or any property thereof (collectively, "Proceedings") not previously disclosed in writing by the **School Governing Authority**; or

(e) Any material development in any Proceedings to which the **School Governing Authority** is a party or the **School Governing Authority's** property is subject.

Written notice of any of the above must be submitted to the **Sponsor** no later than three (3) business days after receipt of notice provided to the **School Governing Authority**, a schedule of all Proceedings involving an alleged liability of, or claims against or affecting the **School Governing Authority** or, if there has been no change since the last such report, a statement to that effect, shall promptly be sent to the **Sponsor**. Other such information as may be reasonably requested by the **Sponsor** to enable the **Sponsor** and its counsel to evaluate any of such Proceedings shall be sent immediately upon request by the **Sponsor**.

2.5 **Sponsor Oversight**. The **School Governing Authority** and the **School's** administration covenant and agree to cooperate fully with the **Sponsor** in all activities as required by regulations of the Ohio Department of Education for oversight of the **School**. This includes, but is not limited to:

(a) Opening Assurances site visits at least ten (10) days prior to the first day of school for student instruction and compliance site visits at least two (2)

times per year and at times thereafter as determined necessary by the **Sponsor**. The **School Governing Authority** or designee must maintain documentation of all verification of compliance in a compliance binder which shall be readily accessible at all times.

(b) Monthly reviews of financials. All financials, operating budgets, assets, liabilities, enrollment records or similar information must be submitted by the Fiscal Officer of the **School** to the **Sponsor** by email to financials@charterschoolspec.com no later than the 15th of every month for the previous months financial activity. The reports submitted may be in a format determined by the **School Governing Authority**, but must include:

(i) Cash Fund Report – a listing of all funds used showing the month's and year's activity and balances; and

(ii) Revenue Summary – a listing of all revenue received for the month and for the year; and

(iii) Check Register – a listing of all checks for the month; and

(iv) Cash Reconciliation – a book to bank reconciliation of all cash accounts; and

(v) Outstanding Purchase Order Detail – a listing of all Purchase Orders created but unpaid (unless the **School Governing Authority** uses an educational management company); and

(vi) Enrollment Records – in the form of monthly FTEs.

Treasurers and the **School Governing Authority** will be notified if a deadline is not met and/or if reports submitted do not contain all of the data required. If the **Sponsor** does not receive the correct data within a reasonable amount of time under the circumstances, the **School Governing Authority** may be placed on probation under section 11.8 of this Charter until all required information is received; and

(c) Signed documentation granting access to the **Sponsor** to all data and data systems related to the academic, fiscal, and compliance performance of the **School** shall be submitted to the **Sponsor** within thirty (30) days of the signing of this charter.

(d) Other appropriate and reasonable requests for information from the **Sponsor**, the Ohio Department of Education, or other required governmental agencies.

(e) Sponsor representatives can act as non-voting ex-officio Board Members and shall be included in executive sessions.

(f) The **School Governing Authority** shall have a post-audit conference. The **Sponsor** shall participate in the post-audit conference even if the **School Governing Authority** chooses not to participate**.**

2.6 **Technical Assistance and Training by Sponsor.** The **Sponsor** and or the Ohio Department of Education may provide technical assistance and training to the **School** and its staff at such times and to the extent that the **Sponsor** and the Ohio Department of Education deems appropriate or as the current law requires. The **School**, **School employees** and **School Governing Authority** have an obligation and may be required to attend training and receive technical assistance at the direction of the **Sponsor** or the Ohio Department of Education.

ARTICLE III

Operations

3.1 **Student Transportation**. The **School Governing Authority** will work to assure that transportation of students is provided to the extent that such transportation is required by law and shall maintain a transportation plan at all times. Under R.C. 3314.091, the **School Governing Authority** must notify the local traditional public school district if the **School Governing Authority** will be accepting responsibility for student transportation. The **School Governing Authority** must then submit a plan as prescribed by R.C. 3314.091, which includes approval and signature of the **Sponsor**.

3.2 **Management by Third Parties**. Should the **School Governing Authority** enter into any charter for management or operation of the **School** or its curriculum or operations, or any portion thereof, such fully executed charter must be attached as **Attachment 3.2**. If the **School Governing Authority** desires to enter into a charter with a management company after execution of this Charter or change management companies during the term of this Charter, the **School Governing Authority** shall submit information pertaining to the management company to the **Sponsor** for approval prior to executing any contract with the new management company. The **Sponsor** shall evaluate the management company and shall provide the **School Governing Authority** with a written response indicating approval or non-approval of the management company within a reasonable amount of time. If the management company is approved, the **School Governing Authority** shall provide the **Sponsor** with the fully executed contract within three (3) business days of execution. This contract shall be incorporated as **Attachment 3.2**.

If the management company provides services to the **School** in excess of twenty percent (20%) of the **School's** gross annual revenues, then the management company must

provide a detailed accounting of the nature and costs of the services it provides to the **School**, acceptable to the Auditor of the State of Ohio. This information shall be included in the footnotes of the financial statements of the **School** and be subject to audit during the course of the regular financial audit of the community school.

The **School Governing Authority** shall evaluate the performance of its management company. This evaluation shall occur annually and a report of the evaluation shall be submitted to the **Sponsor** by October 30th of each year excluding the first year of operation.

3.3 **Non-Sectarian**. The **School** shall be nonsectarian in its programs, admission policies, employment practices, and all other operations, and will not be operated by a sectarian school or religious institution.

3.4 **Disposition of Assets**. To the extent permitted under Chapter 1702 of the Ohio Revised Code and the Internal Revenue Code with respect to a **School** which is a 501(c)(3) tax exempt organization, if the **School** permanently closes the **School** and the **School Governing Authority** agree to distribute all assets in accordance with Section 3314.074 of the Ohio Revised Code. The **School** shall comply with the closing procedures as agreed to in **Attachment 3.4**.

3.5 **Commencement of School Operations**. The **School** shall open for operation not later than September 30th of each school year, unless the mission of the **School** is solely to serve dropouts. Pursuant to division (D) of section 3314.02 of the Revised Code, if the **School** fails to open by the thirtieth (30th) day of September, in its initial year of operation, or within one (1) year after the adoption of the charter if the mission of the **School** is solely to serve dropouts, the charter shall be void.

3.6 **Safety Plan**. Under R.C. 3313.536, the **School Governing Authority or designee** shall submit to the department of education, in accordance with rules adopted by the state board of education, an electronic copy of its emergency management plan not less than once every three years, whenever a major modification to the building requires changes in the procedures outlined in the plan, and whenever information on the emergency contact information sheet changes. The **School Governing Authority** or designee shall also file a copy of the plan with each law enforcement agency that has jurisdiction over the school building.

3.7 **Racial and Ethnic Balance**. The **School** will attempt to achieve or continue, as the case may be, racial and ethnic balance reflective of the community it serves by doing each of the items recited in **Attachment 3.7**. Notwithstanding the admissions procedures of the **School**, in the event that the racial composition of the enrollment of the **School** is in violation of a federal desegregation order, the **School** shall take any and all corrective measures to comply with desegregation order. The **School Governing Authority** must assess the Racial and Ethnic Balance of the **School** within the first two (2) months of the calendar year in order to make necessary adjustments to any marketing plans currently used by the **School** in order to attempt to be reflective of the community it serves.

3.8 **Tuition**. Subject only to any applicable exception pursuant to R.C. 3314.26, tuition in any form shall not be charged for the enrollment of any student. Additionally, the **School Governing Authority** shall not require parents to volunteer in lieu of a tuition charge. Nothing in this section prevents reasonable activity or class fees as allowed by law, or the **School Governing Authority** engaging in voluntary fundraising activities.

3.9 **Admissions Policy**. The admissions and enrollment procedures of the **School** are attached hereto as **Attachment 3.9** and shall be followed and may not be changed without the prior written consent of the **Sponsor**. At a minimum, the admission procedures at all times must comply with R.C. 3314.06 and R.C. 3314.061 if applicable and must:

(a) specify that the **School** will not discriminate in its admission of students to the **School** on the basis of race, religion, color, national origin, handicap, intellectual ability, athletic ability or measurement of achievement or aptitude;

(b) be open to any individual entitled to attend school in the State of Ohio pursuant to section 3313.64 or section 3313.65 of the Ohio Revised Code, except that admission to the **School** may be limited to (i) students who have obtained a specific grade level or are within a specific age group, (ii) students that meet a definition of "at-risk," as defined within this Charter, (iii) residents of a specific geographic area within the district, as defined in this Charter, (iv) separate groups of autistic students and nondisabled students under R.C. 3314.061 and as defined in this Charter, and/or (v) single-gender students of either sex.

If the number of applicants meeting admission criteria exceeds the capacity of the **School's** programs, classes, grade levels or facilities, students shall be admitted by lot from all eligible applicants, except preference shall be given to students attending the **School** the previous year and may be given to eligible siblings of such students. The lottery may be conducted by the **Sponsor**.

(c) The **School Governing Authority** shall adopt a policy regarding the admission of students residing outside the district in which the **School** is located. That policy shall comply with the admissions procedures specified in sections 3314.06 and 3314.061 of the Revised Code and at the sole discretion of the authority, shall do one of the following:

(i) Prohibit the enrollment of students who reside outside the district in which the **School** is located; or

(ii) Permit the enrollment of students who reside in districts adjacent to the district in which the **School** is located; or

(iii) Permit the enrollment of students who reside in any other district in the state.

(d) If the **School** serves kindergarten and first grade students, it may admit students early into kindergarten and first grade based on their local policy for early entrance. If it is the intent of the **School** to admit students who do not meet the statutory deadline for regular admission, the **School Governing Authority** must adopt its own local policy for early entrance.

3.9.1 The **School Governing Authority** agrees to provide notices to students, parents, employees and the general public indicating that all of the **School's** educational programs are available to its students without regard to race, creed, color, national origin, sex and disability. Further, the **School** shall provide a non-discrimination notice in all newsletters, annual reports, admissions materials, handbooks, application forms and promotional materials other than radio advertisements.

3.9.2 The **School Governing Authority** agrees to provide a copy of the most recent Local Report Card to parents during the admissions process under R.C. 3313.6411(B).

3.10 **Attendance Policy**. The **School Governing Authority** must adopt an attendance policy that includes a procedure for automatically withdrawing a student from the **School** if the student, without a legitimate excuse, fails to participate in one hundred five (105) consecutive hours of the learning opportunities offered to the student.

3.11 **Suspension and Expulsion Policies**. The **School Governing Authority** shall maintain a policy regarding suspension, expulsion, removal and permanent exclusion of a student that specifies among other things the types of misconduct for which a student may be suspended, expelled or removed and the due process related thereto. The **School's** practices pursuant to the policy shall comply with the requirements of sections 3313.66, 3313.661 and 3313.662 of the Ohio Revised Code. Those policies and practices shall not infringe upon the rights of handicapped students as provided by state and federal law and the **School** must also maintain a separate policy for the discipline of students receiving special education services.

3.12 **Students with Disabilities.** The **School** will comply with all federal and state laws regarding the education of students with disabilities and be in a position to provide services upon admission and/or identification. The **School** shall provide all necessary related services or the **School Governing Authority** may contract for related services. The **School Governing Authority's** plan to provide these services is included in **Attachment 3.12**.

3.13 **School Closure or Reconstruction**. The **School** agrees to remain open for students to attend until the end of the school year in which it is determined that the **School** must close. The programs provided to students in the final year of the **School** must continue without interruption or reduction unless program changes are approved in writing by the **Sponsor**. The **Sponsor** may, at its sole discretion, operate the **School** in the event the **School Governing Authority** fails to continue until the end of the approved school year or is otherwise suspended or terminated, or replace the entire **School Governing**

Authority or any member of the **School Governing Authority**, should the **School Governing Authority** or any of its members abandon or be in material breach of its duties hereunder or at law. Provided however, the **Sponsor** may suspend the operations or terminate the charter as otherwise indicated by law.

3.14 **Internet or Computer-Based Community Schools**. The **School Governing Authority** and **School**, if an internet or computer-based community school, shall comply with the requirements in R.C. 3314.013 (Limits on start-up schools) and R.C. 3314.033 (Standards governing operation of internet – or computer – based community schools).

3.15 **Residency Policy.** The **School Governing Authority** must adopt a Residency Policy. The following documents may serve as evidence of a student's primary residence:

(a) A deed, mortgage, lease, current home owner's or renter's insurance declaration page, or current property tax bill; or

(b) A utility bill or receipt of utility installation issued within ninety (90) days of the student's enrollment; or

(c) A paycheck or paystub issued to the parent or student within ninety (90) days of the student's enrollment that includes the address of the parent's or student's primary residence; or

(d) The most current available bank statement issued to the parent or student that includes the address of the parent's or student's primary residence; or

(e) Any other official document issued to the parent or student that includes the address of the parent's or student's primary residence.

ARTICLE IV

Compliance With Laws

4.1 **Compliance with State Laws**. The **School** shall comply with sections 9.90 (Purchase or procurement of insurance), 9.91 (Placement or purchase of tax-sheltered annuity for educational employees), 109.65 (Missing children clearinghouse – missing children fund), 121.22 (Public Meetings), 149.43 (Availability of public records for inspection and copying), 2151.357, (Institution receiving children required to make report), 2151.421 (Reporting child abuse or neglect), 2313.19 (Employer may not penalize employee for being called to jury duty), 3301.0710 (Ohio Graduation Tests), 3301.0711 (Administration and grading of tests), 3301.0712 (College and work ready assessments), 3301.0714 (Guidelines for statewide education management information system) (as stated in 3314.17), 3301.0715 (District board to administer diagnostic assessments – intervention services), 3313.472 (Policy on parental and foster caregiver involvement in

schools), 3313.50 (Record of tests – statistical data – individual records), 3313.536 (School safety plan for each school building), 3313.539 (Concussions and school athletics), 3313.608 (Third Grade Reading Guarantee), 3313.609 (Grade Promotion and Retention Policy) 3313.6012 (Policy governing conduct of academic prevention/intervention services), 3313.6013 (Dual enrollment program for college credit), 3313.6014 (Parental notification of core curriculum requirements), 3313.6015 (Resolution describing how district will address college and career readiness and financial literacy), 3313.6411 (Providing report card to parent), 3313.643 (Eye protective devices), 3313.648 (Prohibiting incentives to enroll in district), 3313.66 (Suspension, expulsion or permanent exclusion- removal from curricular or extracurricular activities), 3313.661 (Policy regarding suspension, removal, expulsion and permanent exclusion), 3313.662 (Adjudication order permanently excluding pupil from public schools), 3313.666 (District policy prohibiting harassment required), 3313.667 (District bullying prevention initiatives), 3313.67 (Immunization of pupils – immunization records – annual summary), 3313.671 (Proof of required immunizations – exceptions), 3313.672 (Presenting school records, custody order if applicable and certification of birth by new pupil), 3313.673 (Screening of beginning pupils for special learning needs), 3313.69 (Hearing and visual tests of school children – exemptions), 3313.71 (Examinations and diagnoses by school physician), 3313.716 (Possession and use metered dose inhaler or dry powder inhaler to alleviate asthmatic symptoms), 3313.718 (Possession and use of epinephrine auto-injector to treat anaphylaxis), 3313.719 (Food allergy protection policy), 3313.80 (Display of national flag), 3313.814 (Standards governing types of food sold on school premises), 3313.816 (Sale of a la carte beverage items), 3313.817 (A la carte foods; determination of nutritional value; software), 3313.86 (Health and safety review), 3313.96 (Informational programs relative to missing children – fingerprinting program), 3314.08 (Annual enrollment reports), 3314.40 (Report of employee conviction or alternative disposition), 3314.401 (Employee investigation report kept in personnel file), 3319.073 (In-service training in child abuse prevention programs), 3319.22 through 3319.31 (Licensure/certification of employees), except that the School may engage non-certificated persons to teach up to twelve (12) hours per week pursuant to section 3319.301, 3319.321 (Confidentiality), 3319.39 (Criminal records check), 3319.391 (Applicants and new hires subject to criminal records check provisions), 3319.41 (Corporal punishment policy), 3321.041 (Excused absences for certain extracurricular activities), 3321.01 (Compulsory school age – requirements for admission to kindergarten or first grade – pupil personnel services committee), 3321.13 (Duties of teacher or superintendent upon withdrawal or habitual absence of child from school – forms), 3321.14 (Attendance officer – pupil-personnel workers), 3321.17 (Attendance officer and assistants – powers), 3321.18 (Enforcement proceedings), 3321.19 (Examination into cases of truancy – failure of parent, guardian or responsible person to cause child's attendance at school), 3321.191 (Board to adopt policy regarding habitual truancy – intervention strategies), 3327.10 (Qualifications of drivers), 3333.31 (Rules for determining student residency), 3737.73 (Fire, Tornado and Lockdown Drills), 4111.17 (Prohibiting discrimination in payment of wages), 4113.52 (Reporting violation of law by employer or fellow employee) and 5705.391 (Board of education spending plan), Chapters 117 (Auditor of State), 1347 (Personal Information Systems), 1702 (Non-Profit Corporation Law), 2744 (Political Subdivision Tort Liability), 3307 (State Teachers

Retirement System), 3309 (Public School Employees Retirement System), 3314 (Community Schools), 3365 (Post-Secondary Enrollment Options Program), 3742 (Lead Abatement), 4112 (Civil Rights Commission), 4123 (Workers' Compensation), 4141 (Unemployment Compensation), and 4167 (Public Employment Risk Reduction Program) of the Ohio Revised Code as if it were a school district. The **School** will comply with these sections and chapters of the Ohio Revised Code now in effect and as hereafter amended. Certain laws listed above which are not specified therein as mandatory, are permissive, unless otherwise specifically required under this Charter. Laws listed above which are mandatory, are also mandatory under this Charter.

The **School** shall comply with Chapter 102 (Public Officers – Ethics), section 2921.42 (Having an unlawful interest in a public contract) and section 2921.43 (Soliciting or accepting improper compensation) of the Ohio Revised Code. The **School Governing Authority** must maintain a general conflict of interest policy. Additionally, each **School Governing Authority** member must sign a conflict of interest statement upon appointment to the **Governing Authority**.

The **School** shall also comply with R.C. 3302.04 (Three year continuous improvement plan – intervention by department – site evaluations) and R.C. 3302.041 (Failure to make adequate progress – corrective actions), including division (E) of R.C. 3302.04 to the extent possible, except that any action required by a school district under R.C. 3302.04 shall be taken by the **Sponsor**. The **Sponsor**, however, shall not be required to take any action under R.C. 3302.04(F).

The **School** shall comply with R.C. 3313.614 (Testing requirements for fulfilling curriculum requirement for diploma), and with R.C. 3313.61 (Diploma or honors diploma) and 3313.611 (Standards for awarding high school credit equivalent to credit for completion of high school academic and vocational education courses) except that for students who enter ninth grade for the first time before July 1, 2010, the requirement in R.C. 3313.61 and 3313.611 that a person must successfully complete the curriculum adopted by the governing authority of the community school rather than the curriculum specified in R.C. Title XXXIII or any rules of the state board of education. Beginning with students who enter the ninth grade for the first time on or after July 1, 2010, the curriculum of a high school prior to receiving a high school diploma shall be met by completing the Ohio core curriculum prescribed in R.C. 3313.603(C), unless the person qualifies under R.C. 3313.603(D) or (F). Each **School** shall comply with the plan for awarding high school credit based on demonstration of subject area competency, adopted by the State Board of Education under R.C. 3313.603(J).

The **School**, unless it is an internet- or computer-based community school, shall comply with 3313.801 (Display of national and Ohio Mottoes) as if it were a school district.

The **School** shall comply with Ohio Administrative Code Section 901:5-11-15 governing pesticide policies.

4.2 **Compliance with Other Laws**. The **School** and the **School Governing Authority** may not carry out any act or insure the performance of any function that is not in compliance with the United States Constitution, the Ohio Constitution, federal law, Ohio law and this Charter. The **School** and the **School Governing Authority** are not exempt from federal laws, rules and regulations, or other Ohio laws granting rights to parents.

ARTICLE V

Facilities

5.1 **Location of Facility**. The facility to be used for the **School** will be maintained at 3398 East 55th Street, Cleveland, Ohio 44127. If multiple facilities are used, the **School Governing Authority** shall comply with R.C. 3314.05. If the facility has been or will be leased, a copy of the fully executed lease and any lease renewals or amendments must be provided to the **Sponsor** within three (3) business days of its execution and shall be incorporated into this charter as **Attachment 5.1**. If the facility has been or will be purchased by the **School Governing Authority**, a copy of the contract of sale and related documents must be provided to the **Sponsor** within three (3) business days of execution, and after purchase, a copy of the recorded conveyance documents shall immediately be provided to the **Sponsor.** Any lease, sub-lease or use of the facility by any party, including the management company, must be documented in writing. The facility will not be changed and the number of square feet used will not be reduced without prior notification to the **Sponsor**. Any lease, mortgage payments, or capital improvement costs must be consistent with the yearly budgets given to and approved by the **Sponsor**. In any change of facility, the **Sponsor**, at its sole discretion, but without obligation to do so, may request maps, plans and/or revised budgets showing adequate service of the debt and reserves for maintenance or repairs, and/or attorney, accountant or financial consultant assurances or opinions regarding structure, financing or otherwise. The **Sponsor** shall not be liable for the debts, obligations or business of the **School** or the **School Governing Authority**, but may request any information the **Sponsor** deems necessary to assess adequate planning for facilities.

5.2 **Tax Exempt Status**. Under R.C. 5709.07, real property used by a **School** for primary or secondary educational purposes, including only so much of the land as is necessary for the proper occupancy, use and enjoyment of such real property by the **School** for primary or secondary educational purposes shall be exempt from taxation. This exemption does not apply to any portion of the real property not used for primary or secondary educational purposes.

5.3 **Compliance with Health and Safety Standards**. Any facility used by the **School Governing Authority** for or by the **School** shall meet all health and safety standards established by law for community school buildings. The **School** shall not begin operations either at start up or after any structural change requiring permits until which time the **Sponsor** has viewed all health and safety permits and if in order, provided the

School an Assurances Document as specified by the State Board of Education. Facilities will be maintained in a clean, healthy manner to the satisfaction of the **Sponsor** and/or as indicated by proper authorities. Copies of all current permits, inspections and/or certificates must be filed with the **Sponsor**. The **School** must keep all permits, inspections and/or certifications current and compliant.

5.4 **Closure of School**. If the **School** should close for any reason, the **School Governing Authority** is solely responsible for the sale, lease or other distribution of the facility. The **School Governing Authority** agrees to maintain the facility until such time as the facility is sold or leased to another entity.

ARTICLE VI

Educational Program

6.1 **Number of Students**. The **School** will provide learning opportunities to a minimum of one hundred (100) students; and as applicable, for a minimum of nine hundred twenty (920) hours per school year or in accordance with any applicable changes of law. The **School** shall serve grades Kindergarten through eighth and ages 5-16. The **School** shall provide an education plan as detailed in **Attachment 6.3** for all grades listed in this charter. The education plan shall include the characteristics and ages of the students to be served, including grade configuration and enrollment projections for the next five (5) years. If the **School Governing Authority** desires to add additional grades to the **School**, it shall submit a resolution requesting a charter modification to add grades. The **Sponsor** shall evaluate the request for a modification and respond accordingly. The number of students attending the **School** at any one time shall not exceed the number allowed by the occupancy permit (including staff).

6.2 **Continuing Operation**. The **School** agrees to continue operation by teaching the minimum number of students permitted by law or this Charter, whichever is greater. Time is of the essence in continuing operation. Failure to continue operation without interruption is grounds for termination of this Charter.

6.3 **Curriculum**. For purposes of this Charter, in **Attachment 6.3**, the vision, mission, philosophy, goals, focus of the curriculum and objectives shall be separated from the methods used to achieve those goals. The **School Governing Authority** shall provide a clear mission statement which shall be incorporated into **Attachment 6.3**. Any change in vision, mission, philosophy, goals, focus of the curriculum and objectives methods would constitute a material change in the Charter and must be requested through a charter modification process. Any Charter modification must be submitted to the **Sponsor** in writing for approval. Upon approval by the **Sponsor**, the **School Governing Authority** shall pass a resolution outlining in detail the changes made. The **School's** curriculum must be aligned with the Ohio's New Learning Standards including English, Language Arts and Mathematics (Common Core State Standards), Science and Social Studies content standards and any additional content areas for which standards have been established and/or revised per R.C. 3301.079. The **School** must demonstrate at any given

time, and to the **Sponsor**'s satisfaction, the implementation of the aligned curriculum as stated in this section. **Attachment 6.3** encompasses a description of the learning opportunities that will be offered to students including both classroom based and non-classroom-based learning opportunities that is in compliance with criteria for student participation established by the department under R.C. 3314.08(H)(2). **Attachment 6.3** shall also include an explanation of how the educational program will be implemented within the **School's** facility.

6.3.1 The **School Governing Authority** shall provide the **Sponsor** with a school calendar and bell schedule each year for approval by a date prescribed by the Ohio Department of Education. The **School Governing Authority** may not change the school calendar or bell schedule without prior approval from the **Sponsor** and the Ohio Department of Education and after consulting with each local traditional school district that transports students to the **School**. Any changes made without this approval may result in a corrective action plan.

6.3.2 The **School** shall develop a general plan of intervention for all students not found proficient on the Ohio system of assessments and/or the current tests being required by the Ohio Department of Education. Each year, the **School** shall update the plan and develop additional plans relative to individual student performance.

6.4 **Accountability Standards.** The **School's** academic and non-academic goals are attached as **Attachment 6.4**. The **School** shall also be evaluated based upon state standards. State standards shall be met by the **School** and may be changed from time to time by the Ohio Department of Education.

6.5 **Assessments and Performance Standards**. The performance standards (requirements) and assessments, which shall include the Ohio system of assessments that measure mastery of the course content for the appropriate grade level according to R.C. 3301.0710 and R.C. 3301.0712, which may include nationally normed standardized tests, college readiness exams, work readiness exams, ACT work keys, industry certification examinations, end-of-course examinations developed or selected by the **School Governing Authority**, or assessments on the list developed by the Ohio Department of Education and any other standards and/or assessments required by law or recommended by the **Sponsor**, must be timely and properly administered, met and completed and listed in **Attachment 6.5**. Additionally, a nationally normed assessment must be administered at a minimum of twice annually to all grade levels, excluding Kindergarten, with the aggregate results of each administration being provided to the **Sponsor**. In addition to the required testing, the **School** must assess and keep benchmarks acceptable to the **Sponsor**, of all students, in order to provide guidance for the **Sponsor** to review yearly progress. Such assessments and intended benchmarking are identified in **Attachment 6.5**. The school must submit to the **Sponsor**, in a Sponsor approved format and not later than June 30th of each academic year, an analysis of the two (2) nationally normed assessment administrations that demonstrate growth of students in reading and mathematics.

6.5.1 Results from all nationally normed tests administered by the **School** must be submitted in the form of a results page from the testing company that demonstrates learning gain growth in all students tested to the **Sponsor** by the **School** within ten (10) days of the **School** receiving the results of the tests administered and/or no later than June 30th of each school year.

6.6 **High School Diplomas**. If the **School** is a high school awarding a diploma, the **School** shall comply with sections 3313.61 and 3313.611 of the Ohio Revised Code except that, by completing the curriculum adopted by the **School Governing Authority** the student will be deemed to have met the requirement that a person must successfully complete the curriculum specified in Title 33 of the Ohio Revised Code. At least thirty (30) days before any graduation, the **School** shall make available a list of graduates and proof of passing the Ohio Graduation Test meeting all other charter requirements to the **Sponsor**.

The **School** will comply with R.C. sections 3313.61, 3313.611, and 3313.614, except that for students who enter the ninth grade for the first time before July 1, 2010, the requirement in R.C. sections 3313.61 and 3313.611 that a person must successfully complete the curriculum in any high school prior to receiving a high school diploma may be met by completing the curriculum adopted by the governing authority of the community school rather than the curriculum specified in Title XXXIII of the ORC or any rules of the State Board of Education. Beginning with students who enter ninth grade for the first time on or after July 1, 2010, the requirement in R.C. section 3313.61 and 3313.611 that a person must successfully complete the curriculum of a high school prior to receiving a high school diploma shall be met by completing the Ohio Core curriculum prescribed in division (C) of R.C. section 3313.603, unless the person qualifies under division (D) or (F) of that section. Each **School** shall comply with the plan for awarding high school credit based on demonstration of subject competency, adopted by the State Board of Education under division (J) of R.C. section 3313.603.

The **School** will comply with Section 6 of H.B. 487, Chapter 3365, and sections 3313.603, 3313.6013, 3313.618, 3301.0710, 3301.0711, 3301.0712 of the Ohio Revised Code for students who enter ninth grade for the first time after July 1, 2014. For students who enter the ninth grade after July 1, 2014, the requirements in R.C. section 3313.603, 3313.6013, 3313.618, 3301.0710, 3301.0712 must be successfully completed prior to receiving a high school diploma unless the student qualifies under division (F) of section 3316.603 or division (B) and (D) of 3313.603. For students entering ninth grade before July 1, 2014, schools must comply with sections 3313.61, 3313.611, 3313.614 of the Ohio Revised Code as it existed prior to September 17, 2014.

ARTICLE VII

Reporting

7.1 **Annual Report**. The **School Governing Authority** shall submit not later than October 31st (or any subsequent statutorily prescribed date) of each year to the **Sponsor** and to

the parents of all students enrolled in the **School**, or any other statutorily required parties, its financial status, and the annual report of its activities and progress in meeting the goals and standards of this Charter, local report card rating, adequate yearly progress rating, value added rating and school improvement status of the most current school year as issued by ODE and statement from the **Sponsor**, its activities and standards.

7.2 **Reports to Sponsor**. The **School Governing Authority** shall timely comply with all reasonable requests for information from the **Sponsor**, including the **School** financial reports required in section 2.5 of this Charter.

7.3 **Site Visits**. The **Sponsor** shall be allowed to observe the **School** in operation at site visits at the **Sponsor's** request and shall be allowed access for such site visits or other impromptu visits as the **Sponsor** deems advisable or necessary.

ARTICLE VIII

Employees

8.1 **Employment of Teachers**. At least one (1) full-time classroom teacher or two (2) part-time classroom teachers each working more than twelve (12) hours per week must be employed by the **School**. The full-time classroom teachers and part-time classroom teachers teaching more than twelve (12) hours per week shall be certified or licensed in accordance with R.C. 3319.22 to 3319.31, or other applicable sections of the Ohio Revised Code. Upon employment, the **School** shall forward teacher qualifications, including but not limited to, the grade level and content area being taught and the teacher's licensure or certification granted by the Ohio Department of Education, to the **Sponsor**. The **School** may employ non-licensed persons to teach up to twelve (12) hours per week pursuant to R.C. 3319.301, to the extent permitted by the No Child Left Behind Act. There shall be no more than twenty-nine (29) students per classroom. If the **School** uses federal funds for the purpose of class size reduction by using Title 1 or Title II-A funds, the school wide students to full-time equivalent classroom teacher ratio shall be no more than 1 to 25 based on the State Operating Standard 3301.35.05(A)(3). The **School** may also employ necessary non-teaching employees. Prior to opening day, the **School** will provide the **Sponsor** with proof of Ohio licensure/certification for a sufficient number of teachers to support the stated teacher/student ratio, as well as the credentials and background checks for all staff of the **School**. All teachers and para-professionals shall meet the "highly qualified" standards as applicable and as set out in the law known as "No Child Left Behind" and per the Ohio Department of Education. In addition, persons with only long-term substitute licenses may be employed only if their license is in the grade level and content area they are teaching. The **School Governing Authority** shall provide an organizational chart and a list of roles and responsibilities of all School staff that aligns to the organizational chart included as **Attachment 8.1.**

8.1.1 Each person employed by the **School** as a nurse, teacher, counselor, school psychologist or administrator shall complete at least four (4) hours of in-service training in the prevention of child abuse, violence and substance abuse and the

promotion of positive youth development within two (2) years of commencing employment with the **School**, and every five (5) years thereafter. Prior to opening day, the **School** will provide the **Sponsor** with: 1) proof of Ohio licensure/certification in represented field, 2) sufficient number to support the stated student ratio, and 3) credentials and proof of background checks completed for all certified staff including nurse, counselor, school psychologist or administrator.

8.1.2 Each classroom teacher initially hired by the **School** on or after July 1, 2013 and employed to provide instruction in physical education will hold a valid license issued pursuant to R.C. 3319.22 for teaching physical education.

8.1.3 Beginning with the 2015-2016 school year, if the **School** is ranked in the lowest ten percent (10%) of all public school buildings according to performance index score, the **School Governing Authority** shall require each classroom teacher currently teaching in a core subject area in the building to demonstrate expertise by examination.

8.2 **Staff Evaluation.** Each **School** must have a valid process, similar to OTES and OPES, for evaluating teachers and principals/superintendents that includes goal setting and annual review that includes not less than two (2) formal observations during the school year and review of student performance data throughout the school year. Any person qualified to perform evaluations must be credentialed by the Ohio Department of Education and the performance rubric must be aligned to the OTES rubric. A **School Governing Authority** member or designee and/or regional manager of the management company shall undergo appropriate training/credentialing by the Ohio Department of Education and be responsible for evaluating the principal/superintendent. If the **School** has committed to the Race to the Top (RttT) funding, the **School** must use the OTES and OPES frameworks for all evaluations.

8.3 **Dismissal of Employees**. Subject to 11.2 below, the **School Governing Authority** may employ administrators, teachers and non-teaching employees necessary to carry out its mission and fulfill this Charter, so long as no contract of employment extends beyond the term of this Charter. The requirements and procedures regarding the disposition of employees of the **School** in the event this Charter is terminated or not renewed under R.C. 3314.07 are set out in **Attachment 8.3**.

8.4 **Employee Benefits**. The **School** must provide to all full-time employees health and other benefits as set out in **Attachment 8.4**. In the event certain employees have bargained collectively pursuant to Chapter 4117 of the Ohio Revised Code, the collective bargaining agreement supersedes Attachment 8.4 to the extent that the collective bargaining agreement provides for health and other benefits. The collective bargaining agreement shall not, under any circumstances, be a part of this Charter. The **School** shall establish and/or update an employee handbook prior to the first day of school each year.

8.5 **Criminal Background Check**. The **School Governing Authority** must request that the superintendent of the Bureau of Criminal Identification & Investigation conduct a criminal background records check for any applicant who has applied to the **School** for employment, in any position. The **School Governing Authority** hereby appoints the **Sponsor** as a representative pursuant to R.C. 3319.39(D) for purposes of receiving and reviewing the results of the criminal records checks performed under R.C. 3319.39(A)(1) for employees working at the **School** and authorizes its agent(s) (including educational management organizations) to communicate this information directly to the **Sponsor**. The **Sponsor** agrees that it is responsible for any and all reasonable costs or damages that result from the **Sponsor's** failure to comply with other state and federal laws regarding the privacy of the results of criminal records checks. An applicant may be employed conditionally for up to sixty (60) days until the criminal records check is completed and the results of the criminal records check are received. If the results of the criminal records check indicate that the applicant does not qualify for employment the applicant shall be released from employment.

All vendors and contractors of any kind shall show proof, which may be provided through their employer, that they have been the subject of a criminal records check in accordance with R.C. 3319.392(D).

All employees, staff, volunteers, vendors or contractors undergoing a criminal background check must sign consent to release the results to the **Sponsor**.

The **School** must comply with the teacher misconduct reporting laws and updated background check requirements found in R.C. 3319.31, 3319.313, 3319.314, 3319.314 and OAC 3301-20.

ARTICLE IX

Finance

9.1 **Financial Records.** The **School's** financial records will be maintained in the same manner as are financial records of school districts, pursuant to rules of the Auditor of the State, R.C. 3314.042 and R.C. 3301.07, and audits shall be conducted in accordance with section 117.10 of the Ohio Revised Code. The **Sponsor** shall receive a copy of the draft audit and shall be notified, by the Auditor of State, any independent contracted auditor or the **School Governing Authority**, of all post audit conferences in order to review the school's annual audit prior to the document being finalized and released.

9.2 **Fiscal Licensure.** Under 3314.011, prior to assuming the duties of fiscal officer, agent and/or fiscal servicer of the **School**, the fiscal officer, agent or service provider shall be licensed as provided for in Ohio Revised Code 3301.074.

9.2.1 R.C. 9.24 prohibits any state agency or political subdivision from awarding a contract for goods, services, or construction to any person against whom a finding for recovery has been issued by the Auditor of State, if that finding is unresolved.

Before entering into a public contract described above, the **School Governing Authority** is required to verify that the person does not appear in this database.

9.3 **Fiscal Bond**. Fiscal agent, officer and/or service provider shall execute a bond in an amount and with surety to be approved by the **School Governing Authority**, payable to the State of Ohio, conditioned for the faithful performance of all of the official duties required of the **School** fiscal agent, officer or service provider. The bond shall be in an amount of not less than fifty thousand dollars ($50,000). The bond shall be deposited with the **School Governing Authority**, and a copy thereof, certified by the **School Governing Authority**, shall be filed with the county auditor and the **Sponsor**.

9.4 **Budget**. A financial plan detailing an estimated school budget for the first year of the period of this Charter and specifying the total estimated per pupil expenditure amount for each such year and at least five (5) fiscal years thereafter is attached as **Attachment 9.4**. Each year of this Charter, immediately after the **School Governing Authority's** approval but no later than October 30th, a final yearly school budget shall be submitted to the **Sponsor**. The budget must detail estimated revenues and expenses. Revenues include the base formula amount that will be used for purpose of funding calculations under section 3314.08 of the Ohio Revised Code. The **Sponsor** shall assess the yearly budget to ensure the **School Governing Authority** maintains financial viability. Should the **Sponsor** request further breakdown of revenue or expenses, or line items for expenses or revenue not projected, the **School** agrees to revise or comply with such requests. Should the **School** be managed by a third party management company, the **School Governing Authority** must procure from such management company, sufficient data, at the **Sponsor's** discretion, to allow the **Sponsor** to review revenue and expenses as required and/or permitted by law.

9.5 **Borrowing Money**. The **School Governing Authority** may borrow money to pay necessary and actual expenses of the **School** in anticipation of receipt of any portion of the payments to be received by the **School.** The **School Governing Authority** may issue notes to evidence such a borrowing. A copy of all notes must be provided to the **Sponsor** within five (5) business days of signing. The proceeds from the notes shall be used only for the purpose for which the anticipated receipts may be lawfully expended by the **School**. The **School** may borrow money for a term not to exceed fifteen (15) years for the purpose of acquiring facilities.

9.6 **Payment to Sponsor for Oversight**. For and in consideration of **three percent (3%)** of all funds received by the **School** from the State of Ohio, the **Sponsor** shall provide the oversight required by law. Payments to the **Sponsor** may be made by monthly automatic transfer to the general fund of the **Sponsor**, and the **School Governing Authority** agrees to sign documentation necessary to accomplish the same. Failure to pay the required payment to the **Sponsor** for oversight by the 30th of every month, may result in the **Sponsor** placing the **School** on probation, suspension or termination as prescribed in sections 11.8 thru 11.10 of this Charter.

9.7 **Fiscal Year**. The fiscal year for the **School** shall be July 1 to June 30.

ARTICLE X

Insurance/Indemnification

10.1 **Liability Insurance**. Commercial general liability insurance at all times will be maintained by the **School Governing Authority** in amounts not less than one million dollars ($1,000,000) per occurrence and two million dollars ($2,000,000) in the aggregate, plus an excess or umbrella policy extending coverage as broad as primary commercial general liability coverage in an amount no less than five million dollars ($5,000,000). The insurance coverage shall be not only for the **School** and the **School Governing Authority,** its Directors, officers and its employees but also provide additional insured status for the **Sponsor**, **its Board, Executive Director, employees, and Charter School Specialists as additional insureds**, **not just certificate holders**. The **School Governing Authority** shall also maintain directors and officers liability (D&O) and errors and omissions insurance (E&O) coverage in the amount of one million dollars ($1,000,000) per occurrence and one million dollars ($1,000,000) aggregate. The **School Governing Authority** must obtain policies that notify the **Sponsor** in writing at least thirty (30) days in advance of any material adverse change to, or cancellation of, such coverage. All insurers shall be licensed by the State of Ohio and have an AM Best rating of A or better.

10.2 **Indemnification**. The **School Governing Authority** and **School** shall defend, indemnify, save and hold harmless the **Sponsor** and its Board, Superintendent, officers, employees and agents, including Charter School Specialists from any and all claims, debts, actions, causes of actions, proceedings, judgments, mitigation costs, fees, liabilities, obligations, damages, losses, costs or expenses (including, without limitation, attorneys', expert, accounting, auditors or other professionals' fees and court costs) of whatever kind or nature in law, equity or otherwise (collectively "Liabilities") arising from any of the following:

(a) A failure of the **School Governing Authority** and/or **School** or any of its officers, directors, employees, agents or contractors to perform any duty, responsibility or obligation imposed by law or this Charter;

(b) An action or omission by the **School Governing Authority** and/or **School** or any of its officers, directors, employees or contractors that results in injury, death or loss to person or property, breach of contract or violation of statutory law or common law (state and federal), or Liabilities;

(c) Any sum that the **Sponsor** may pay or become obligated to pay on account of: (1) any inaccuracy or breach of any representation under this Charter; (2) any breach or any failure of the **School Governing Authority** to duly perform, comply with, or observe any term, provision, covenant, agreement, obligation or condition under this Charter or under the law, and all agreements delivered in any way connected herewith, on the part of the **School Governing Authority**, to be performed, complied with, or observed; or (3) Liabilities to lenders, vendors, the

State of Ohio, receivers, parents, students, the **School Governing Authority** or to third parties in any way related to the **School** and/or **School Governing Authority**; and

(d) Any Liabilities incurred by the **Sponsor** or any of its officers, directors, employees, agents or contractors as a result of an action or legal proceeding at law or equity brought against the **Sponsor** by the **School** or the **School Governing Authority** unless the **School** or **School Governing Authority** obtains a final judgment or order on the merits against the **Sponsor**, and the right to appeal such judgment or order has been exhausted or has expired.

10.3 **Indemnification if Employee Leave of Absence.** If the **Sponsor** provides a leave of absence to a person who is thereafter employed by the **School**, the **School Governing Authority** and the **School** shall indemnify and hold harmless the **Sponsor** and its board members, Superintendent, employees and agents from liability arising out of any action or omission of that person while that person is on such leave and employed by the **School Governing Authority.**

ARTICLE XI

General Provisions

11.1 **Charter Authorization**. Before executing this Charter, the **School Governing Authority** must pass a resolution in a properly noticed and held public meeting, authorizing execution of this Charter and authorizing one or more individuals to execute this Charter for and on behalf of the party, with full authority to bind the party. For all new schools, this resolution must be passed by March 15th of the year in which the **School** intends to open. For renewal schools, this resolution must be passed by June 1st of the year in which the charter ends.

11.2 **Termination and Cancellation of Charters**. Except as otherwise permitted by this Charter, or by the **Sponsor**, contracts entered into by the **School Governing Authority** with third parties shall provide for a right to cancel, terminate or non-renew effective each June 30th, or upon termination of this Charter.

11.3 **General Acknowledgements**. The **School Governing Authority** specifically recognizes and acknowledges the following:

(a) The authority of public health and safety officials to inspect and order **School** facilities closed if not in compliance with health and safety laws and regulations in accordance with R.C. 3314.03(A)(22)(a).

(b) The authority of the Ohio Department of Education to suspend the operations of the **School** under R.C. 3314.072 due to the circumstances enumerated therein.

(c) The **Sponsor** is not liable for the acts or omissions, or the debts of the **School** and/or **School Governing Authority** pursuant to R.C. 3314.07(D) and 3314.08(J) (2), and any other applicable law limiting the liability of the **Sponsor**.

(d) The **Sponsor** may take steps to intervene in, correct, declare probationary status of, suspend, terminate or non-renew the status of the **School** as an Ohio Community School, and correct problems in the **School's** performance.

(e) The Ohio Department of Education may take over sponsorship of the **School** in accordance with R.C. 3314.015(C).

(f) The authority of the Auditor of State to cause legal action against or the cessation of payments to the **School** pursuant to Section 269.60.60 of the uncodified law under H.B. 119 of the 127th General Assembly for the period of that law's duration.

(g) The mandate of permanent closure under R.C. 3314.35 under the circumstances enumerated therein.

(h) The **Sponsor** or **Sponsor's designee** may offer services to the **School** related to EMIS, SOES, fiscal, special education coordination, federal programs and Medicaid billing. The **School Governing Authority** acknowledges that these services are not related to the sponsorship of the **School Governing Authority** and the sponsorship shall not be contingent upon the **School Governing Authority** accepting any of the additional services offered by the **Sponsor** or **Sponsor designee**. The **Sponsor** shall not require the **School Governing Authority** to purchase additional services from the **Sponsor** or **Sponsor's designee**. If the School Governing Authority does accept, purchase, subscribe to, or otherwise use any additional services and the associated fees offered by the **Sponsor**, they shall be accompanied by the written assurances of the **Sponsor** and the **School Governing Authority** that the additional administrative services being provided:

(a) Pose no conflict of interest in accordance with Chapters 102. and 3301. of the Revised Code, and related statutory provisions, and;

(b) Shall be obtained at the lowest and best price at or below market value, as evidenced by two written price quotations from vendors not including that of the Sponsor, or;

(c) If the community school accepts the sponsor's offer to provide the additional administrative services which was not the lowest

written price quotation, the Sponsor has received the community's school's justification, in writing, for not selecting the lowest written price quotation, which shall be approved and adopted by the community school's governing board by resolution.

(i) The **Sponsor** or **Sponsor's designee** has a legitimate educational interest in the educational records of the **School** and grants to the **Sponsor** and the **Sponsor's designee** access to educational records under 20 U.S.C. § 1232g, the Family Rights and Privacy Act ("FERPA").

(j) If the **School** closes, the chief administrative officer shall collect and assemble in an orderly manner the educational records of each student who is or has been enrolled in the **School** and transmit these records to each student's district of residence within seven (7) business days of the **School** closing pursuant to R.C. 3314.44 (Collection and transmittal of school records after closing; Compliance; Penalty).

11.4 **Dispute Resolution**. The **Sponsor** and **School Governing Authority** agree to informal mediation of any dispute not otherwise governed by mandatory administrative procedures pursuant to this Charter or the law. Such mediation shall be non-binding and the parties, if failing to agree on one mediator, shall obtain a list of three (3) mediators from the Columbus Bar Association and each eliminate one, using the one (1) mediator left after eliminations. All mediation will take place in Franklin County and all costs of the mediator shall be split equally between the parties.

11.5 **Term**. This Charter shall be for a term of one (1) year commencing on the date of execution of this Charter and expire on **June 30, 2016**. During the **2015-2016** school year, the **School Governing Authority** shall undergo the high stakes review conducted by the **Sponsor**.

11.6 **Renewal**. Renewal is subject to the **Sponsor's** determination that the **School Governing Authority** has satisfactorily complied with the applicable laws and this Charter, and that the **School's** progress in meeting the academic goals stated in this Charter is satisfactory.

11.6.1 The **School Governing Authority** shall be assessed for renewal or shall submit to a high-stakes review every five (5) years based upon the following:

(a) The **School's** academic performance; and

i) Proficiency rates on state assessments; and

ii) Student academic growth; and

iii) Graduation rates; and

iv) Student attendance; and

v) Post-secondary enrollment (if applicable); and

vi) Student performance on other valid and reliable assessments; and

vii) Adherence to accountability standards as detailed in Attachment 6.4; and

(b) The **School's** financial viability; and

(c) The **School's** operational performance

11.7 **Non-renewal of this Charter**.

(a) The **Sponsor** may choose not to renew this Charter at its Expiration Date for any of the following reasons:

(i) Failure to meet student performance requirements stated in this Charter;

(ii) Failure to meet generally accepted standards fiscal management;

(iii) Violation of any provision of this Charter or applicable state or federal law;

(iv) Other good cause.

By February 1st of the termination year of this Charter, the **Sponsor** shall notify the **School Governing Authority** of the proposed action in writing. The notice shall include the reasons for the proposed action in detail, the effective date of the non-renewal, and a statement that the **School Governing Authority** may, within fourteen (14) days of receiving the notice, request in writing, an informal hearing before the **Sponsor**. The informal hearing shall be held within fourteen (14) days of the receipt of a request for the hearing. Within fourteen (14) days following the informal hearing, the **Sponsor** shall issue a written decision either affirming or rescinding the decision to not renew this Charter.

(b) If the **School Governing Authority** does not intend to renew this Charter with the **Sponsor**, the **School Governing Authority** shall notify the **Sponsor** in writing of that fact at least one hundred eighty (180) days prior to the expiration of this Charter. In such a case, the **School Governing Authority** may enter into a Charter with a new **Sponsor** in accordance with R.C. 3314.03, upon the expiration of this Charter or at the sole discretion of the **Sponsor**, by an assignment of this Charter before its expiration date.

11.8 **Probation**. The **Sponsor** may, in lieu of suspension or termination, declare in writing that the **School Governing Authority** is in a probationary status, after consulting with the **School Governing Authority** or authorized parties thereof, and specifying the conditions that warrant probation and after receiving the **School Governing Authority's** written assurances (satisfactory to the **Sponsor**) of the actions and time frames necessary to remedy those conditions. Such probationary status shall not extend beyond the current school year. The **Sponsor** may proceed to suspension, termination or take-over of operations if the **Sponsor** finds at any time, that the **School Governing Authority** is no longer able or willing to remedy the conditions to the satisfaction of the **Sponsor**. For purposes of this Charter, the **Sponsor** agrees to attempt to declare probationary status with the **Governing Board**, before proceeding to suspension, except in extraordinary circumstances such as those involving the health and safety of students, or waste or illegal use of state or federal funds.

11.9 **Intent to Suspend/Suspension**. The **Sponsor** may suspend operations of the **School** for (1) failure to meet student performance requirements stated in this Charter, or (2) failure to meet generally accepted standards of fiscal management, or (3) violation of any provision of this Charter or applicable state or federal law, (4) other good cause or if funding to the School Governing Authority should cease under R.C. 263.420, if the **Sponsor** sends a written notice of intent to suspend explaining the reasons and provides the **School Governing Authority** with five (5) business days to submit a remedy, and promptly reviews and disapproves the proposed remedy, or if the **School Governing Authority** fails to submit a remedy or fails to implement the remedy.

Once the **School Governing Authority** is suspended it must cease operations on the next business day, immediately send notice to all **School** employees and parents stating that the **School** is suspended and the reasons therefore, and the **School** again has an opportunity to submit a proposed remedy within five (5) business days. At all times during suspension, the **School Governing Authority** remains subject to non-renewal or termination proceedings in accordance with the law.

Under R.C. 3314.03, if the **School Governing Authority** fails to remedy the conditions cited by the **Sponsor** as reasons for the suspension by the thirtieth (30^{th}) day of September of the school year immediately following the school year in which the operation of the **School** was suspended, this Charter shall become void.

11.10 **Termination of the Charter**. The **Sponsor** may choose to terminate this Charter for any of the following reasons: (1) failure to meet student performance requirements stated in this Charter, (2) failure to meet generally accepted standards fiscal management, (3) violation of any provision of this Charter or applicable state or federal law, or (4) other good cause.

Additionally, if the **Sponsor** has suspended the operation of this Charter under R.C. 3314.072, the **Sponsor** may choose to terminate this Charter prior to its expiration.

By February 1st of the termination year of this Charter, the **Sponsor** shall notify the **School Governing Authority** of the proposed action in writing. The notice shall include the reasons for the proposed action in detail, the effective date of the termination, and a statement that the **School Governing Authority** may, within fourteen (14) days of receiving the notice, request, in writing, an informal hearing before the **Sponsor**. The informal hearing shall be held within fourteen (14) days of the receipt of a request for the hearing. Within fourteen (14) days following the informal hearing, the **Sponsor** shall issue a written decision either affirming or rescinding the decision to terminate this Charter.

The decision of the **Sponsor** to terminate this Charter may be appealed to the State Board of Education within fourteen (14) days of the decision. The State Board shall conduct a hearing and issue a written decision, including reasons for upholding or annulling the termination, within sixty (60) days after the filing of the appeal. The decision of the State Board is final.

The termination of this Charter shall be effective upon the occurrence of the later of the following events:

(a) ninety (90) days following the date the **Sponsor** notifies the **School Governing Authority** of its decision to terminate this Charter as provided for above; or

(b) if an informal hearing is requested and as a result of that hearing the **Sponsor** affirms its decision to terminate this Charter, the effective date of the termination specified in the notice, or if that decision is appealed to the State Board and the State Board affirms that decision, the date established in the resolution of the State Board affirming the **Sponsor's** decision.

If this Charter is terminated pursuant to this provision, then the **School Governing Authority** shall not enter into a charter with any other **Sponsor**.

11.11 **Failure to Open/Permanent Closure**. If the **School Governing Authority** initially fails to open the **School** for operation by August 31st of the year the charter is executed or if the **School** permanently closes prior to the Expiration Date hereof, this Charter shall become void, subject only to the survival of Article X, Section 10.2 of this Charter.

11.12 **Compliance with Requests of Sponsor**. The **School Governing Authority** and the **School** shall timely comply with all reasonable requests of the **Sponsor**, and allow the **Sponsor** to monitor the **School** operations**.** Failure to do so is grounds for suspension and termination or non-renewal of this Charter. Timeliness is defined as an answer in writing within five (5) business days (unless a shorter time is otherwise required pursuant to this Charter) and adequate assurances of cure or actual cure within a period of time acceptable to the **Sponsor**.

11.13 **Services from the Sponsor**. The **Sponsor** shall not require the **School Governing Authority** to purchase additional services from the **Sponsor**. If the **School Governing Authority** opts to purchase any additional services from its **Sponsor**, the accepting, purchasing, subscribing to, or otherwise using any additional services and the associated fees offered by the **Sponsor** shall be accompanied by the written assurances of the **Sponsor** that the additional administrative services being provided:

(a) Pose no conflict of interest in accordance with Chapters 102. and 3301. of the Revised Code, and related statutory provisions, and;

(b) Shall be obtained at the lowest and best price at or below market value, as evidenced by two written price quotations from vendors not including that of the Sponsor, or;

(c) If the **School Governing Authority** accepts the **Sponsor's** offer to provide the additional administrative services which was not the lowest written price quotation, the **School Governing Authority** shall provide an approved and adopted board resolution for not selecting the lowest written price quotation.

11.14 **Headings**. Headings are for the convenience of the parties only. Headings have no substantive meaning.

11.15 **Assignments**. This Charter and its terms shall not be assigned or delegated without the express written approval of the other party.

11.16 **Notice**. Any notice to one party by the other shall be in writing and effective upon receipt and may be satisfied by personal delivery or by any other means by which receipt can be documented, to; in the case of the **Sponsor** or **Sponsor's Designee**, the President; or, in the case of the **School Governing Authority**, the President, and to the attorney for the **School Governing Authority**, at the last known business address of the **Sponsor**, and the last known business or home address of the **School** and/or its administrator or any board member.

Should the **School** be abandoned by or not have in place, an administrator or an authorized Director of the Board, the **Sponsor** may give notice to the Ohio Department of Education.

11.17 **Severability.** Should any term, clause or provision of this charter be deemed invalid or unenforceable by a court of competent jurisdiction, all remaining terms, clauses or provisions shall remain valid and enforceable and in full force and effect, and the invalid or unenforceable provision shall be stricken or replaced with a provision as near as possible to the original intent.

11.18 **Changes or Modifications**. This Charter constitutes the entire agreement among the

parties and any changes or modifications of this Charter shall be made and agreed to in writing, authorized and executed by both parties. Notifications required by this Charter shall not be considered changes or modifications of this Charter.

11.19 **Attachments.** All Attachments (1.3-9.4) to this Charter are attached hereto and incorporated by reference into the Charter.

Executed this 16th day of June, 2015 in Cincinnati, Ohio.

St. Aloysius

By: [signature] (Name)

Its: COO; CORPORATE COUNSEL (Title)

with full authority to execute this Charter for and on behalf of the **Sponsor** and with full authority to bind the **Sponsor**.

School Governing Authority of

Broadway Academy

By: Mrs. Gwendolyn Norfleet Rodgers (Name)

Its: President (Title)

with full authority to execute this Charter for and on behalf of the **School Governing Authority** and with full authority to bind the **School Governing Authority**.

DATE	DOCUMENT ID	DESCRIPTION	FILING	EXPED	PENALTY	CERT	COPY
09/04/2012	201224401476	AMENDED/RESTATED ARTICLES (AMA)	50.00	.00		.00	.00

Receipt

This is not a bill. Please do not remit payment.

AMY GOODSON, ESQ.
2851 FULMER DRIVE
SILVER LAKE, OH 44224

STATE OF OHIO

CERTIFICATE

Ohio Secretary of State, Jon Husted

1991209

It is hereby certified that the Secretary of State of Ohio has custody of the business records for

BROADWAY ACADEMY INC.

and, that said business records show the filing and recording of:

Document(s):	Document No(s):
AMENDED/RESTATED ARTICLES	**201224401476**

United States of America
State of Ohio
Office of the Secretary of State

Witness my hand and the seal of the Secretary of State at Columbus, Ohio this 30th day of August, A.D. 2012.

Jon Husted

Ohio Secretary of State

Form 541 Prescribed by:
JON HUSTED
Ohio Secretary of State
Central Ohio: (614) 466-3910
Toll Free: (877) SOS-FILE (767-3453)
www.OhioSecretaryofState.gov
Busserv@OhioSecretaryofState.gov

Mail this form to one of the following:

Regular Filing (non expedite)
P.O. Box 1329
Columbus, OH 43216

Expedite Filing **(Two-business day processing time requires an additional $100.00).**
P.O. Box 1390
Columbus, OH 43216

Certificate of Amendment
(Nonprofit, Domestic Corporation)
Filing Fee: $50

2012 AUG 30 AM 11:17

Check the appropriate box:

- ○ Amendment to existing Articles of Incorporation (128-AMD)
- ◉ Amended and Restated Articles (126-AMAN) - The following articles supersede the existing articles and all amendments thereto.

Complete the following information:

Name of Corporation: Broadway Academy, Inc.

Charter Number: 1991209

Check one box below:

- ○ The articles are hereby amended by the **Members** pursuant to Ohio Revised Code section 1702.38 (C) or (D)
- ◉ The articles are hereby amended by the **Directors.** Pursuant to Ohio Revised Code section 1702.38(E). In the case of adoption of the resolution by the directors, a statement of the basis for such adoption shall be provided - this may be attached with the resolution

A copy of the resolution of amendment is attached to this document.

Note: If amended and restated articles were adopted, amended articles must set forth all provisions required in original articles other than with respect to the initial directors pursuant to Ohio Revised Code section 1702.38(A).

Required
Must be signed by an authorized officer of the Corporation pursuant to the Ohio Revised Code section 1702.38(G).

If authorized representative is an individual, then they must sign in the "signature" box and print their name in the "Print Name" box.

If authorized representative is a business entity, not an individual, then please print the business name in the "signature" box, an authorized representative of the business entity must sign in the "By" box and print their name in the "Print Name" box.

Mrs Gwendolyn Norfleet Rodgers
Signature

Gwendolyn Norfleet-Rodgers
By (if applicable)

Print Name

Signature

By (if applicable)

Print Name

AMENDED AND RESTATED ARTICLES OF INCORPORATION
OF
BROADWAY ACADEMY, INC.

FIRST: The name of the Corporation is Broadway Academy, Inc.

SECOND: The place in the State of Ohio where its principal office is in the City of Cleveland, Cuyahoga County.

THIRD: The Corporation is organized exclusively for charitable and educational purposes within the meaning of section 501(c)(3) of the Internal Revenue Code.

FOURTH: No part of the net earnings of the Corporation shall inure to the benefit of, or be distributable to its Directors, Officers, or other private persons, except that the Corporation shall be authorized and empowered to pay reasonable compensation for services rendered and to make payments and distributions in furtherance of the purposes set forth in the Third Article hereof. No substantial part of the activities of the Corporation shall be the carrying on of propaganda, or otherwise attempting to influence legislation; and the Corporation shall not participate in, or intervene in (including the publishing or distribution of statements) any political campaign on behalf of or in opposition to any candidate for public office. Notwithstanding any other provision of these Articles, the Corporation shall not carry on any other activities not permitted to be carried on (a) by a corporation exempt from federal income tax under section 501(c)(3) of the Internal Revenue Code (or the corresponding section of any future federal tax code) or (b) by a corporation contributions to which are deductible under section 170(c)(2) of the Internal Revenue Code (or the corresponding section of any future federal tax code).

FIFTH: Upon the dissolution of the Corporation, the Board of Directors shall, after paying or making provision for the payment of all of the liabilities of the Corporation, dispose of all of the assets of the Corporation exclusively for the purposes of the Corporation in such manner, or to a public benefit corporation, the United States, a state or any political subdivision of a state, or an organization recognized as exempt for federal income tax purposes under section 501(c)(3) of the Internal Revenue Code of 1986, as amended, as the Board of Trustees shall determine. Any such assets not so disposed of shall be disposed of by the Court of Common Pleas of the county in which the principal office of the Corporation is then located, exclusively for such purposes or to an organization described above, as said Court shall determine. Notwithstanding anything contained in this Article V, to the extent permitted by Chapter 1702 of the Revised Code, at any time during which this Corporation is a community school under the laws of Ohio, it shall be subject to R.C. 3314.074.

Amended Articles of Incorporation

RESOLVED, that the Board of Directors of Broadway Academy approves the amended articles of incorporation to be amended to provide clarification of its nonprofit purpose

BE IT FURTHER RESOLVED that the Board authorizes payment of $50.00 for the filing fee associated with submitting the amended articles of incorporation to the Secretary of State's office.
Motion: Mr. Andrews **Second:** Ms. Gioitta
Ayes: 5 **Nays**: 0

Board ~~Secretary~~ President

March 21, 2012
Date

AMENDED AND RESTATED CODE OF REGULATIONS OF BROADWAY ACADEMY, INC.

ARTICLE I
GENERAL

Section 1. Name.

The name of this Ohio nonprofit corporation shall be Broadway Academy, Inc. (the "Corporation").

Section 2. Operation, Objectives, and Guiding Principles.

Subject to all of the terms and conditions set forth in the Corporation's Articles of Incorporation and this Code of Regulations, the Corporation is organized, and shall be operated as a public benefit corporation defined in §1702.01(P) of the Ohio Revised Code.

a. The Corporation shall engage in lawful activities that directly or indirectly further public or charitable purpose and, upon dissolution, shall distribute its assets to a public benefit corporation, the United States, a state or any political subdivision of a state, or a person that is recognized as exempt from federal income taxation under section 501(c)(3) of the "Internal Revenue Code of 1986," as amended.

b. Unless otherwise specifically set forth in this Code of Regulations:

1. No part of the net earnings of the Corporation shall inure to the benefit of or be distributable to its members, directors, officers, or other private persons, except that the Corporation shall be authorized and empowered to pay reasonable compensation for services rendered by its members, directors or officers or other private persons and to make payments and distributions in furtherance of the purposes set forth in these Articles; and

2. No substantial part of the activities of the Corporation shall be the carrying on of propaganda, or otherwise attempting to influence legislation; and

3. The Corporation shall not participate in, or intervene in (including the publishing or distribution of statements) any political campaign on behalf of or in opposition to any candidate for public office; and

4. No present or former member, or immediate family member of the Board of Directors shall be an owner, employee or consultant of any nonprofit or for profit operator or sponsor of a community school unless at one year has elapsed since the conclusion of the person's membership; and

5. No loans shall be made by the Corporation to its directors or officers.

Section 3. Location.

The Corporation's headquarters shall be located and maintained in Cuyahoga County, Ohio or such other location as the Board of Directors may determine.

Section 4. Property.

The Corporation may purchase, lease, rent, accept as gifts or contributions, or otherwise receive, acquire and manage real and personal property in furtherance of its purposes.

ARTICLE II
BOARD OF DIRECTORS

Section 1. Management.

The Board of Directors shall be the governing body of the Corporation responsible for the management of the affairs of the Corporation in furtherance of its purposes. The Corporation shall have a Board of Directors consisting of no less than five members; all of whom shall be appointed each year to hold office in accordance with Section 2 below. No present or former member, or immediate family member of the Board of Directors shall be an owner, employee, or consultant of any nonprofit or for profit operator or sponsor of a community school unless at least one year has elapsed since the conclusion of the person's membership.

Section 2. Authority.

Except where otherwise provided in the Ohio Revised Code, the Corporation's Articles of Incorporation, or this Code of Regulations, the full authority of the Corporation shall be vested in and exercised by the Board of Directors. Any authority of the Directors may be delegated to such persons or committees as the Directors so acting may determine.

Section 3. Election of and Term of Office of Directors.

Each Director shall hold office for a term of three years commencing on the day of the meeting at which the Director was elected and ending on the day of the third annual meeting thereafter or until successor Directors are elected and qualified.. Prior to the expiration of each Director's term, the remaining Board of Directors shall appoint, by majority vote, a replacement Director who shall serve a three year term commencing upon the expiration of each initial Director's term. Directors may be reappointed and serve additional terms.

Section 4. Director Vacancies.

a. Except as provided in Section 3 above, the office of any Director shall become vacant upon his or her death, failure to qualify, removal or resignation as a Director. Any Director's office shall likewise become vacant if he or she shall be declared of unsound mind or otherwise incompetent by order of a court having jurisdiction, or if he or she shall be adjudicated as bankrupt or shall make an agreement for the benefit of his or her creditors.

b. A vacancy among the Directors shall be filled by the appointment of a successor Director to serve for the portion of the term remaining. Such appointment shall made by a vote of the remaining directors, though less than a majority of the whole authorized number of directors.

Section 5. Qualifications.

All Directors are required to obtain a criminal background check, as required by Chapter 3314 of the Ohio Revised Code. A Director may not serve on the Board if he or she has been convicted of, or plead guilty to, a disqualifying offense applicable to his or her position as set forth under Ohio law. At any time during which this Corporation is a community school under the laws of Ohio, no member of the Board may serve on the governing authority of more than one other Ohio community school while a member of this Board.

Section 6. Compensation.

Directors may elect to receive compensation pursuant to Ohio Revised Code section 3314.02E(4) or subsequent related provisions. Directors may also be compensated or reimbursed, as authorized and approved by the remaining Directors, for services rendered or expenses incurred in furtherance of the purposes of the Corporation.

ARTICLE III
MEETINGS, POWERS AND COMPENSATION OF DIRECTORS

Section 1. General Powers of the Board.

The powers of the Corporation shall be exercised, its business and affairs conducted and its property controlled by the Board of Directors, except as otherwise provided in the Articles of Incorporation, amendments thereto, or Chapter 1702 of the Ohio Revised Code.

Section 2. Other Powers.

Without prejudice to the general powers conferred above, the Directors, acting as a Board, shall have the power:

a. to fix, define and limit the powers and duties of all officers,

b. to appoint, and at their discretion, with or without cause, to remove, or suspend such subordinate officers, assistants, managers, agents, and employees as the Directors may from time to time deem advisable, and to determine their duties and fix their compensation;

c. to require any officer, agent, or employee of the Corporation to furnish a bond for faithful performance in such amount and with sureties as the Board may approve;

d. to designate a depository or depositories of the funds of the Corporation and the officer or officers or other person who shall be authorized to sign notes, checks, drafts, contracts, deeds, mortgages and other instruments on behalf of the Corporation.

Section 3. Meetings of the Board.

Annual Meetings of the Board of Directors shall be held each year for the election of officers and for the transaction of any other business which may properly come before the Board.

Regular Meetings of the Board of Directors shall be held at least six times a year (including the Annual Meeting) pursuant to the Ohio Revised Code and at such other times and places as is directed by the Board of Directors.

Special and emergency meetings of the Board may be held at any time upon the written call of the Board President or any Director. The person or persons authorized to call special meetings of the Board of Directors may fix a reasonable time and place for holding them.

Except for Special Meetings, written notice of any Board of Directors Meeting shall be given to the Directors at least five (5) days prior to such meeting and shall set forth the reasons therefore, which may be for general purposes.. Any Special Meeting may be made other than by written notice when circumstances dictate. Notice of meetings shall be given to the public as required by Ohio law.

All meetings of the Board shall be held in the county in which the headquarters are located, as the Board of Directors may determine or at other locations as the Board of Directors may determine from time to time.

Section 4. Meeting Held Through Communications Equipment.

Unless otherwise prohibited by law, meetings of the Board of Directors or any committee of the Board of Directors may be held through communications equipment provided that all persons participating in such meeting can hear and otherwise communicate with each other, and such participation shall constitute presence at such meeting. The preceding notwithstanding, no meeting may be held through the use of communications equipment at any time during which the Corporation is a community school under Chapter 3314 of the Ohio Revised Code or is otherwise subject to Section 121.22 of the Ohio Revised Code.

Section 5. Action Without Meeting.

Unless otherwise prohibited by law, any action which may be taken at any meeting of the Board of Directors, or any committee of the Board of Directors, may be taken without a meeting by unanimous consent of the Directors who are entitled to vote on such action evidenced by a writing or writings signed by all of the members of the Board or of such committee who are entitled to vote on such action, as the case may be. The writing or writings evidencing such action taken without a meeting shall be filed with the Secretary of the Corporation and inserted by the Secretary in the permanent records of the Corporation relating to meetings of the Board or of its committees.

Section 6. Quorum.

Except as otherwise provided in this Code of Regulations, the minimum number of Directors necessary to constitute a quorum for the transaction of business at any meeting shall be a majority of the Directors entitled to vote who are then in office.

Section 7. Vote of Directors.

All matters submitted to a vote at any meeting at which a quorum is present shall be determined by a majority vote of the members entitled to vote who are present unless otherwise provided in this Code of Regulations.

Section 8. Executive Session.

So long as the Corporation operates as an Ohio Community School as defined in Ohio Revised Code Section 3314, all meetings shall comply with the legal requirements for Ohio Community Schools. As such, the Board may discuss matters in executive session as permitted by Section 121.22(G) of the Ohio Revised Code as the same may be amended.

ARTICLE IV
OFFICERS

Section 1. Election of Officers.

The Board of Directors shall elect as Officers of the Corporation a President, Secretary, and a Treasurer, and may elect such Vice Presidents and assistant officers as the Board from time to time deems appropriate. Each Director shall be entitled to vote only for one (1) person for each office to be elected. An individual may hold more than one (1) office of the Corporation, provided however, that no person

shall execute, acknowledge or verify an instrument in more than one capacity. The duties of the Officers shall be as follows:

a. President. The President shall be the active executive officer of the Corporation and shall exercise supervision over the business of the Corporation and over its several officers, subject, however, to the control of the Board of Directors. The President shall preside at all meetings of the Board of Directors. He/She shall have authority to sign all deeds, mortgages, bonds, contracts, notes and other instruments requiring his/her signature; and shall have all the powers and duties prescribed by the General Corporation Act; appoint all committee chairs and committee members; assist in conducting new board member orientation; coordinate managements' annual performance evaluation; recruit new board members; act as spokesperson for the organization; periodically consult with board members on their roles and help them assess their performance; and such other duties as from time to time may be assigned to him/her by the Board of Directors.

b. Vice-President. The Vice-President shall perform duties as are conferred upon him/her by these Regulations or as may from time to time be assigned to him/her by the Board of Directors or the President. At the request of the President, or in his/her absence or disability, the Vice-President, designated by the President (or in the absence of such designation, the Vice-President designated by the Board of Directors) shall perform all the duties of the President, and when so acting, shall have the powers and duties of the President.

c. Secretary. The Secretary of the Corporation shall keep minutes of all proceedings of the meetings and shall make proper records of the same which shall be attested to him/her. He/She shall keep such books as may be required by the Board of Directors and file all reports to states, to the Federal government, and to foreign countries. The Secretary shall be required to give notice of meetings of the Directors, and shall perform such other and further duties as may from time to time be assigned to him/her by the Board of Directors or the President. The Secretary shall sign all deeds, mortgages, bonds, contracts, notes and other instruments executed by the Corporation requiring his/her signature.

d. Treasurer. The Treasurer shall monitor the financial affairs of the Corporation. So long as the Corporation is operating a community school defined in Chapter 3314 of the Ohio Revised Code, the Board of Directors shall appoint an Assistant Treasurer to act as the corporation's designated fiscal officer who shall hold such licenses and receive such training as required by Ohio law. The Assistant Treasurer shall cause to be kept adequate and correct accounts of its assets and liabilities, receipts, disbursements, gains, losses, together with such other accounts as may be required, and, review and answer board members' questions about the annual audit and he/she shall perform such other duties as from time to time may be assigned to him/her by the Board of Directors. Upon the expiration of his/her appointment, the Assistant Treasurer shall turn over to the Board of Directors all property, books, paper and money of the Corporation in his/her hands.

e. Designated Fiscal Officer. The Board shall have a Designated Fiscal Officer as required by Ohio Law. The Fiscal Officer shall hold the office of Assistant Treasurer. The Fiscal Officer may be an employee or independent contractor hired by the Board. The Fiscal Officer shall have general supervision of all finances; he/she shall receive and have in his/her charge all money, bills, notes, deeds, leases, mortgages and similar property belonging to the Corporation, and shall do with same as may from time to time be required by the Board of Directors. The Fiscal Officer shall not be considered a member of the Board, as that term is used in this Code of Regulations.

The Fiscal Officer shall understand financial accounting for non-profit organizations; manage the Board's review of and action related to the Board's financial responsibilities; work with management to ensure that appropriate financial reports are made available to the Board on a timely basis; review preliminary annual budgets with management and assist in presenting the budget to the Board for approval; and review and answer Board members' questions about the annual audit. The Fiscal Officer shall cause to be kept adequate and correct accounts of its assets and liabilities, receipts, disbursements,

gains, losses, together with such other accounts as may be required, and, upon the expiration of his/her term of office shall turn over to his/her successor to the Board of Directors all property, books, papers, and money of the Corporation in his/her hands; and he/she shall perform such other duties as from time to time may be assigned to him/her by the Board of Directors.

Annual reports are required to be submitted to the Board showing income, expenditures, and pending income. The financial records of the organization are public information and shall be made available to the membership, Board members, and the public.

Section 2. Assistant and Subordinate Officers.

The Board of Directors may appoint such assistant and subordinate officers as it may deem desirable. Each such officer shall hold office during the pleasure of the Board of Directors and perform such duties as the Board of Directors may prescribe.

The Board of Directors may from time to time, authorize any officer, appoint and remove subordinate officers, prescribe their authority and duties, and fix their compensation, if any.

Section 3. Duties of Officers May be Delegated.

In the absence of any officer of the Corporation, or for any other reason, which the Board of Directors may deem sufficient, the Board of Directors may delegate, for the time being, the powers and duties, or any one of them, of such officer to any other officer or to any Director.

Section 4. Qualifications and Authority of Officers.

The Officers of the Corporation may, but need not, be Directors of the Corporation. Officers of the Corporation shall have such authority as may be specified from time to time by the Directors.

Section 5. Term of Office.

The officers of the Corporation shall hold office for one year. The number of terms of such Officers shall not be limited.

Section 6. Resignation and Removal.

Any Officer may, by written notice to the Board of Directors, resign at any time. Any Officer may be removed by the Board of Directors without cause at any time.

Section 7. Officer Vacancies.

Vacancies which occur in any office shall be filled by the Board of Directors for the remainder of the vacant term in such manner as said Board, in its discretion, deems appropriate.

ARTICLE V
COMMITTEES

The Corporation may have Standing or Special Committees of no more than two (2) Directors to perform such functions as the Board of Directors may authorize and direct. The chairpersons of such committees shall be selected by the President from among its members. Committee members shall be appointed by the President.

ARTICLE VI
SEAL

If deemed advisable by the Board of Directors, the Corporation may adopt a corporate seal. If deemed advisable by the Board of Directors, duplicate seals may be provided and kept for the purpose of the Corporation.

ARTICLE VII
BOARD POLICIES

Section 1. Nondiscriminatory Policy

The Corporation shall not discriminate on the basis of race, color, gender, national origin, pregnancy status or military status with respect to its rights privileges, programs, activities, and/or in the administration of its educational programs and athletics/extracurricular activities. Specifically, with respect to admissions, it will admit students of any race, creed, color, national or ethnic origin, sex, and handicapping condition. Upon the admission of any handicapped student, the Corporation will comply with all federal and state laws regarding the education of handicapped students.

Section 2. Conflicts of Interest Policy

The Corporation shall adopt a conflicts of interest policy to protect the Corporation's interest when it is contemplating entering into a transaction or arrangement that might benefit the private interest of a Director, Officer, or other interested person.

ARTICLE VIII
INDEMNIFICATION

Section 1. Indemnification.

Except as otherwise provided in this Article, the Corporation shall, to the fullest extent not prohibited by applicable law, indemnify each person who, by reason of being or having been a Director or Officer of the Corporation, is named or otherwise becomes or is threatened to be made a party to any action, suit, investigation or proceeding (or claim or other matter therein), and the Corporation by its Board of Directors may indemnify any other person as deemed proper by said Board, against any and all costs and expenses (including attorney fees, judgments, fines, penalties, amounts paid in settlement, and other disbursements) actually and reasonably incurred by, or imposed upon, such person in connection with any action, suit, investigation or proceeding (or claim or other matter therein), whether civil, criminal, administrative or otherwise in nature, with respect to which such person is named or otherwise becomes or is threatened to be made a party by reason of being or any time having been a Director, Officer, employee or other agent of or in a similar capacity with the Corporation, or by reason of being or at any time having been, at the direction or at the request of the Corporation, a director, Director, officer, administrator, manager, employee, volunteer, advisor or other agent of or fiduciary for any subsidiary or other corporation, partnership, trust, venture or other party or enterprise, including any employment benefit plan.

Each request by or on behalf of any person who is or may be entitled to indemnification for reason other than by being or having been a Director or Officer of the Corporation shall be reviewed by the Board of Directors, and indemnification of such person shall be authorized by said Board only if it is determined by said Board that indemnification is proper in the specific case, and, notwithstanding anything to the contrary in this Code of Regulations, no person shall be indemnified to the extent, if any,

it is determined by said Board or by written opinion of legal counsel designated by said Board for such purpose that indemnification is contrary to applicable law.

Section 2. Insurance.

The Corporation, to the extent permitted by Chapter 1702 of the Ohio Revised Code, may purchase and maintain insurance or furnish similar protection for or on behalf of any person who is or at any time has been a Director, Officer, employee, or volunteer of the Corporation.

ARTICLE IX
CONFLICT WITH ARTICLES OF INCORPORATION

If, at any time, any provision of this Code of Regulations conflicts with any provision of the Corporation's Articles of Incorporation, the provisions of the Articles of Incorporation shall control, and the portion of this Code of Regulations that conflicts with the Articles of Incorporation shall be void to the extent of the conflict with the Articles of Incorporation.

ARTICLE X
DISSOLUTION

The Corporation may be dissolved by the Board of Directors at any time, provided that upon dissolution the Corporation shall distribute its assets to a public benefit corporation, the United States, a state or any political subdivision of a state, or a person that is recognized as exempt from federal income taxation under section 501(c)(3) of the "Internal Revenue Code of 1986," as amended. Notwithstanding the foregoing, to the extent permitted by Chapter 1702 of the Revised Code, at any time during which this Corporation is a community school under the laws of Ohio, it shall be subject to R.C. 3314.074.

ARTICLE XI
MISCELLANEOUS

Section 1. Fiscal Year.

The fiscal year of the Corporation shall commence on July 1 and conclude on June 30 of each year.

Section 2. Audit.

The fiscal records of the Corporation shall be audited each year by the Auditor of the State of Ohio or by a Certified Public Accountant and the report thereof made available to the President, the Board of Directors, and such other persons as may be necessary or appropriate.

Section 3. Spending Authority.

Except for previously approved recurring expenses such as sponsorship fees; management fees; grant expenses; insurance; audit, accounting, and tax fees; bank fees, legal fees; and meeting notification expenses, all expenditures shall be approved by resolution of the Board of Directors.

Broadway Academy

Board of Directors

Gwendolyn Norfleet-Rodgers

16310 Eldamere Ave.
Cleveland, Ohio 44128
216-921-5130
Gwenleo326@gmail.com

Cynthia Weston

7255 Winchester Dr.
Solon, Ohio 44139
440-536-0212
5678dance22@gmail.com

Richard Andrews

1210 Oakridge Dr.
Cleveland, Ohio 44121
216-282-5111
richardtandrews@gmail.com

Caroline Gioitta

2296 West 10th St.
Cleveland, Ohio 44113
216-781-5176
caregioitta@gmail.com

Kim Henry

2111 Acacia Park Dr.
Lyndhurst, Ohio 44124
216-215-6389
khnds1@sbcglobal.net

MANAGEMENT AGREEMENT

THIS MANAGEMENT AGREEMENT ("Agreement") is entered into effective as of this 2nd day of March, 2011, by and between Chippewa Community School, LLC, a Nevada limited liability company (the "Operator") and CSR-CCEZ VCPHS WEST, INC., an Ohio not-for-profit corporation (the "Corporation"), dba Broadway Academy Inc., see section 12 and 13, which is governed by its Board of Directors (the "Board").

WITNESSETH:

WHEREAS, the Corporation is organized as an Ohio nonprofit corporation under Chapter 1702 of the Ohio Revised Code and the Corporation has entered and into a Community School Contract dated March 2, 2011 (the "School Contract") with St. Aloysius Orphanage (the "Sponsor"), pursuant to which the Corporation is authorized to operate a community school under Chapter 3314 of the Ohio Revised Code (the "School").

WHEREAS, the Operator has developed an educational model which it utilizes to manage and operate a unique group of schools called "Brighten Heights and HOPE Academy" as more fully described in Exhibit A attached hereto and incorporated herein by reference (together with any future improvements, alterations or refinements thereto, the "Model"), and provides management services to community or charter schools throughout the State of Ohio and in other states, including educational, managerial, financial and other consulting services.

WHEREAS, the Corporation desires the Operator to provide such requisite management, educational, financial and other consulting services necessary to operate a community school all in accordance with the School Contract;

WHEREAS, the Operator desires to provide the aforementioned services and other expertise referenced herein;

WHEREAS the Corporation desires to contract with the Operator to provide the services and functions detailed herein, the Board agrees to evaluate the Company's performance utilizing a "how well" analysis instead of a "how will" analysis. Said analysis shall be mutually agreeable to both parties and must be permissible by law; and

WHEREAS the Operator desires to be evaluated on the aforementioned standard.

NOW, THEREFORE, in consideration of their mutual promises and covenants, and intending to be legally bound hereby, the parties hereto agree as follows:

1. Term. This Agreement shall have an initial term of four (4) years, commencing on March 2, 2011, and ending on June 30, 2015, unless sooner terminated as provided for herein. Thereafter, this Agreement shall automatically renew for two successive five (5) year terms unless one party notifies the other party not less than six (6) months prior to the expiration of the then current term of its intention not to renew this Agreement. In the event that the School Contract is terminated or not renewed for any reason and no similar contract is obtained from the

Sponsor or another authorized sponsor, this Agreement shall terminate at the completion of the then-current school year.

2. **The School Contract.** The Corporation shall be responsible for its own corporate governance and operation in accordance with applicable law. In order to assist the Corporation in carrying out the terms of the School Contract, the Corporation hereby contracts with the Operator to provide the Model and any and all functions, equipment, supplies, facilities, services and labor relating to the provision of education, management and day-to-day operation of the School as provided for herein.

In providing services required by this Agreement, the Operator must observe and comply with all applicable federal, state and local statutes, and the requirement that the Corporation qualify as a "public benefit corporation" as defined in R.C. § 1702.01(P). The Operator shall be responsible and accountable to the Board for the administration, operation and performance of the School in accordance with the School Contract, except for the Corporation's accounting, financial reporting and audit functions which will be performed by the designated fiscal officer hired by the Corporation at its own expense at a rate not to exceed industry standard amounts as agreed upon by the Operator and the Corporation. If the Corporation appoints the Operator as its designated fiscal officer, the Operator shall provide such accounting, financial reporting and audit functions for no additional cost or fee. The Corporation shall not amend the School Contract in a manner which would materially affect the responsibilities and obligations between the Operator and the Corporation during the term of this Agreement without the Operator's approval.

3. **Management Services.** The School further contracts with the Operator, to the extent permitted by law, to provide the functions outlined below relating to the provision of educational services and the operation of the School. The Operator will provide the School the following services:

(a) **Objectives for Academic Progress.** The Operator shall report academic progress consistent with the provisions of the School Contract to the Board annually with regular updates provided at Board meetings if so requested by the Board.

(b) **Curriculum Development.**

(i) The Operator shall provide and select all curricula. The Operator shall provide curriculum that is aligned with the state standards applicable to the School, and shall monitor and continuously assess the curriculum and standardized testing procedures.

(ii) The Operator shall evaluate and assess the School's accountability system on an annual basis. The Operator may from time to time redefine, modify and/or replace curriculum models and testing procedures without such decisions being subject to School Board's approval.

(iii) The Operator shall annually identify its gifted education and special education plans to the Board consistent with the provisions of the School Contract and shall report to the Board at regular meetings and seek the Board's approval of any material changes or modifications to the programs.

(c) **Staffing of School Level Positions and Professional Development.**

(i) The School Administrator and teachers are employees of the Operator, and as such, the Operator shall make all decisions regarding hiring, termination, staffing composition, training, and professional development.

(ii) The Operator shall establish and maintain on a continuous basis such teacher development programs to define teacher qualifications and performance requirements as the Operator deems appropriate. The Operator shall similarly implement a professional development program aimed at improving the effectiveness of each teacher's ability to help students' learning, in general.

(iii) The Operator shall coordinate ongoing teacher training with respect to technology; and shall provide training in its methods, curriculum, and programs on a regular and continuous basis.

(iv) Non-instructional personnel shall receive such training as the Operator determines to be reasonably necessary from time to time.

(d) **School Facility and Facility Management.**

(i) The Operator will provide a facility for the School. The Operator intends for the School to initially be located at 3398 E. 55th Street, Cleveland, Ohio, 44127 or such other facility as shall be selected by the Operator. During the term of this Agreement, the School Facility shall be used only to carry out the terms and conditions of the School Contract, educational purposes not inconsistent with the School Contract and other uses which do not violate the School Contract, do not conflict with applicable laws, and do not conflict or interfere with the operation of the School or the safety and security of the School and its students.

(ii) The Operator shall be responsible for maintenance, custodial and security services for the School Facility.

(iii) The Operator shall be responsible for making reasonable improvements to the School Facility as needed for the School's operation, safety, health and welfare of the School's students. All upkeep and improvements shall

be made in accordance with applicable law and reasonable Sponsor mandates. Said improvements shall be made in a timely and reasonable manner.

(iv) Upon 60 days prior notice to the Board, Operator may increase or decrease the size of the School Facility or move the School Facility to another location by leasing or purchasing a suitable facility for the School's operations as defined by State and Federal law.

(v) In the event the School Facility or any portion thereof is determined to be or becomes unsafe or otherwise unsuitable for the School's operations to the extent that use thereof must cease immediately, the Operator may relocate some or all of the School operations to another suitable location on a temporary or permanent basis, as required by the circumstances, without first obtaining the Board's approval. The Operator shall notify the Board and the Sponsor immediately in the event of any such relocation and shall, in a timely fashion, provide the Board and the Sponsor with reasonable proof that the alternate location is a suitable facility for the School's operations as defined in the School Contract.

(vi) The Operator shall annually report on changes in the location, physical facility layout and capital improvements involved with the School Facility.

(e) **Equipment, Technology, and Operational Support Services.**

(i) The Corporation shall make all furniture, computers, equipment, and other personal property currently owned or hereafter acquired by it for use in the operation of the School, available to the Operator throughout the term hereof for continued use in the operation of the School. The Operator shall negotiate the terms of the purchase or lease of any additional furniture, computers, software, equipment, and other personal property necessary for the operation of the School. The Operator shall purchase or lease all furniture, computers, software, and other personal property necessary for the operation of the School which is not provided by the Corporation. If equipment is purchased on behalf of the Corporation using funding specifically provided by the Corporation pursuant to Section 7(e)(ii), it will be titled in the Corporation's name instead of the Operator's name. However, in no event shall any of the Continuing Fee or any operational grant funds be used for the purchase of Corporation-titled equipment.

(ii) The Operator shall consummate the purchase or lease of the equipment and from the time of the purchase or lease and at all times thereafter, manage and maintain the equipment in proper working order. The foregoing shall not limit the Operator's ability to sell, scrap or dispose of its own equipment which is obsolete, unneeded, excessive, broken or inoperable as determined by the Operator in its sole discretion.

(iii) The Operator shall provide to the Board as requested, access to the Operator's supply sources (including supply sources of affiliates of the Operator) to obtain centralized purchasing discounts for the School where applicable.

(f) **Management and Management Consulting.** It is the responsibility of the Operator to perform as follows:

(i) Perform all functions pertaining to school operations and day-to-day management of the School, in accordance with the School Contract.

(ii) Provide the Model, curriculum and program development as discussed in this Agreement and the School Contract.

(iii) Perform other consulting and liaison services with governmental and quasi-governmental offices and agencies as are necessary in day-to-day operations of the School or as required by the School Contract;

(iv) Perform advisory services regarding special education and special needs students, programs, processes and reimbursements through the Operator's Special Education Department;

(v) Provide all data information management services, testing, and testing analysis required by law or otherwise deemed necessary or useful by the Operator and provide the same to the Sponsor if required by the School Contract;

(vi) Draft operations manuals, forms (including teacher contracts, applications, enrollment and similar forms), and management procedures, as the same are from time to time developed by the Operator;

(g) **Student Recruitment.** The Operator shall be responsible for the recruitment and enrollment of students at levels that it determines optimal, subject to the Operator's general recruitment and admission policies. Students shall be recruited and selected in accordance with the procedures set forth in the School Contract and in compliance with all applicable federal, state and local law.

(h) **School Level Policies.** The Operator shall propose and the Board shall adopt reasonable policies applicable to the School, which shall be consistent with this Agreement, . The Board may not unilaterally adopt or impose any rules, regulations or procedures or amendments or supplements to any of the foregoing without the approval by Operator, which approval may be withheld by the Operator in its sole discretion.

(i) **Authority.** The Operator shall have the authority and power necessary to undertake its responsibilities described in this Agreement.

(j) **Subcontractors.** The Operator reserves the right to subcontract services to be provided hereunder without the Board's approval; provided that the Operator shall be solely responsible for all costs, expenses and fees associated with such subcontractors.

4. Purchases with Corporation Funds. Any property purchased by the Operator on behalf of the Corporation with the Corporation's funds, such as curriculum materials, books and supplies, and equipment which, by the nature of the funding source, must be titled in the Corporation's name will be the property of the Corporation; provided that the Corporation must fund the purchase of such Corporation-titled assets with grants for that specific purpose or from other funds available to the Corporation. In no event shall any of the Continuing Fee, any separate funds belonging to the Operator or any operational grant funds be used for the purchase of Corporation-titled equipment. The Operator shall permanently mark or tag with a number any property owned by the Corporation in accordance with School policy and keep an inventory of said property.

5. Insurance and School Responsibilities.

(a) **The Operator.** The Operator shall at its expense, maintain such commercial general liability insurance and other insurance required by the School Contract, except the Directors and Officers insurance, which shall be maintained by the Corporation. The limits of the Operator's primary and umbrella insurance policies shall at all times meet or exceed the requirements set forth in the School Contract. The Operator's policies shall name the Corporation and the other parties mentioned in the School Contract as insureds, or as an additional insureds on an Operator policy. A certificate of insurance evidencing such coverages shall be provided upon reasonable request. All such policies of insurance shall be issued by responsible companies of recognized standing authorized to do business in the State, shall be written in standard form, and shall provide that the policies shall not be cancelable except upon (30) days written notice to the Corporation. Upon the Corporation's request, the Operator shall deliver to the Corporation a copy of such policies and other written confirmation acceptable to Corporation, together with evidence that the insurance premiums have been paid.

(b) **The Corporation.** The Board will be responsible for its directors' and officers' insurance, legal fees for the representation of the Board and general corporate matters, accounting, audit, tax and consulting fees for the School and other expenses approved by the Board.

6. Budget.

(a) **Projected Budget.** The fiscal officer shall provide the Board with an annual projected Budget for the Corporation (the "Budget") which shall be submitted prior to the June 30th immediately preceding the next academic year.

(b) **Budget Detail.** The Budget shall be limited to the level of detail required for public auditing purposes.

(c) **Approval.** The Budget shall be prepared by the fiscal officer and submitted to the Board for approval, which approval shall not be unreasonably withheld or delayed. The Budget may be amended from time to time at the recommendation of the fiscal officer and submitted to the Board for approval, which approval shall not be unreasonably withheld or denied.

7. Fees.

(a) **Continuing Fee.** The Corporation shall pay a monthly management, consulting and operation fee (the "Continuing Fee") to the Operator of ninety-six percent (96%) of the Qualified Gross Revenues. As used in this Agreement, "Qualified Gross Revenues" shall mean the revenue per student received by the Corporation from the State pursuant to the Code. Qualified Gross Revenues do not include: student fees, charitable contributions, PTA/PTO income, and other miscellaneous revenue received which shall be retained by the Corporation or PTA/PTO. Federal Title Programs and such other federal, state and local government grant funding designated to compensate the School for the education of its students, including any grants under the American Recovery and Reinvestment Act of 2009 ("Supplemental Revenues") shall be paid to the Operator in full within five (5) business days of receipt of any such Supplemental Revenues by the Corporation. The Continuing Fee shall be paid within five (5) business days of receipt by the Corporation of any Qualified Gross Revenues via electronic funds transfer. The Continuing Fee shall be subject to an annual reconciliation based upon actual enrollment and actual revenue received (including the final month of the term, even though the payment may be made beyond expiration of the term).

(b) **Payment of Costs.** Except as otherwise provided in this Agreement, all costs incurred in providing the Model at the School shall be paid by the Operator. Such costs shall include, but shall not be limited to, compensation of all personnel, curriculum materials, textbooks, library books, computer and other equipment (excluding Corporation-titled equipment), software, supplies, building payments, maintenance, and capital improvements required in providing the Model. As provided in Section 4, all property purchased by Operator shall remain Operator's sole property at all times.

(c) **Grants.** The Operator, in its sole discretion, , may apply for available grants in the name of the School that will provide additional funding to the School, aid the Corporation in fulfilling the terms of the School Contract and/or provide additional services and programs to the students. The Operator will seek prior approval of the Board, and the Board shall not unreasonably withhold or delay approval of any grant application, and shall be deemed to have approved any grant application submitted by the Operator unless it gives specific written objections to the same within ten (10) business days after such submission.

Within five (5) business days following the Corporation's receipt of funds from the applicable funding source the entire amount of such grant funds shall be paid over to

the Operator via electronic funds transfer following the presentation of an invoice by the Operator. The Corporation and its designated fiscal officer shall cooperate with the Operator to establish any necessary accounts, authorizations and procedures such that the Corporation shall automatically transfer the funds received from grant funding sources when such funds are immediately available in the Corporation's accounts.

(d) The Board shall cooperate with the Operator to set up and establish necessary accounts and procedures for grant funding. This Section shall survive any expiration or termination of this Agreement until all payments earned prior to the date of such expiration or termination shall have been paid in full.

(e) **Board Funds.**

(i) The Board shall be responsible for paying its fees to its Sponsor plus its own expenses and legal, insurance, tax and other professional fees out of the portion of Qualified Gross Revenues retained by the Corporation. The costs and fees relating to any annual Audit by the Auditor of the State of Ohio, special or independent audits shall also be paid by the Board out of such retained funds. The Corporation shall be solely responsible for the purchase and operation of equipment deemed necessary or appropriate by the Board for Board operations which are separate from the day-to-day operation of the School.

(ii) Except for the first school year, after deduction of the Continuing Fee and payment of all costs and fees described in (i) above, the Board shall deposit all remaining revenue into a Student Enrichment Fund established by the Board. The Operator shall propose uses for such funds and the Board shall spend such funds for educational services in the areas of student cultural activities; supplemental tutoring services and other programs in accordance with federal and state grant guidelines. Proposals for use of Student Enrichment Funds by the Operator and or the School Administrator shall be submitted in writing to the Board detailing the purpose of the request, and the time frame for use of the funds. Eighty five percent (85%) of all Student Enrichment Funds not spent during the fiscal year in which they are received shall be paid over to the Operator at the end of such fiscal year.

(iii) During the time this Agreement is in effect, the Operator shall pay, which payment shall be treated as an advance by the Operator against future revenues of the Corporation and which shall be evidenced by a loan, any properly incurred Corporation expense under the following terms and conditions: (a) a reasonable estimate of the expense is submitted to the Operator by the Corporation and is approved by the Operator, in writing, prior to the expense being incurred; (b) the Corporation has not received funding from any source for the operation of the School sufficient to pay such expense; and (c) such expenses advanced by the Operator as set forth above, shall be payable by the Corporation, in whole or in part, at such time as the Corporation receives revenue to pay the same and carry a cash surplus in its accounts equal to at least three months of

reasonably anticipated operating expenses. Such advance shall be evidenced by a promissory note, security agreement and UCC financing statements acceptable to the Operator and the Corporation. In no event shall any such promissory note provide for recourse against any member of the Board, management of the School or any other third party.

8. Personnel, Training, Compensation, and Additional Programs.

(a) **School Level Personnel.** All personnel necessary to implement the Model shall be employed by the Operator and the Operator shall also have the responsibility and authority to determine staffing levels and salaries, and to select, evaluate, assign, discipline, transfer and terminate personnel, consistent with the School Contract and state and federal law.

(b) **School Administrator.** The Operator will have the authority to select and supervise the School Administrator and to hold him or her accountable for the success of the School. The employment contract with the School Administrator and the duties and compensation of the School Administrator shall be determined by the Operator.

(c) **Teachers.** Prior to the commencement of the first school year under this Agreement, and from time to time thereafter, the Operator shall determine the number of teachers and the applicable grade levels and subjects required for the operation of the School. The Operator shall employ teachers who meet all applicable legal requirements and who are qualified in the grade levels and subjects required, as are required by law. The curriculum taught by such teachers shall be the curriculum developed pursuant to Section 3(b) hereof. Such teachers may, at the discretion of the Operator, work at the School on a full or part time basis.

(d) **Support Staff.** Prior to the commencement of the first school year under this Agreement, and from time to time thereafter, the Operator shall determine the number and functions of support staff, qualified in the areas required, as are required for operation of the School and by Ohio Law. Such support staff may, at the discretion of the Operator, work at the School on a full or part time basis.

(e) **Training.** The Operator shall provide training in its methods, curriculum, program, and technology to all teaching personnel on a regular and continuous basis. Non-instructional personnel shall receive such training as the Operator determines as reasonable and necessary under the circumstances.

(f) **Salary and Benefits.** For employees that the Operator provides to the School, the Operator assumes full responsibility and liability for benefits, salaries, worker's compensation, unemployment compensation, and liability insurance.

(g) **Additional Programs.** The services provided by the Operator and the Corporation under this Agreement consist of the educational program during the school year and school day, and for the age and grade level of students as set forth in the School

Contract, as such school year, school day, and age and grade level may change from time to time. The Corporation and the Operator may decide to provide such additional programs as may be mutually agreed upon by the Corporation and the Operator. The foregoing shall not prohibit the Operator from offering other educational services at the School Facility outside of school hours; provided the same do not interfere with the operation of the School.

9. Termination by the Corporation. The Corporation may, at its option, terminate this Agreement upon the occurrence of any of the following events, however the termination will take effect no earlier than the end of the current fiscal year in which the event occurred:

(a) The School Contract is not renewed by the Sponsor and no similar contract is obtained with the Sponsor or any other authorized sponsor;

(b) The Operator materially fails to comply with a specific and essential material requirement of this Agreement and the Operator does not cure said failure within 30 days of its receipt of written notice from the Corporation, unless the failure cannot be reasonably cured within 30 days, in which case, the Operator shall promptly undertake and continue efforts to cure said failure within a reasonable time. Notwithstanding the foregoing, in the event that a failure shall be such that it creates an imminent danger to the life of students, parents or others, said failure must be cured immediately upon written notice from the Corporation;

(c) The Operator files for bankruptcy or has a bankruptcy suit filed against it which is not dismissed within ninety (90) days, is insolvent, ceases its operations, admits in writing its inability to pay its debts when they become due or appoints a receiver for the benefit of its creditors;

(d) The Operator fails to maintain the insurance coverages as described above; or

(e) The parties mutually agree in writing to terminate the Agreement.

10. Termination by the Operator. The Operator may, at its option, terminate this Agreement upon the occurrence of any of the following events:

(a) The Corporation fails to make any payment of money due to the Operator hereunder within five (5) days of when due;

(b) If any academic year results in operating deficits, provided that any notice of termination delivered to the Corporation after school opens for education of students for any school year shall not be effective until the end of that academic year;

(c) The Corporation is in material default under any other condition, term or provisions of this Agreement or the School Contract, which default remains uncured for the period of thirty (30) days from the time that the Corporation receives written notice of said default, unless the default cannot be reasonably cured within 30 days, in which case

the Corporation shall promptly undertake or continue efforts to cure said material default within a reasonable time;

(d) Any adverse and material change in local, state or federal funding for the Corporation's students; provided that any notice of termination delivered to the Corporation based upon an adverse and material change in funding shall be effective when the funding change goes into effect or such later date as designated by the Operator; or

(e) Any Operator facility that is instrumental to the implementation of the Model or the day-to-day operations of the School is inaccessible so that, in the Operator's reasonable discretion, providing maintenance or continuing of School operations would be unfeasible, uneconomical or impractical, provided that notice of termination is delivered by the Operator to the Corporation promptly (within sixty (60) days) after the occurrence of the event(s) giving rise to such right of termination.

In the event that the Corporation or the Operator elects to terminate this Agreement for any of the aforementioned reasons, then the parties shall continue to perform their respective obligations hereunder, notwithstanding such notice of termination, until the end of the then current academic year.

11. Duties Upon Termination. Upon termination of this Agreement for any reason whatsoever, the Corporation shall immediately pay to the Operator and/or any of the Operator's affiliates any moneys owing to such person or entity. Furthermore, the Corporation shall return to the Operator all such material purchased by the Operator pursuant to Section 3 above. The Operator shall assist the Corporation in any transition of management and operations, including, but not limited to: (i) the orderly transition of all student records and the delivery of Board-owned equipment and material (if any) to the Board, (ii) sending notices to students as reasonably requested by the Corporation at the Corporation's cost, and (iii) at the Corporation's option and cost, delivering student records directly to the students. This Section 11 shall survive any expiration or termination of this Agreement.

12. License. The Operator developed and owns proprietary rights to the Model, the Protected Materials, as defined in Section 13 below, and the HOPE Academy, Brighten Heights, and Broadway Academy tradenames (collectively the "Name"). The Operator hereby grants the Corporation a limited revocable license to use the Model, the Protected Materials and the Name in connection with the School. At such time as this Agreement is terminated or otherwise expires, the license granted herein shall automatically terminate and the Corporation shall: (a) immediately cease use of the Name, the Protected Materials and the Model; (b) immediately begin doing business under and change its corporate name to some name other than the Name, which new name shall not consist in any variation or manner of the word or words "HOPE," "Academy," "HOPE Academy," "Brighten Heights," and/or "Broadway Academy," used alone or in any combination; and (c) notify the Sponsor, the Department of Education and any other oversight entity of the name change including, but not limited to, the Secretary of State. This Section 12 shall survive any expiration or termination of this Agreement.

13. Proprietary Rights. The copyrights and intellectual property rights for all methods, documents, curricula and materials developed by the Operator during the course of operating the School (collectively, the "Protected Materials") shall constitute the sole and exclusive property of the Operator, and neither the Corporation, the School nor the Board shall have any right to any of the same either as a "Work Made for Hire" (as such are defined under the U.S. and international copyright laws) or otherwise. The Operator shall exclusively own all United States and international copyrights, trademarks, patents and all other intellectual property rights in said Protected Materials. The Protected Materials may not be used by the Corporation, the School or the Board for any purpose other than strictly within the scope of the license granted under Section 12 above without the prior written consent of the Operator. Immediately upon termination of this Agreement or the Operator's earlier request, the Corporation, the School and the Board shall deliver all originals and copies of the Protected Materials (regardless of the media on which the same is stored) to the Operator and delete all of the same from all databases and other storage media maintained by the Corporation, the School and the Board. This Section 13 shall survive any expiration or termination of this Agreement.

14. Relationship of the Parties. The parties hereto acknowledge that their relationship is that of each party being viewed as independent contractors. No employee, consultant or compensated individual of either party shall be deemed an employee, consultant, or compensated individual of the other party. Nothing contained herein shall be construed to create a partnership or joint venture between the parties.

15. Confidentiality and Non-Disclosure. Without the prior written consent of the other party, neither party will at any time use for its own benefit or purposes or for the benefit or purposes of any other person, corporation or business organization, entity or enterprise, or disclose in any manner to any person, corporation or business organization, entity or enterprise any trade secret, information, data, know-how or knowledge (including but not limited to curricula information, financial information, marketing information, cost information, vendor information, research, marketing plans, educational concepts and employee information) belonging to, or relating to the affairs of a party to this Agreement ("Protected Party") or that the other party received through its association with the Protected Party, whether received prior to the date hereof or hereafter (collectively, "Confidential Information"), unless: (a) the party can show that such information, data or knowledge was known to it prior to the time its association with the Protected Party began, (b) it can show that any such information, data or knowledge has become generally available to the public otherwise than by a breach of this Agreement by the party, or (c) is subsequently disclosed to the party by a third person or entity which is not prohibited from disclosing same by a contractual, fiduciary or other legal obligation to the Protected Party. The existence of the relationship between the parties and any agreements they have entered into or may hereafter enter into also constitute Confidential Information.

Nothing herein shall be deemed to prohibit the parties from disclosing any Confidential Information which a party becomes legally compelled to disclose. Without limiting the generality of the foregoing, in the event that a party becomes legally compelled (by oral questions, interrogatories, requests for information or documents, subpoena, investigative demand or similar process) to disclose any of the Confidential Information, the party covenants to use its best efforts to provide the Protected Party with prompt written notice (not less than forty-eight

(48) hours) so that the Protected Party may seek a protective order or other appropriate remedy and/or waive compliance with the provisions of this Agreement. In the event that such protective order or other remedy is not obtained, or that the Protected Party waives compliance with the provisions of this Agreement, the party covenants to furnish only that portion of the Confidential Information which the party is legally required to disclose and will exercise its best efforts to obtain reliable assurance that confidential treatment will be accorded the Confidential Information. Employee information must be reviewed by sponsor. This Section 15 shall survive any expiration or termination of this Agreement.

16. Non-Solicitation. The Corporation hereby agrees that commencing on the date of this Agreement and continuing for a period equal to two (2) years after the termination of this Agreement for any reason, that it will not, and none of its affiliates will directly or indirectly (i) solicit or actively seek to hire any employee of the Operator, or (ii) solicit any personnel employed by the Operator to terminate his or her relationship with the Operator. This Section 16 shall survive any expiration or termination of this Agreement. The period of time set forth in this Section will be extended by the amount of time that the School engages in activity in violation of this Agreement and while the Operator seeks enforcement of this Agreement.

17. Limited Third Party Beneficiaries. The Corporation acknowledges that (a) the Name, some of the components of the Model and some of the Confidential Information referenced in Section 15 above belong to affiliates of the Operator, including without limitation White Hat Management, LLC; White Hat Ventures, LLC; BHA Ohio, LLC; Signal Tree Education, LLC; and WHLS of Ohio, LLC (collectively, "Operator Affiliates"); (b) some of the Protected Materials referenced in Section 13 above may be developed by one or more Operator Affiliates; and (c) some of the employees used in the provision of the Model may be employed by the Operator Affiliates. Accordingly, such Operator Affiliates shall benefit from Sections 13, 14, 15 and 16 above, and the Corporation acknowledges that any Operator Affiliate injured or affected by any breach hereof by the Corporation may enforce this Agreement against the Corporation. Whenever the term "Operator" is used in Sections 12, 13, 14, 15, 16 and 18 of this Agreement, such use shall be deemed to refer to the Operator and all Operator Affiliates collectively. Subject to this section, this Agreement and the provisions hereof are for the exclusive benefit of the Parties hereto and their affiliates and not for the benefit of any third person, nor shall this Agreement be deemed to confer or have conferred any rights, express or implied, upon any other third person. This Section 17 shall survive any expiration or termination of this Agreement.

18. Injunctive Relief / Dispute Resolution.

(a) **Injunctive Relief.** The Corporation acknowledges that the covenants set forth in Sections 12, 13, 15, and 16 above are reasonable and necessary to protect the Operator and its business. If the Corporation engages in any activity in violation of the provisions hereof, the Operator shall, in addition to any other remedies available to it, be entitled to an injunction by any competent court of equity enjoining and restraining the School from continuance of such activity.

(b) **Arbitration.**

(i) Except as otherwise provided in this Section 18, any and all disputes arising under this Agreement shall be determined by binding arbitration to be conducted as set forth in this Section and shall be generally in accordance with the Commercial Arbitration Rules of the American Arbitration Association. The judgment upon the award rendered in any arbitration hereunder shall be final and binding on both parties hereto.

(ii) All disputes subject to this Section shall be raised by notice to the other party, which notice shall state with particularity the nature of the dispute and the demand for relief, making specific reference by article number and title to the provisions of this Agreement alleged to have given rise to the dispute.

(iii) All disputes subject to this Section shall be heard by a panel of three (3) arbitrators (the "Arbitration Panel"), each of which shall be a member of the American Arbitration Association or another arbitration service, and which Arbitration Panel shall be selected as follows: (a) the Corporation and the Operator shall each promptly (within fourteen (14) days after close of the pleadings) select one (1) neutral arbitrator and promptly notify the other party of said selection. Within five (5) days thereafter the party not selecting said arbitrator may object to and thus remove such arbitrator, one time in its sole discretion and thereafter for cause; and (b) the two (2) arbitrators selected by the parties shall select a third arbitrator to complete the Arbitration Panel. The arbitration proceedings shall take place at a mutually acceptable location in Akron, Ohio within sixty (60) days after the selection of the Arbitration Panel.

(iv) The need for and scope of formal discovery will be determined by agreement of the parties or, if the parties are unable to agree, the Arbitration Panel. The Arbitration Panel will render its opinion/award within thirty (30) days from the date of the hearing. The Arbitration Panel's award will be written and may include findings of fact and conclusions of law. In the event of a formal hearing, each party shall only be allowed a maximum of eight (8) hours to present evidence and/or witnesses.

(v) All costs of the Arbitration and the Arbitration Panel shall be borne equally by both parties.

(vi) Notwithstanding anything else in this Agreement, claims for monies due, for services rendered, costs, grants funds and/or expenses due, may at either party's option, be brought separately in a court of competent jurisdiction or pursued in Arbitration as set forth above. In the event a party pursues claims for monies due in court, all other disputes herein shall be subject to binding arbitration. This Section 18 shall survive any expiration or termination of this Agreement. Such actions for moneys due may be brought without terminating this Agreement.

19. Notices. Any notices to be provided hereunder shall be provided to the Sponsor within 10 days and given in writing with by personal service, mailing the same by United States

certified mail, return receipt requested, and postage prepaid, facsimile (provided a copy is sent by one of the other permitted methods of notice), or a nationally recognized overnight carrier, addressed as follows:

If to the Operator, to:

Chief Legal Officer
159 South Main Street
600 Key Building
Akron, Ohio 44308
Attn: President
Facsimile: (330) 762-5037

With a copy to:

John F. Martin
Brennan, Manna & Diamond, LLC
75 East Market Street
Akron, Ohio 44308
Phone: (330) 253-5060
Facsimile: 330-253-1977

If to the Corporation, to:

_____
_____
_____
Attn: Board President
Phone:
Facsimile:

With a copy to:

_____
_____
_____
_____

20. Severability. The invalidity or unenforceability of any provision or clause hereof shall in no way affect the validity or enforceability of any other clause or provision hereof.

21. Waiver and Delay. No waiver or delay of any provision of this Agreement at any time will be deemed a waiver of any other provision of this Agreement at such time or will be deemed a waiver of such provision at any other time.

22. Governing Law and Jurisdiction. This Agreement shall be governed by and construed in accordance with the laws of the State of Ohio and jurisdiction is proper in the County in which the School is situated.

23. Assignment; Binding Agreement. Neither party shall assign this Agreement without the written consent of the other party, which consent shall not be unreasonably withheld or delayed; provided, however, that the Operator may assign this Agreement to a similarly situated and qualified affiliate without the consent of the Corporation so long as an assignment

would not invalidate the School Contract. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns.

24. Independent Activity. All of the parties to this Agreement understand that Operator's business is to operate and manage charter schools throughout the State. As such, the parties agree that Operator and its affiliates, may operate other charter schools in multiple states including the State of Ohio.

25. Representations and Warranties of the Operator. The Operator hereby represents and warrants to the School as follows:

(a) The Operator is duly organized, validly existing, and in good standing under the laws of the State of Nevada and has the authority to carry on its business as now being conducted and the authority to execute, deliver, and perform this Agreement.

(b) The Operator has taken all actions necessary to authorize the execution, delivery, and performance of this Agreement, and this Agreement is a valid and binding obligation of the Operator enforceable against it in accordance with its terms, except as may be limited by federal and state laws affecting the rights of creditors generally, and except as may be limited by legal or equitable remedies.

(c) The Operator has made, obtained, and performed all registrations, filings, approvals, authorizations, consents, licenses, or examinations required by any government or governmental authority, domestic or foreign, in order to execute, deliver and perform its obligations under this Agreement.

(d) The Operator has the financial ability to perform all of its duties and obligations under this Agreement.

26. Indemnification of the Parties. The Corporation and the Operator (herein referred to as "Party" and/or "Parties") shall indemnify and hold harmless each other and its members, directors, employees, officers and affiliates from any and all claims, demands, actions, suits, causes of action, obligations, losses, costs, expenses, attorney fees, damages, judgments, orders, and liabilities of whatever kind or nature in law, equity or otherwise, arising from any of the following:

(a) A failure of the Party or any of its officers, trustees, directors, or employees to perform any duty, responsibility or obligation imposed by law or by this Agreement or the School Contract; and

(b) An action or omission by the Party or any of its officers, trustees, directors, employees, successors, agents or contractors that results in injury, death or loss to person or property, breach of contract, or violation of statutory law or common law (state or federal).

27. **Force Majeure.** In the event that the Operator shall be delayed or hindered in or prevented from the performance of any act required hereunder by reason of fire or other casualty, acts of God, strike, lockout, labor trouble, inability to procure services or materials, failure of power, restrictive governmental laws or regulations, riots, insurrection, war or other reason of a like nature not the fault of the Operator, then such performance shall be excused for the period of the delay and the period for such performance shall be extended for a period equivalent to the period of such delay. The provisions of this Section shall not operate to excuse the Corporation from prompt payment of any amounts required by the terms of this Agreement.

LEFT INTENTIONALLY BLANK

28. Amendment. This Agreement may not be modified or amended except by a writing signed by each party hereto.

29. Counterparts. This Agreement may be executed in several counterparts, with each counterpart deemed to be an original document and with all counterparts deemed to be one and the same instrument.

30. Captions. Paragraph captions are used herein for references only and are not intended, nor shall they be used, in interpreting this instrument.

31. Integration / Entire Agreement. This Agreement (together with the documents referred to herein) contains the entire agreement between the parties and supersedes all prior agreements between the parties, if any, written or oral, with respect to the subject matter hereof.

IN WITNESS WHEREOF, the parties hereto have set their hands by and through their duly authorized officers as of the date first above written.

CORPORATION:

By: Mrs. Gwendolyn Norfleet Rodgers
Its: President

OPERATOR:

By: _____
Its: CEO

FIRST AMENDMENT TO MANAGEMENT AGREEMENT

THIS FIRST AMENDMENT TO MANAGEMENT AGREEMENT (the "Amendment") is made this 16th day of January 2013, by and between Chippewa Community School, LLC, a Nevada limited liability company (the "Operator"), and Broadway Academy, Inc. f/k/a CSR - CCEZ VCPHS WEST INC., an Ohio nonprofit corporation ("Corporation").

WITNESSETH:

WHEREAS, Operator and Corporation are parties to a Management Agreement dated January 29, 2011 (the "Management Agreement");

WHEREAS, the Ohio Revised Code permits Corporation to accept responsibility for providing or arranging transportation of its local school district's native students to and from the community school;

WHEREAS, if mutually agreed by both Operator and Corporation, Operator is willing to arrange or coordinate such transportation services pursuant to the terms of this Agreement.

NOW, THEREFORE, in consideration of the foregoing and intending to be legally bound, the parties hereto agree as follows:

1. Incorporation by Reference. The preamble to this Amendment is incorporated by reference as if fully set forth herein.

2. Amendment to Section 3(d) of the Management Agreement. Section 3(d) of the Management Agreement is hereby amended to add Subsection (d)(vii), which shall read as follows:

> "(vii) If mutually agreed by both Operator and Corporation, Operator may provide or arrange transportation for students enrolled in the School. Said transportation shall be funded using only funds provided by the Ohio Department of Education to the Corporation for that purpose. Under no circumstances shall Operator be required to use any part of the Continuing Fee to provide or arrange for transportation services."

3. Amendment to Section 7(d) of the Management Agreement. Section 7(d) of the Management Agreement is amended, in its entirety, to read as follows:

> "(d) The Board shall cooperate with the Operator to set up and establish necessary accounts and procedures for grant funding. Any transportation funding received by the Board shall be considered grant funding under Section 7(c). This Section shall survive any expiration or termination of this Agreement until all payments earned prior to the date of such expiration or termination shall have been paid in full."

4. All Other Terms and Conditions. All terms and conditions of the Management Agreement not specifically amended or modified herein shall remain in full force and effect. All capitalized terms contained herein shall have the meanings attributed to them in the Management Agreement, unless specifically otherwise defined herein.

IN WITNESS WHEREOF, the parties hereto have entered into this Amendment as of the date first set forth above.

OPERATOR:	SCHOOL:
CHIPPEWA COMMUNITY SCHOOL, LLC	**BROADWAY ACADEMY, INC.**
By: Thos W Bennett	By: MaGwendolyn Nesbitt Rodgers
Its: CEO	Its: President

SECOND AMENDMENT TO THE MANAGEMENT AGREEMENT

THIS SECOND AMENDMENT TO THE MANAGEMENT AGREEMENT ("Second Amendment") is entered into effective as of this 20th day of March 2013, by and between Chippewa Community School, LLC, a Nevada limited liability company (the "Operator"), and Broadway Academy Inc., an Ohio not-for-profit corporation (the "Corporation") (collectively referred to as the "Parties").

W I T N E S S E T H:

WHEREAS, the Parties entered into a Management Agreement dated March 2, 2011 as subsequently amended on January 16, 2013 (as so amended, the "Management Agreement") concerning the operation of the school known as Broadway Academy;

WHEREAS, Section 7(a) of the Management Agreement provides that the Operator shall receive a "Continuing Fee" of ninety-six percent (96%) of the "Qualified Gross Revenues" as calculated therein; and

WHEREAS, both the Operator and the Corporation now recognize that the Governing Authority of the Corporation will better able to fulfill its obligations under Section 7(e) of the Management Agreement if it retains an additional one percent (1%) of the "Qualified Gross Revenues" as defined therein.

NOW, THEREFORE, in consideration of their mutual promises and covenants, and intending to be legally bound hereby, the parties hereto agree as follows:

1. Incorporation by Reference. The preamble to this Second Amendment is incorporated by reference as if fully set forth herein.

2. Amendment to Section 7(a) of the Agreement. Effective April 1, 2013, Section 7(a) of the Management Agreement is hereby replaced in its entirety with the following:

> "(7)(a) **Continuing Fee.** The Corporation shall pay a monthly management, consulting and operation fee (the "Continuing Fee") to the Operator of ninety-five percent (95%) of the Qualified Gross Revenues. As used in this Agreement, "Qualified Gross Revenues" shall mean the revenue per student received by the Corporation from the State pursuant to the Code. Qualified Gross Revenues do not include: student fees, charitable contributions, PTA/PTO income, and other miscellaneous revenue received which shall be retained by the Corporation or PTA/PTO. Federal Title Program funding and such other federal, state, and local government grant funding including but not limited to any grants under the American Recovery & Reinvestment Act of 2009, the Education Jobs Fund Act of 2010, or Race to the Top Grant ("Supplemental Revenues") shall not be included in the "Qualified Gross Revenues" and shall be paid to the Operator in full within five (5) business days of receipt of any such Supplemental Revenues by the Corporation. The Continuing Fee shall be paid within five (5) business days of receipt by the Corporation of any Qualified Gross

Revenues via electronic funds transfer. The Continuing Fee shall be subject to an annual reconciliation based upon actual enrollment and actual revenue received (including the final month of the term, even though the payment may be made beyond expiration of the term)."

3. All Other Terms and Conditions. All terms and conditions of the Management Agreement not specifically amended or modified herein shall remain in full force and effect. All capitalized terms contained herein shall have the meanings attributed to them in the Agreement, unless specifically otherwise defined herein.

IN WITNESS WHEREOF, the parties hereto have set their hands by and through their duly authorized officers as of the date first above written.

OPERATOR:

By: _____

Its: CEO

CORPORATION:

By: _____

Its: President

ATTACHMENT 3.4

CLOSING PROCEDURES ASSURANCE DOCUMENT

By signing this document, I_____Gwendolyn Norfleet Rodgers___, hereby certify that I am the School Governing Authority President and/or authorized representative of____Broadway Academy__. If _____Broadway Academy_____ should cease to exist for any reason, the School Governing Authority agrees to cooperate fully with the Sponsor and comply with all Community School Closing Procedures put in place by the Ohio Department of Education at the time of the School's closing.

Furthermore, the School Governing Authority appoints _____Maggie Ford_____, or the then current School leader, as Designee, to coordinate the closure of the School and to insure all requirements of the Community School Closing Procedures as prescribed by the Ohio Department of Education at the time of the School's closing are fully completed.

The School Governing Authority President and Designee hereby acknowledge and they have reviewed the Ohio Department Education Community School Closing Procedures in effect at the time of executing this document and understand the duties to be undertaken should the School close. Failure to complete these duties as prescribed may result in criminal or civil penalties as permitted by law.

Mrs Gwendolyn Norfleet Rodgers
School Governing Authority President

5/20/2015
Date

Designee

5/20/2015
Date

ATTACHMENT 3.7

A. Plan to Achieve or Continue Racial and Ethnic Balance

The School shall annually evaluate the racial and ethnic makeup of the School and compare and contrast it with the population of the City of Cleveland and/or Cleveland Metropolitan School District. If it is determined by the School that the makeup, to any substantial degree, does not reflect the general population of the City of Cleveland and/or Cleveland Metropolitan School District, the School shall review its policy, outreach programs, marketing and services and implement a plan to attempt to remedy the deficiency. Such a plan may include additional outreach programs or new and enhanced services to attract a broader base of students. The School will also assess the quality and effectiveness of the School's relationships with the various community organizations with which the School has established partnerships.

Admission and Enrollment Policy

Community Schools are public schools of choice, part of Ohio's program of Education (Ohio Revised Code (ORC) Section 3314.01). It is the policy of the School to permit the enrollment of students who reside in any district in the state. [ORC 3314.03(A)(19)].

The School does not discriminate in its programs, privileges or activities or in the administration of its educational policies.

Admission is open to any student entitled to attend per ORC Section 3313.64 or 3313.65. The School will not discriminate in admission and will not exceed the capacity of the School's program or facility. When demand exceeds the School's capacity, admissions will be determined by a lottery of all applicants. Preference of admission will be given in the following order:

1. Returning students
2. Siblings of returning students; and
3. New students (if space is available).

Registration and enrollment are two different steps in the process of becoming a student at the School. Registration initiates the first step in a two-step process. By registering, a desire is expressed to attend the School. It does not mean that the student is enrolled.

Registration consists of:

Completing the enrollment packet; and

Submitting the copies of the birth certificate, photo ID, current immunization record, transcript request form, custodial paperwork if required, and proof of residence. Accept able forms of proof of residence documents are explicitly detailed in the School's annual enrollment packet. Examples of acceptable forms of proof of residence documentation include but are not limited to: voter registration cards, lease agreements, utility statements, bank statements, mortgage statement, rental agreements and notarized affidavits of residency or a notarized letter including student(s) name. The foregoing items may be used to established proof of residency for verification of a child's ability to enroll in school. These items must be current, be in the parent's name, and include a street address. A post office box address cannot be used to validate residency records.

Enrollment consists of:

All of the registration steps being complete, including the enrollment packet, required documentation being submitted, except as permitted by law or approved by the Administrator, and grade placement being assigned.

Reference:

ORC 3313.97
ORC 3314.084(B)(1)

Inter-District Open Enrollment Policy

The Board of Directors shall permit the enrollment of students from adjacent or other districts to this School, providing that each enrollment is in accordance with the laws of this State, all contractual obligations, the provisions of this policy, and the administrative guidelines established to implement this policy. The School Administrator shall establish guidelines to implement the open enrollment policy in accordance with Ohio Revised Code 3314.06 and all contractual obligations. The guidelines shall provide the following:

1. Application procedures; including deadlines for the application and for notification of the students and the superintendent of the applicable district whenever an adjacent or other districts student's application is approved;
2. Procedures for admitting adjacent or other district applicants free of any tuition obligation to the School; including, but not limited to: (a) the establishment of capacity limits by grade level, school building and education program; (b) a requirement that all siblings of native students wishing to be enrolled in the School shall receive preference over first-time applicants and all other district students previously enrolled will receive a preference over first-time applicants; and (c) procedures to ensure that an appropriate racial balance is maintained in either the sending or receiving schools.

The procedures for admitting adjacent or other district students established by the School Administrator shall not include:

1. Any requirement of academic ability, or any level of athletic, artistic, or other extracurricular skills;
2. A requirement that the student be proficient in the English language;
3. Rejection of any applicant because the student has been subject to disciplinary proceedings, except that if an applicant has been suspended or expelled by the student's district for ten consecutive days or more in the term for which admission is sought or in the term immediately preceding the term for which admission is sought, the procedures may include a provision denying admission of such applicant.

Enrollment will not be denied to any eligible applicant on the basis of sex, race, religion, national origin, ancestry, pregnancy, marital or parental status, sexual orientation, or physical, mental, emotional or learning disability. The school will also not discriminate in its pupil admissions policies or practices whether on the basis of intellectual or athletic ability, measures of achievement or aptitude, or any other basis that would be illegal if used by any public school.

The Board of Directors shall provide information about the application procedures and deadlines, upon request, to the board of education of any other school district or to the parent of any student anywhere in the state.

ENTRANCE AGE
(Mandatory Kindergarten)

Each child who is five years of age on or before September 30 shall be eligible to enroll in kindergarten. Each child who is six years of age on or before September 30 shall be eligible to enroll in first grade.

A child who does not meet the age requirements set forth above, but who will be five or six years old, respectively, prior to the first day January of the school year in which admission is requested, shall be evaluated for early admittance in accordance with this policy and upon a referral by the child's parent or guardian, an educator employed by the School, a preschool educator who knows the child or a pediatrician or psychologist who knows the child. When a referral for early entrance to kindergarten or first grade is received, the building review committee shall interview the parent(s) and child and arrange for the necessary testing. The testing will include a nationally normed test approved by the board in addition to observations of the child.

If a child for whom admission to kindergarten or first grade is requested will not be five or six years of age, respectively, prior to the first day of January of the school year in which admission is requested, the child shall be admitted only in accordance with the school's acceleration policy.

ATTACHMENT 3.12

STUDENTS WITH DISABILITIES

Policy to Comply with Federal and State Laws Regarding the Education of (.a Handicapped Students.

The School has adopted the Ohio Department of Education's Special Education Model Policies and Procedures governing the education of students with disabilities. The School will adopt revisions to the Model Policies and Procedures as they are developed and will continue to comply with federal and state laws regarding the education of handicapped students.

1. The school will meet state and federal law mandates for providing education and services for students that qualify for 504, LEP/ELL, and SWD. Students referred will undergo a multi-factored evaluation, attended by the parent, and an administrator or the administrator designee, and a school psychologist. The evaluation will determine whether an IEP, 504, LEP/ELL, or gifted is appropriate or ongoing monitoring. A student is entitled to a Section 504 Accommodation Plan if they have been identified and the evaluation shows that the individual has a mental or physical impairment that substantially limits one or more major life activities. This determination is made by a team of knowledgeable individuals, including the parents, who are familiar of the student and his/her disability. The school will use Operating Standards for Identifying and Serving Gifted Students OAC 3301-51-15 to guide the gifted program in the school. The School will provide students with disabilities services that implement and comply with federal, state, and local procedures and policies, respectively, including, Section 504 of the Rehabilitation Act of 1973, Individuals with Disabilities Education Act ("IDEA"), and Ohio State Plan for Special Education.

This includes, but is not limited to:

- Provisions for a Free Appropriate Public Education ("FAPE");
- A non-discriminatory policy regarding identification, evaluation, selection and location;
- Individualized Education Plans ("IEPs") to include meetings with the student's family, the Local School District ("LEA") and Academies staff; and
- All students with disabilities will be educated in the least restrictive environment

The School will be guided by the principles set forth in the *"No Child Left Behind Act"* 20 USCS § 6301, which ensures the academic success of every student, including:

- All students must be held to the same challenging standards;
- All students must be assessed;
- Progress of students is to be consistent;
- Assessment results must be reported to parents; and
- Student progress is monitored regularly and improvements are noted.

- No student with a disability will be unlawfully excluded from participation in any program or activity of the School, nor will the student be subject to discrimination by the School.

English Language Learners ("ELL") / Limited English Proficient Students ("LEP") **LEP/ELL** students will be identified according to the guidelines and procedures specified by the 2012 ODE Revised Guidelines for the Identification and Assessment of Limited English Proficient Students

Details can be found at: http://www.ode.state.oh.us/GD/Templates/Pages/ODE/ODEDetail.aspx?page=3&Topic RelationID=499&ContentID=16099&Content=111488)

The School will utilize the Home Language Survey developed by the Department of Education to identify students whose primary or home language is other than English ("PHLOTE") according to ODE guidelines. Once students have met the PHLOTE criteria ("failed the PHLOTE"), the School will contract with Partners for Success and Innovation ("PSI") services to evaluate the student's level of English proficiency and to develop an appropriate service plan, which can occur both in a general education setting and/or other settings. The plans may include the participation of an LEP/ELL teacher and/or contracted services for initial native language instruction, and a phasing-in of English instruction.

Materials utilized may include computer-aided language instruction such as Rosetta Stone, and materials provided through PSI services, the Lau Resource Center and Ohio Teachers of English to Speakers of Other Languages ("TESOL"). TESOL also provides professional development for LEP/ELL teachers. Providers of LEP/ELL services and general education teachers will regularly communicate to assure any necessary accommodations in instruction and/or testing are provided.

Students identified as LEP/ELL must participate in annual Ohio Test of English Language Acquisition ("OTELA") testing to determine their level of English proficiency. To exit the LEP/ELL program, students will need to demonstrate the ability to understand, speak, read and write the English language at a level in which they are able to: 1) achieve successfully in classrooms where the language of instruction is in English; 2) meaningfully participate in academic assessments in English; and 3) participate fully in society in the United States.

A student has attained the required English proficiency to be exited from the LEP/ELL program when (s)he obtains a composite score of 5 on the OTELA or obtains a composite score of 4 on the OTELA, completes a trial period of mainstream instruction and obtains a composite score of 4 or above on the OTELA during the trial period of mainstream instruction. Parents will be informed of the student's LEP/ELL status and program first through a parent notification letter in either English or the parent's native language, detailing the results of the English language assessment, explaining the need for LEP/ELL services, program participation and exit requirements, and providing the parent with program options. Parents will be informed regularly of the student's progress and OTELA results, and will be informed when the student has met the criteria for exiting the LEP/ELL program.

The effectiveness of the LEP/ELL program and services will be evaluated each year via Ohio's Annual Measurable Achievement Objectives and Ohio's Revised Title III Accountability Plan.

2. RTI- The School will utilize the Response to Instruction (RTI) model in identifying students. The RTI process is a three tier process beginning with

whole class, transitioning to small group for those who qualify. If students are not responding in tier two, students will transition to tier three, which will consist of one on one intervention. If the student responds well, the intervention will continue in the areas needed and processing back to the general education classroom. If student does not respond to the intervention, a further evaluation will be completed through the multi-factored evaluation.

3. Intervention Services will include but not limited to small group intervention, one to one intervention, after school tutoring and summer school tutoring. Modified curriculum with student support. Dedicated daily time will be scheduled to work on any intervention with students.

4. Discipline- The student code of conduct will be created and approved by the board. The School will implement said policy with all students. For SWD, The School will abide by federal law on how to implement and distribute consequences.

5. The School will provide services as prescribed in a student's IEP. Such services will include but not limited to: psychologist, speech language pathologist, audiologist, physical therapist, occupation therapist, and adaptive physical education. The School may contract those services or may choose to hire a qualified individual.

6. The School will employ HQT teacher(s) and para-professionals with proper credentials to provide services for SWD, TESOL, ESEA or gifted endorsement.

NET SUBLEASE AGREEMENT

THIS NET SUBLEASE AGREEMENT, (the "Lease") is entered into effective as of the 1st day of July 2013, by and between Chippewa Community School, LLC, a Nevada limited liability company, c/o White Hat Management, LLC, 121 South Main Street, Suite 200, Akron, Ohio 44308 ("Lessee"), and Lumen Broadway Realty, LLC a Nevada limited liability company, 121 South Main Street, Suite 500, Akron, Ohio 44308 ("Sublessor").

WITNESSETH:

WHEREAS, Sublessor leases certain real property located at 3395 East 53rd Street, Cleveland, Ohio 44127, as described in Exhibit "A" attached hereto and made a part hereof (the "Property") from Most Rev. Richard G. Lennon, Bishop of the Diocese of Cleveland in his capacity as trustee for Our Lady of Lourdes Parish ("Owner"), pursuant to a Lease effective July 1, 2013 between Owner and Lessee (the "Main Lease");

WHEREAS, Sublessor desires to sublease the Property to Lessee and Lessee desires to sublease the Property from Sublessor, upon the conditions and terms set forth herein.

NOW, THEREFORE, in consideration of their mutual promises, covenants and intending to be legally bound, the parties hereto agree as follows:

1. **Lease Term**. Sublessor hereby lets and leases to Lessee, the Property for the term of five (5) years and one (1) month, commencing July 1, 2013 and ending on July 31, 2018, and Lessee agrees to lease the same for such term. As used herein, a "Lease Year" shall mean a period of twelve months running from July 1 of each year to June 30 of the following year. Lessee shall not have any right to renew this Lease.

2. **Rent**.

(a) During the first Lease Year, Lessee shall pay to Sublessor, as the rent for the Property, an annual sum equal to One Hundred Ninety-Two Thousand Seven Hundred Ninety and 00/100 Dollars ($192,790.00).

(b) On the first day of July for each successive Lease Year, the rent contained in Section 2(a) above shall automatically increase by the lesser of: (i) 3%; or (ii) the percentage change in the CPI (as defined below) from June of the prior year to June of the then current year. As used herein, "CPI" means The United States Department of Labor, Bureau of Labor Statistics Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W), Cleveland-Akron-Lorain, Ohio Average, Subgroup "All Items," (1982-1984 = 100). If at any time the CPI is not reported in the format recited herein, Sublessor shall substitute any official index published by the Bureau of Labor Statistics or successor or similar governmental agency as may then be in existence and shall, in Sublessor's reasonable opinion, be most nearly equivalent thereto.

The rentals to be paid hereunder shall be payable in monthly installments in an amount equal to one-twelfth of the estimated annual rentals to be paid for such year under (a) or (b) above. Sublessor shall audit Lessee's books and records at the end of each Lease Year and shall determine the actual rentals for that Lease Year will be calculated at the end of each, and any overage shall be refunded to Lessee by Sublessor and any underpayment remitted to Sublessor within thirty days following the end of such Lease Year. Lessee shall grant Sublessor and its representatives full access to its financial records for the purpose of conducting such audit. All estimated monthly payments shall be paid in advance on the first day of each month during the term hereof, commencing as of the date hereof. Lessee covenants and agrees that it will pay to Sublessor, its agents, successors or assigns, the rent, when due, in lawful money of the United States, without demand and without any deduction whatsoever, and shall pay the same at the Sublessor's office, unless another address is designated by notice to Lessee or otherwise provided. The rent provided for herein shall increase from time to time in amounts equal to any increase in the rentals payable under the Main Lease.

3. **Expenses**. Lessee further covenants and agrees to pay all costs, perform all duties and provide all goods and services required to be paid, performed or provided by Sublessor under the Main Lease at its sole cost and expense in the time and manner provided for in the Main Lease. Without limiting the generality of the foregoing, Lessee shall be responsible for (i) all common area and similar expenses allocable to the Property; (ii) the payment of any real estate taxes or assessments to be paid by Sublessor under the Main Lease; (iii) the maintenance, replacement and repair of the Property, its equipment and fixtures as and when needed in compliance with the terms of the Main Lease; (iv) obtain and maintain all insurances required to be obtained and maintained by Sublessor under the Main Lease, such as fire, casualty and extended coverage; premises liability; rental interruption; worker's compensation. Sublessor shall be named as an additional insured in all liability policies obtained by Lessee.

4. **Security Deposit**. Unless Sublessor waives the requirement of this Section 4, which waiver may be revoked at any time, Sublessee shall pay to Sublessor at the time of execution of this Lease, an amount equal to three months' base rentals hereunder (the "Security Deposit"), which sum Sublessor shall retain as security for the performance by Sublessee of each of its obligations hereunder. In the event Sublessor waives the Security Deposit, Sublessor may at any time during the term of this Lease revoke such waiver and immediately require Sublessee to make such deposit in Sublessor's sole and absolute discretion. Sublessee shall from time to time deposit such additional amounts as shall be necessary to adjust the Security Deposit to cover any increase in rentals hereunder. Sublessee agrees that the Security Deposit shall not be used as the last month's rent. If Sublessee fails at any time to perform its obligations, Sublessor may at its option apply said Security Deposit, or so much thereof as is required, to cure Sublessee's default and Sublessee shall immediately remit to Sublessor such amount as is necessary to restore the Security Deposit to its full amount as provided above. Unless Sublessor uses the same to cure a default of Sublessee or to restore the Premises to the condition that Sublessee is required to leave it at the conclusion of the term, Sublessor shall, within sixty (60) days of the termination or expiration of the Lease or as otherwise, refund so much of the deposit as remains.

5. **Mortgages**. The Lessee agrees to subordinate this Lease to the lien of any mortgage, security agreement and/or assignment of rents, or any such other instrument, granted to any party by Sublessor or Owner and secured by the Property.

If Sublessor requests Lessee to make payments under any such mortgage, security agreement, and/or assignment of rents, or any such other instrument, directly to the holder of any such instrument, Lessee covenants and agrees to timely pay the same pursuant to the terms and conditions thereof. The parties agree that all amounts so paid shall be deducted from the monthly rent due. No action taken to enforce said mortgage, security agreement and/or assignment of rents, or such other instrument, by result of a default thereunder shall terminate this Lease or constitute a breach of any terms hereof as long as Lessee is not in default hereunder and Lessee will attorn to any purchaser or assignee in any foreclosure sale.

6. **Payment of Utilities**. Lessee shall contract for and pay for all necessary utilities for service to the Property during the term of this Lease, including without limitation, electric, gas, water, steam and sewer payments, except to the extent any of the same may be provided by Owner under the Main Lease..

7. **Use of Property**. Lessee shall use the Property solely for the operation of a community school and related activities. Lessee accepts the Property "as is," and covenants and agrees to use and keep the Property in good, clean and sanitary condition; to keep the sidewalks and steps abutting the Property free of ice, snow and rubbish; to comply with all applicable statutes, ordinances, rules and regulations of all governmental agencies with jurisdiction over the Property; and to promptly cooperate with Sublessor to cause compliance with all orders of such governmental agencies to the Sublessor concerning the Property. Further, Lessee covenants and agrees to commit and permit no waste on or of the Property.

8 **Alterations to Property**. Lessee shall not make alterations to the Property without the prior written consent of Sublessor, which consent shall not be unreasonably withheld. Sublessor's denial of consent to an alteration shall be reasonable if based upon Owner's denial of consent under the Main Lease.

9. **Inspection of Property**. Lessee agrees to permit Sublessor or its agent to inspect the Property at any reasonable time and to enter thereon for the purpose of inspecting same. Lessee agrees to permit Owner or its agent to inspect the Property as and when permitted in the Main Lease.

10. **Signs**. Lessee shall have the right to erect and place signs, in, upon and about the Property in compliance with the Main Lease and all applicable laws and regulations. Lessee at the end of the term of this Lease, at Owner or Sublessor's request, shall remove all signs from the Property and repair any resulting damage or defacement to the Property.

11. **Liability Insurance**. Lessee agrees to save, protect and defend Sublessor and to hold Sublessor harmless from all loss, cost and expense resulting from injury to or death of persons, or damage or loss of property occurring in, or about the Property, unless caused by or due to the negligence of Sublessor or its agents. If such coverage is not required by the Main Lease,

Lessee agrees to provide for and cover such liabilities with appropriate insurance, from a first-class company, in a single limit policy amount of at least One Million Dollars ($1,000,000.00) coverage per occurrence, and One Hundred Thousand Dollars ($100,000.00) for property damage, and to furnish Sublessor a certificate giving evidence of such liability coverage and naming Sublessor as the insured, with Lessee and Owner as additional insureds as their interests appear. Sublessor and Lessee do hereby release and discharge the other from any liability for loss or damage to property caused by fire or other casualty for which insurance (permitting waiver of liability and containing waiver of subrogation whereby insurer waives its right of subrogation against the other) is required to be carried by the injured party under the terms of this Lease. Each party shall give notice of this provision of this Lease to its insurer(s).

12. **Additional Insured**. Lessee, at Sublessor's request, will cause any mortgagee of the Property to be added as additional insureds as their interests may appear on any and all insurance policies required to be purchased and maintained by Lessee hereunder.

13. **Government Regulations**. Lessee shall comply with all statutes, ordinances, rules, orders, regulations and requirements of the federal, state and local governments and all of their departments and bureaus pertaining to the Lessee's use and occupancy of the Property during said term at the Lessee's sole cost and expense.

14. **Right to Possession**. Sublessor covenants and warrants that at all times during the term hereof, so long as Lessee is not in default hereunder, whether for rental payments or any other of its obligations, Lessee shall have the right of possession of the Property under the terms of the Lease without hindrance from Sublessor or any person(s) or party(ies) lawfully claiming through or under Sublessor.

15. **Fire Insurance Proceeds**. If the building and improvements are damaged to an extend allowing Sublessor to terminate the Main Lease, Sublessor shall consult with Lessee in determining whether to so terminate the Main Lease or continue the Main Lease as provided therein. This Lease shall terminate immediately upon any such termination of the Main Lease.

16. **Lease Expiration, Termination and Default**.

(a) Upon the expiration of the Lease, or its termination by reason of other provisions herein, Lessee covenants and agrees to vacate, deliver up and surrender possession of the Property to Sublessor. Upon expiration of this Lease, or termination by any reasons of any provision herein, Lessee forfeits all right, title and interest in and to the subject Property.

(b) If any of the terms, provisions or conditions of this Lease are breached in any respect or defaulted under by Lessee, Sublessor or its representatives may terminate the Lease upon ten (10) days written notice to Lessee and re-enter the Property by force or summary proceedings and remove all persons, property and effects therefrom without being liable therefore; may rent Property on behalf of Lessee, in any manner and upon any terms, without releasing Lessee from liability herein, applying any monies collected first to Sublessor's cost and expenses in all such undertakings, then upon Lessee's liabilities hereunder; and Sublessor may use all other remedies available to it, in law or in equity, including the appointment of a receiver. If the Lessee

is in default and Sublessor deems the Lease to be terminated, Lessee forfeits all right, title and interest in and to the Property.

(c) At the expiration of the term, holding over by the Lessee, with or without Sublessor's consent, shall constitute a holdover and shall not constitute a renewal, and shall be a month to month tenancy, with the rent being equal to one-twelfth (1/12) of the annual rental amount of this Lease and the same shall be payable in advance each such month, along with all other expenses due under the terms and conditions of this Lease. However, this provision shall not be construed to give the Lessee any right to holdover, and it is expressly understood and agreed that the Lessee has no right to holdover.

17. **Non-Payment of Money**. No default or breach of the Lease by Lessee involving payment of money, either to the Sublessor, Owner or to any other party to whom a payment is due under the terms and conditions hereof, shall be deemed to have occurred unless Sublessor shall have notified Lessee in writing of such breach and Lessee shall have failed to pay such sum(s) within ten (10) days from the date of such notice; provided, however, that this "notice" period shall not apply to the extent Lessee is to make payments to Owner or to any deed of trust, mortgage note, mortgage, promissory note or security agreement payments to be made by Lessee to the holder(s) of any such instruments, as referenced in Section 5 hereof, all of which shall be promptly paid by Lessee in accordance with their terms. If such breach be other than for payment of money, it shall be deemed to have occurred only after like notice and Lessee's failure to cure the same or to have commenced and maintained effective action to cure the same within thirty (30) days from the date of such notice. Lessee's failure to diligently maintain and continue such effective action after once being so notified, shall constitute a breach not requiring further notice or time.

In the event of:

(a) a default for non-payment as provided;

(b) any failure to promptly pay any amounts pursuant to any deed of trust, mortgage note, mortgage, promissory note or security agreement as set forth in Section 5 hereof;

(c) a breach for other than payment of money as provided; or,

(d) failure to diligently maintain and continue action to remedy a breach for other than money,

Sublessor may terminate this Lease and re-enter and take possession as provided in Section 16(a) above, and may use all other remedies available to it in law or in equity.

18. **Non-Waiver**. Any failure of Sublessor to insist upon strict performance of any part or provision of the Lease shall not be deemed a waiver, and shall not waive or diminish Sublessor's right thereafter to demand strict compliance therewith or any other provision and shall not prejudice or affect Sublessor's rights in event of a subsequent default. Sublessor's rights and remedies under this Lease are cumulative.

19. **Right to Sublease**. Lessee shall not have the right to sublease the Property without the prior written consent of the Sublessor. Such consent may be withheld in Sublessor's sole discretion.

20. **Appropriation**. In the event that the property is appropriated by the city, county, state or Federal Government, or any other appropriating agency, or a private entity pursuant to any enabling legislation or statute, Sublessor shall be entitled to the entire payment without any deductions.

21. **Assignment**. Lessee shall have no right to pledge, assign, transfer or otherwise negotiate its interest in this Lease, in whole or in part.

22. **Indemnification by Lessee**. Lessee shall indemnify and save Sublessor harmless from any and all injury to or loss of the Property from whatever cause, and from liability arising out of the use, maintenance and/or delivery thereof, but shall be credited with any amounts received by Sublessor from insurance procured by Lessee. In addition, Lessee shall indemnify Sublessor for any loss, cost or liability arising from Lessee's failure to comply with any provisions of the Main Lease.

23. **Lien Free Use of Property**. Sublessor's rights under the Main Lease and its corresponding leasehold interest in the Property shall remain the property of Sublessor and title thereto shall remain in Sublessor exclusively. Lessee shall keep such leasehold interest and the Property free from any and all liens and claims, and shall not do or permit any act whereby such title or right may be encumbered or impaired without the consent of Sublessor, which consent may be withheld for any reason or no reason. Lessee shall give Sublessor immediate notice of any attachment or other judicial process affecting such leasehold or the Property, and indemnify and save Sublessor harmless from any loss or damage caused thereby. Upon the expiration or termination hereof, the Property shall be returned to Sublessor by Lessee at Lessee's sole expense and in the same condition as when received by Lessee, reasonable wear and tear resulting from proper use thereof alone excepted.

24. **Insolvency of Lessee**. In the event of Lessee's default hereunder or becoming insolvent, or if Lessee ceases doing business as a going concern, or if a petition is filed by or against Lessee under any bankruptcy act or any act or law of similar import thereto, or if Lessee, without Sublessor's prior written consent, attempts to remove, sell, transfer, encumber or sublet the Property, or if Sublessor reasonably and in good faith deems itself insecure, Sublessor and/or its agents may without notice or liability or legal process enter into the Property and take control of same and in order to accomplish same, may use all force necessary or permitted by applicable law. Lessee hereby expressly waives all further rights to possession of the Property and all claims for injury suffered through or loss caused by such repossession. Should any legal proceeding be instituted by Sublessor to recover any monies due and/or to become due hereunder and/or for possession of the Property, Lessee shall pay a reasonable sum as attorney's fees, in addition to all amounts due and the expenses of retaking and such legal proceedings.

25. **Notice**. Any bill, statement or notice permitted or required under the Lease to any

party named herein, shall be in writing and sent by Certified U.S. Mail, postage prepaid to either party, at its respective address above or at such other address as such party shall from time to time designate in writing.

26. **Binding Agreement**. This Lease shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns, limited, however, by any provisions herein expressed to the contrary.

27. **Miscellaneous**.

(a) Section headings are inserted for convenient reference only and shall not affect the construction of this Lease.

(b) Any language, clause or provision hereof found to be invalid or unenforceable under the law of the State of Ohio shall be deemed to be deleted only with respect to such offending language, clause or provision.

(c) The laws of the jurisdiction in which the Property is located shall control the construction and enforcement of this Lease.

IN WITNESS WHEREOF, the parties have duly executed this Lease as of the date first above written.

Lessee:

CHIPPEWA COMMUNITY SCHOOL, LLC

By: _____

Its: CEO

Sublessor:

LUMEN BROADWAY REALTY, LLC

By: _____

Its: Vice President

School Name:	Broadway Academy	Date:	March 16, 2015

6.3a Mission, Vision, Philosophy

The mission should answer the question *why do we exist?* The vision should answer the question *what do we hope to become?* Likewise, a school's philosophy should answer the question *what do we value and believe about educating students?*

Mission	**6.3a**	**1) MISSION: The specific intent of the school - 1) student focused; 2) intent of the school; 3) includes all students; 4) directs the work of the Board; 5) clear and concise.** **State the school's clear, concise, and compelling mission statement that describes its specific intent/purpose.**
The School's mission is to provide a 21st Century learning environment to enable students to reach academic goals and become responsible 21st Century citizens. We believe that scholarship, leadership and service are the cornerstones of our future 21st Century citizens.		
Vision	**6.3a**	**2) VISION: The anticipation of the operation, function and success of the school over time - 1) innovative approach; 2) student and time / future focused; 3) directs the work of the Board over time; 4) aligned to the mission.** **State the school's clear, *concise*, and compelling vision statement that describes the anticipated operation, function and success of the school over time.**
Below are core, compelling beliefs that provide the basis for the philosophical foundation of the School's program: · Everyone deserves a chance at receiving an appropriate individualized education and being successful in life; · Everyone deserves a chance to become all (s)he can be; · No single educational approach or philosophy is right for everyone; · Everyone learns at different rates, and students should have educational choices that provide for their individual needs and learning pace; · Schools need to teach students 21st Century skills.		
Philosophy	**6.3a**	**3) PHILOSOPHY: The principles and beliefs by which the school will operate – 1) incorporates all aspects of the mission and vision; 2) illustrates innovative approach; 3) clarifies target population; 4) describes benefits for all students; 5)explains how the Board will encompass the vision, mission, and philosophy**

		to direct the operation of the school. **State the school's clear, *concise*, and compelling philosophy that describes the values and beliefs by which the school will operate.**

In embracing a new vision of challenging learning activities, the school's curriculum for all students would emphasize the integration of higher order thinking skills, authentic tasks, and mixed-ability groupings. Instead of students practicing discrete, isolated skills (such as spelling and punctuation done on worksheets), the curriculum would stress composition, comprehension, and applications of skills. Rather than treating basic skills as an obstacle that must be surmounted before exposing students to more complex and meaningful learning activities, schools would give at-risk students opportunities to learn and practice basic skills in the context of working on authentic tasks (Means, Chelemer, & Knapp, 1991). At-risk students would work more in heterogeneous groupings as part of collaborative classrooms and less in ability groupings or pull-out classes for compensatory instruction. They would be judged on their ability to perform a complex task and to reflect on and describe the thinking that went into it rather than on their facility with multiple-choice tests. Research on classrooms that have put constructivist teaching and learning models into practice also indicates that technology can enhance student engagement and productivity. More specifically, technology increases the complexity of the tasks that students can perform successfully, raises student motivation, and leads to changes in classroom roles and organization (Baker, Gearhart, & Herman, 1994; Dwyer, Ringstaff, & Sandholtz, 1990; Means & Olson, 1995). These role changes--with students moving toward more self-reliance and peer coaching, and teachers functioning more as facilitators than as lecturers--support educational reform goals for all students.The School serves grades K-8 students whose families desire school choice. The Academy will provide a safe, secure and positive individualized learning environment for children that is an alternative to public schools that have been ineffective in meeting certain family and student learning needs, and is an alternative to cost-prohibitive private schools. The School serves students who have either been displaced or underserved by traditional public schools. The students often arrive more than one full grade level behind requiring student instruction that is focused on mastery of standards not time in the seat. Over 95% of the students will fall under the government's poverty limits.

All students have different needs, learn at various rates and have different learning styles. No one educational program is appropriate for all students. Therefore, students will have a broad experience of activities that engage them in media-rich content, direct instruction, project-based learning, interest-driven and talent-driven opportunities with a healthy mind and body emphasis.

Students will learn from their teachers, peers, and community partners. This broad-based approach to learning will be an exciting and valuable experience creating lifelong 21st century learners as well as competent 21st century citizens. Students will learn and grow with the guidance of Highly Qualified Teachers, Instructional Aides, and Intervention Specialists. The School will provide a safe and nurturing environment, placing a premium on self-discipline, individuality and responsibility. The dedicated staff will work in small groups and one-on-one with students, addressing not only their learning issues but also their life situations that have prevented success in traditional schools.

6.3b Curriculum

The primary function of a school is to provide for the education of students. The curriculum describes all planned learning of students and should describe the learning experiences through which a student will progress. *What are the learning goals for students at your school*? The curriculum is to be research-based. *What evidence supports the effectiveness of the learning students will experience?* With strong evidence and great detail, each of the items below should be addressed.

Curriculum	**6.3b**	**1) Provide a detailed description of the curriculum including English/Language Arts, Science, Social Studies, Mathematics, and any other content area. The curriculum should describe the specific learning outcomes students are achieve in <u>all</u> content areas offered by the school.**

The School employs a standards-based curriculum enhanced with teacher-created lessons. According to the US Department of Education, Standards-based education is a process for planning, delivering, monitoring and improving academic programs in which clearly defined academic content standards provide the basis for content in instruction and assessment.

- Standards help ensure students learn what is important, rather than allowing textbooks to dictate classroom practice.
- Student learning is the focus - aiming for a high and deep level of student understanding that goes beyond traditional textbook-based or lesson-based instruction.

A standards-based system:

- Measures its success based on student learning (the achievement of standards) rather than compliance with rules and regulations.
- Aligns policies, initiatives, curriculum, instruction, and assessments with clearly defined academic standards.
- Consistently communicates and uses standards to focus on ways to ensure success for all students.
- Uses assessment to inform instruction.

Standards-based systems increase student achievement

Students generally learn better in a standards-based environment because everybody's working towards the same goal.

- Teachers know what the standards are and choose classroom activities and teaching strategies that enable students to achieve the standards.
- Students know the standards, too, and can see scoring guides that embody them. The students can use them to complete their work.
- Parents know them and can help students by seeing that their homework aligns with the standards.
- Administrators know what is necessary to attain the standards and provide professional development, resources and materials to ensure that

students are able to reach the prescribed standards.

The first step in the Curriculum Design Framework is curriculum alignment, which shows what will be taught in each subject area and at each grade level. The leadership team will align the content creating curriculum maps and pacing guides to provide a roadmap for school staff. The teachers will assemble their curriculum for each grade level and align it with the Ohio Common Core standards evaluating their resources identifying gaps and. The next step in the process is to organize the components of the curriculum visually. On the horizontal axis, each grade level from kindergarten through eight is listed; on the vertical axis, each academic subject area is listed. Next, teachers will identify which skills students should be able to demonstrate in each subject area and grade level.

Building on the curriculum alignment component, which shows what will be taught, the curriculum map illustrates when it will be taught. The map displays the skills in the order they will be taught in each grade level. To determine the mapping sequence, teachers will evaluate research across a number of areas, including best-practice teaching methodology, cognitive-learning theories, and brain research. The objectives are laid out across the curriculum map—skill by skill, quarter by grading quarter, and grade level by grade level. During this process, teachers will articulate between grade levels. This part of the process ensures students will have a continuous appropriate product for academic achievement. The next step in the process is to begin looking at building units that are aligned with instruction and content.

Curriculum Benchmarking

During this part of the process, staff will develop scales and assessments that will be used for monitoring progress and to inform student learning. The goal here is to build formative assessments so that the teacher can deliver appropriate content based on collected data and enough summative assessments that the teacher and student can triangulate data to ensure the student has mastery of each assessed standard. This process is known as curriculum benchmarking, and will be done for each grade level. This is a simple process of quality control, identifying children who have mastered skills and those who have yet to master them. These multiple assessments (which are correlated with the curriculum alignment and curriculum maps) allow the School to collect objective data throughout the school year. This helps determine where children are, and where they need to be. This continuous progress monitoring allows the content to be differentiated, meeting the needs of all students, complying with Individual Education Plans, enriching gifted students, and meeting the needs of students who are Limited English Proficient.

Understanding by Design (“UbD”) is a framework for improving student achievement. Emphasizing the teacher's critical role as a designer of student learning, UbD works within the standards-driven curriculum to help teachers clarify learning goals, create assessments of student understanding, and develop effective and engaging learning activities. While developing scales that coordinate common core standards, the team identifies appropriate timeline of standards coverage, which determines when a student will address each content standard. This design provides the teacher and student a roadmap for their individual instruction program where students will be allowed to move at an appropriate pace per their mastery level of standards. Furthermore, staff and students will create a vertical planning score that will allow students and teachers to easily embed core content into each individualized student activity to truly create a Project Based Learning (PBL) community.

2015-2016 St. Aloysius Sponsorship Contract Education Plan Attachment

Developed by nationally-recognized educators Grant Wiggins and Jay McTighe, and published by the Association for Supervision and Curriculum Development (ASCD), Understanding by Design Evaluating is judging the worth of something according to standards or criteria. Information obtained from formal evaluation activity is generally useful in program decision-making. Systematic evaluation promotes the identification of program needs and development of proposals for program improvement. Reasons for conducting program evaluation include the following objectives:

- To review existing district standards and benchmarks
- To determine a logical scope and sequence for K-12 instruction
- To articulate K-12 programs
- To identify program omissions and duplications
- To assess the extent to which a program does what it purports to do
- To determine the extent that a program meets the needs of students
- To identify changes and trends in the school community
- To provide a database for decision-making and long-range planning
- To inform the community of program quality and effectiveness
- To guide staff development
- To provide guidance for the selection of instructional materials based on research and best practice
- To identify areas where curriculum areas can be integrated

The process of reviewing content is strictly adhered to with student academic and emotional needs addressed first. For this reason, vertical (K-8) and horizontal articulation is vital while increasing the opportunities to integrate purpose among instructional programs. Attention to vertical coordination is crucial because it is the sequence that students experience. In this process the continuity of the educational experience is not broken. The direct involvement of teachers and principals in the improvement process is retained.

The ESP recognizes the importance of evaluation, as it is a legitimate and necessary program improvement activity. Data from the K-8 evaluation enables the ESP to respond to concerns expressed by the Board of Directors, staff, and parents regarding common curriculum expectations. The ESP believes the involvement and cooperation of several groups, including the instructional staff, administration, parents, community members and the Board of Directors, is a vital component of the model. The Board and administration must be prepared to make financial commitments allowing for staff and curriculum development, and time to satisfactorily complete a program evaluation. This model indicates the Board's pledge to continuing support of the goals and purposes of long-range evaluation. Teaching staff and administrators cooperate by serving on various committees and follow procedures established by

the program committees. Parents and other community members are asked to serve on committees and to give input. Upon completion of the process, teaching staff and administrators are expected to follow the recommendations for program improvement as accepted by the Board of Directors.

The curriculum review process provides a systematic procedure to study existing curriculum areas and programs relative to internal and external standards. Each year, a self-study committee (Curriculum Team) is appointed and has the responsibilities of carrying out the K-8 curriculum review process for each curriculum area. The Curriculum Team meets on a regular basis to carry out the program review and evaluation process. This process begins in the Spring and is complete for the new year by Fall. Membership of the committee is composed of teacher representatives of grade levels and/or courses, administrators, parents and community representatives. The committee is chaired by the curricular area coordinator. Other membership may include the media specialists, staff development facilitators, special education teachers, counselors, or other curricular area staff for the purposes of course integration. During this process, key questions are established and surveys are completed by teachers, administrators, parents, and students to identify program components and satisfaction with the program. Student achievement and program data are also collected. During the summer following data collection, the survey data, academic achievement data, and program data are reviewed for the purpose of further analysis. From the data analysis, strengths and limitations are identified. Recommendations are made to address the limitations, and an improvement plan is written to outline procedures for accomplishing the recommendations.

Design is based on the following key ideas:

- A primary goal of education should be the development and deepening of student understanding.
- Students reveal their understanding most effectively when they are provided with complex, authentic opportunities to explain, interpret, apply, shift perspective, empathize, and self-assess. When applied to complex tasks, these "six facets" provide a conceptual lens through which teachers can better assess student understanding.
- Effective curriculum development reflects a three-stage design process called "backward design" that delays the planning of classroom activities until goals have been clarified and assessments designed. This process helps to avoid the twin problems of "textbook coverage" and "activity-oriented" teaching, in which no clear priorities and purposes are apparent.
- Student and school performance gains are achieved through regular reviews of results (achievement data and student work) followed by targeted adjustments to curriculum and instruction. Teachers become most effective when they seek feedback from students and their peers and use that feedback to adjust approaches to design and teaching.

Consistent with the School's mission, vision, and educational philosophy, the School program will implement the Ohio Model Curriculum, aligned with Ohio's Revised Academic Content Standards based on the Common Core State Standards. This state-aligned, empirically-proven curriculum, coupled with a Highly Qualified Staff and a project-based learning model, will empower students to take charge of their own education.

Using Ohio Model Curricula frameworks, teachers will have guidance on what to teach and when to teach specific content. Instructional materials are reviewed each year by a committee of experienced teachers and the Director of Curriculum to assure alignment with Common Core and Model Curricula.

Pacing guides will be developed to match Model Curricula framework. Curriculum Resource evaluation and review is conducted annually by a committee of experienced teachers and administrators headed by the COO. Student assessment data is used to evaluate resource effectiveness. Scales, maps and pacing guides are reviewed annually and adjustments are made as appropriate.

Curriculum evaluation and review is conducted annually by a committee of experienced teachers headed by the COO.

Specific Learning Objectives

ELA K-2

The academic program in the primary grades will have an emphasis on phonics, phonemic awareness, vocabulary development, fluency and comprehension of text introducing informational text and increasing text complexity as the students basic skills develop. All students who leave the second grade will be fluent readers. All students in grades K-2 will use I Read in addition to the balanced literacy program. The balanced literacy program will consist of The read aloud, guided reading, shared reading, independent reading, and word study.

Math K-2

The Academic Program in the primary grades will focus on the attainment of basic math facts and functions beginning with the cardinal number identification and spatial relationships and culminating with extending understanding of base-ten notation; building fluency with addition and subtraction; using standard units of measure; and describing and analyzing shapes.

ELA 3-5

The objective of the ELA program in grades 3-5 will build upon the automaticity that was mastered in the primary grades with increasingly more complex texts and an emphasis on the spoken and written word. Story maps, oral presentations and using the writing process across the content. Informational text will be used to teach the next gen science and social studies standards. By the end of fifth grade all students will be able to evaluate resources and use the 5 step writing process. Students who enter the school in these grades who are two or more grade levels behind will be double dosed in treading using the core and System 44.

Math 3-5

In Grade 3, instructional time should focus on four critical areas: (1) developing understanding of multiplication and division and strategies for multiplication and division within 100; (2) developing understanding of fractions, especially unit fractions (fractions with numerator 1); (3) developing understanding of the structure of rectangular arrays and of area; and (4) describing and analyzing two-dimensional shapes. In Grade 4, instructional time will focus on three critical areas: (1) developing understanding and fluency with multi-digit multiplication, and developing understanding of dividing to find quotients involving multi-digit dividends; (2) developing an understanding of fraction equivalence, addition and subtraction of fractions with like denominators, and multiplication of fractions by whole numbers; (3) understanding that geometric figures can be analyzed and classified based on their

properties, such as having parallel sides, perpendicular sides, particular angle measures, and symmetry. In Grade 5, instructional time will focus on three critical areas: (1) developing fluency with addition and subtraction of fractions, and developing understanding of the multiplication of fractions and of division of fractions in limited cases (unit fractions divided by whole numbers and whole numbers divided by unit fractions); (2) extending division to 2-digit divisors, integrating decimal fractions into the place value system and developing understanding of operations with decimals to hundredths, and developing fluency with whole number and decimal operations; and (3) developing understanding of volume.

ELA 6-8

The school will focus on students' ability to read carefully and grasp information, arguments, ideas, and details based on evidence in the text. Students will be able to answer a range of *text-dependent* questions, whose answers require inferences based on careful attention to the text. the use of Mentor Texts will guide students as they move from emergent to developed writers. Students who enter the school in these grades are typically 3 or more years behind in their reading comprehension and fluency. To that end, all students will be assessed upon entry and placed in system 44 or Read 180 if needed.

Math 6-8

In Grade 6, instructional time will focus on four critical areas: (1) connecting ratio and rate to whole number multiplication and division and using concepts of ratio and rate to solve problems; (2) completing understanding of division of fractions and extending the notion of number to the system of rational numbers, which includes negative numbers; (3) writing, interpreting, and using expressions and equations; and (4) developing understanding of statistical thinking. In Grade 7, instructional time will focus on four critical areas: (1) developing understanding of and applying proportional relationships; (2) developing understanding of operations with rational numbers and working with expressions and linear equations; (3) solving problems involving scale drawings and informal geometric constructions, and working with two- and three-dimensional shapes to solve problems involving area, surface area, and volume; and (4) drawing inferences about populations based on samples. In Grade 8, instructional time will focus on three critical areas: (1) formulating and reasoning about expressions and equations, including modeling an association in bivariate data with a linear equation, and solving linear equations and systems of linear equations; (2) grasping the concept of a function and using functions to describe quantitative relationships; (3) analyzing two- and three-dimensional space and figures using distance, angle, similarity, and congruence, and understanding and applying the Pythagorean Theorem.

K-8 Science

Observations of the Environment This theme focuses on helping students develop the skills for systematic discovery to understand the science of the natural world around them in greater depth by using scientific inquiry. **Interconnections within Systems** This theme focuses on helping students explore the components of various systems and then investigate dynamic and sustainable relationships within systems using scientific inquiry. **Order and Organization** This theme focuses on helping students use scientific inquiry to discover patterns, trends, structures and relationships that may be inferred from simple principles. These principles are related to the properties or interactions within and between systems.

2015-2016 St. Aloysius Sponsorship Contract Education Plan Attachment

K-8 Social Studies

THEME K A Child's Place in Time and Space The kindergarten year is the time for children to begin to form concepts about the world beyond their own classroom and communities. Culture, heritage and democratic principles are explored, building upon the foundation of the classroom experience. Children deepen their learning about themselves and begin to form an understanding of roles, responsibility for actions and decision making in the context of the group setting. 1 Families Now and Long Ago, Near and Far The first-grade year builds on the concepts developed in kindergarten by focusing on the individual as a member of a family. Students begin to understand how families lived long ago and how they live in other cultures. They develop concepts about how the world is organized spatially through beginning map skills. They build the foundation for understanding principles of government and their roles as citizens. 2 People Working Together Work serves as an organizing theme for the second grade. Students learn about jobs today and long ago. They use biographies, primary sources and artifacts as clues to the past. They deepen their knowledge of diverse cultures and their roles as citizens. 3 Communities: Past and Present, Near and Far The local community serves as the focal point for third grade as students begin to understand how their communities have changed over time and to make comparisons with communities in other places. The study of local history comes alive through the use of artifacts and documents. They also learn how communities are governed and how the local economy is organized. 4 Ohio in the United States The fourth-grade year focuses on the early development of Ohio and the United States. Students learn about the history, geography, government and economy of their state and nation. Foundations of U.S. history are laid as students study prehistoric Ohio cultures, early American life, the U.S. Constitution, and the development and growth of Ohio and the United States. Students begin to understand how ideas and events from the past have shaped Ohio and the United States today. 5 Regions and People of the Western Hemisphere In grade five, students study the Western Hemisphere (North and South America), its geographic features, early history, cultural development and economic change. Students learn about the early inhabitants of the Americas and the impact of European exploration and colonization. The geographic focus includes the study of contemporary regional characteristics, the movement of people, products and ideas, and cultural diversity. Students develop their understanding of the relationship between markets and available resources. 6 Regions and People of the Eastern Hemisphere In grade six, students study the Eastern Hemisphere (Africa, Asia, Australia and Europe), its geographic features, early history, cultural development and economic change. Students learn about the development of river civilizations in Africa and Asia, including their governments, cultures and economic systems. The geographic focus includes the study of contemporary regional characteristics, the movement of people, products and ideas, and cultural diversity. Students develop their understanding of the role of consumers and the interaction of markets, resources and competition. 7 World Studies from 750 B.C. to 1600 A.D.: Ancient Greece to the First Global Age The seventh grade year is an integrated study of world history, beginning with ancient Greece and continuing through global exploration. All four social studies strands are used to illustrate how historic events are shaped by geographic, social, cultural, economic and political factors. Students develop their understanding of how ideas and events from the past have shaped the world today. 8 U.S. Studies from 1492 to 1877: Exploration through Reconstruction The historical focus continues in the eighth grade with the study of European exploration and the early years of the United States. This study incorporates all four social studies strands into a chronologic view of the development of the United States. Students examine how historic events are shaped by geographic, social, cultural, economic and political factors.

Examples of Curriculum Resources

LEAD 21

Grade Levels K - 5

Transforming K-5 Literacy Instruction for 21st Century Classrooms

comprehensive K-5 core literacy program set to transform your reading instruction with:

- Differentiated Readers - The Next Generation in Leveled Texts
  This collection of engaging and innovative connected-text-sets provides an unprecedented range of readability
- A Plan for Acceleration - Instruction, Texts, and Technologies to Move All Students Toward Proficiency and Beyond
  Instruction and resources come together to forge gap-closing learning trajectories for students at Intensive, Strategic, Benchmark, and Advanced Levels.
- Complete Print and Digital Parity Everything print is also accessible digitally. Students and teachers are engaged and supported by digital innovation throughout the program.

My Math

McGraw-Hill My Math was built on the Common Core State Standards and exceeds your expectations of how challenging and engaging an elementary math program can be with: Real rigor that produces results McGraw-Hill My Math was carefully constructed to help you meet the demands of the Common Core State Standards. Woven throughout, the three components of rigor (Conceptual Understanding, Procedural Skill & Fluency, & Application) are woven throughout the program in equal intensity, allowing your students to progress toward a higher level of achievement in meeting the high expectations of the Standards and CCSS Assessments.

Read 180

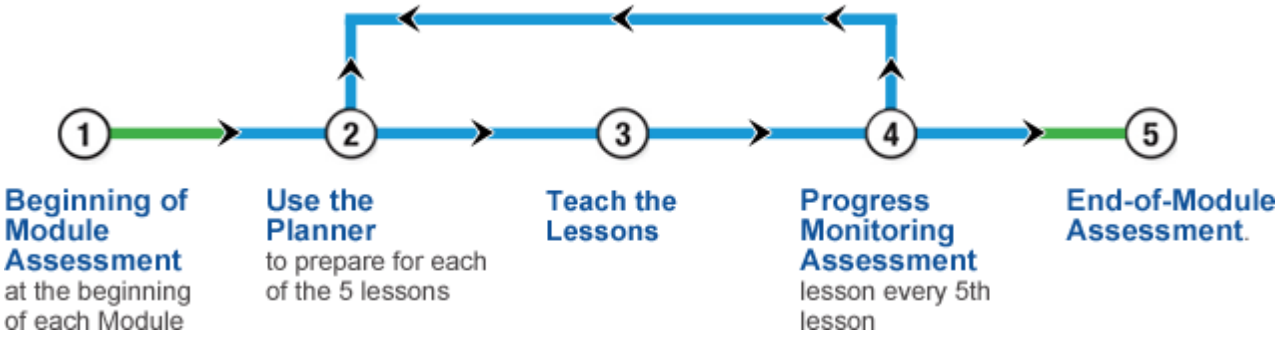
* READ 180 is the most studied and most successful intervention program for struggling readers, used in 40,000 classrooms across the country.

* READ 180 combines adaptive software with small group direct instruction and independent reading to help accelerate reading achievement and get students back on track in school and in life.

* More than 40 independent studies have proven the effectiveness of READ 180.

Do The Math

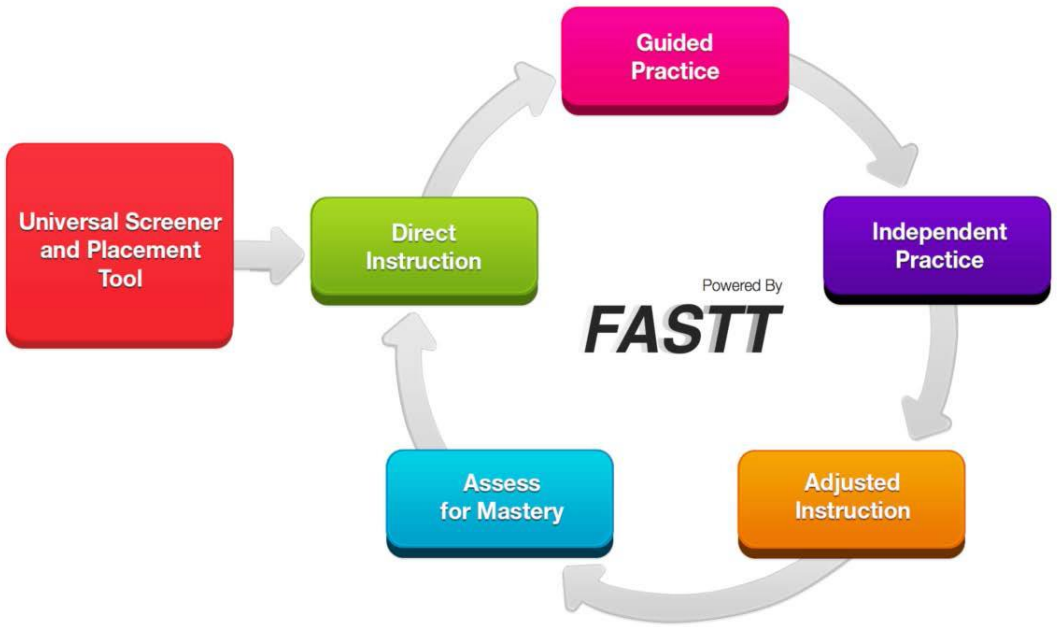
Each of the 13 Do The Math modules follows a consistent structure that includes frequent and strategically placed formative and summative assessments that both encourage and support students every step of the way. Students are assessed every fifth lesson to determine their progress. Teachers are provided with additional strategies for students still struggling as well as those ready for a challenge.



iRead

iRead technology meets the challenge of providing effective foundational reading instruction through a combination of explicit and systematic instruction for all students, ongoing embedded assessment to identify areas of need, and adaptive tailoring of instruction so that individual students receive more intensive teaching and practice with skills where they need more work. Instruction is differentiated for each student in pacing, amount of practice, and instructional content.

iRead provides explicit and systematic instruction in phonemic and phonological awareness, the alphabet, phonics, sight words, syllabication1, morphology and syntax, and spelling, as called for by research and expert opinion in early reading.



Expert 21

Expert 21 is a comprehensive English Language Arts curriculum that prepares students for the literacy demands of the 21st Century through a powerful combination of explicit instruction, inquiry-based learning, contemporary and relevant literature and informational texts, real-world writing and projects, and supportive technology. The only new English Language Arts curriculum developed with the foundational research and working drafts of the Common Core State Standards, Expert 21 accelerates the acquisition of standards-aligned literacy skills, while integrating 21st Century competencies to ensure all students are college and career ready.

- Literary and informational texts that students want to read because they're relevant, contemporary and interdisciplinary
- Inquiry-based learning that helps students build an understanding of the world in which they live, learn and work

2015-2016 St. Aloysius Sponsorship Contract Education Plan Attachment

- Explicit instruction in and application of 21st Century Skills students will use in college, career, and life.

Instructional Materials include:

Content Area	Materials	Grade Level
Math	MY Math (or similar)	Grades K-5
Math	Edgenuity, BSN	Grades 6-8
Science	Science A-Z	Grades K-8
English/Language Arts	Read 180/ E 21	Grades 6-8
Reading/ELA	Comprehension Club, Leveled Readers	K-5
Social Studies	Embedded	Grades K-8

	6.3b	2) Provide evidence of the curriculum's research base.
See Attachments		

WRIGHT GROUP

LEAD21®

LITERACY EQUITY ACCELERATION DIFFERENTIATION

Differentiation and Acceleration Through Small-Group Reading Instruction

Program Research Base

Mc Graw Hill Wright Group

Contents

Executive Summary 1
Introduction 2
The Role of Small-Group Reading Instruction:
Why Is It Important? 3
The Purposes of Small-Group Reading Instruction 5
General Description of the Typical Small Group 7
Guiding Principles for Effective Small-Group Reading Instruction
in Wright Group LEAD21 7
Typical SGRI Lesson Format 10
How Small-Group Reading Instruction Changes Across the Grades:
A Vision for SGRI in the Intermediate Grades 13
Aligning SGRI with Independent Work Structures:
What Do the Rest of the Students Do When the
Teacher Is Working with a Small Group? 15
Conclusion 19
LEAD21 Differentiation and Acceleration Pedagogy 20
Author Biography 21
References 22

Ref. RD 11 M 8079

Differentiation and Acceleration Through Small-Group Reading Instruction

Executive Summary

A solid base of research shows that students learn reading best when they have access to a full range of instruction geared to various grouping sizes. In addition, research shows that the exclusive use of one grouping pattern tends to widen the gap between below-level readers and advanced readers. Educators have learned that each grouping size, including independent reading, contributes its own benefits, and in a well-rounded reading program students should move from one size group to another on a regular basis.

In **Wright Group LEAD21**, the small-group concept is enhanced. It includes all the common expectations of guided reading, but also encompasses teaching methods to address both differentiation and acceleration. The major portion of the reading instructional block of **LEAD21** incorporates three components: Interactive Reading (whole-class, community reading, which includes read-alouds); Differentiated Reading (small-group reading, which includes the principles of guided reading); and Independent Reading.

LEAD21 stands out from the traditional basals in its Differentiated Reading component, referred to in this Program Research Base as Small-Group Reading Instruction, or SGRI. It fulfills four functions: first, it provides targeted, scaffolded instruction as an intervention for students with similar needs. Second, it provides explicit instruction and demonstrations to smaller groups of students: Intensive, Strategic, Benchmark, and Advanced readers.

Third, it is designed to be a forum for response across a shared text when a small group of students have read the same text and are asked to collaborate on their response to the text. Lastly, and related to the third function, SGRI in **LEAD21** becomes a forum for response across texts when a small group of students have read different, but related texts. The Differentiated Reader fulfills this last need and is the primary reading text in the program, written for four levels of readers.

Five guiding principles govern the instructional plan for Differentiated Reading in **LEAD21**: 1. The need to differentiate instruction; 2. The need to provide equitable access to high-quality instruction for all students and reduce the stigma of being a struggling reader; 3. The desire to shift teacher focus from student progress to student proficiency; 4. The need for acceleration of below-level readers; and 5. The desire to follow a gradual release model of instruction.

LEAD21 incorporates a grouping structure designed to address the needs of all students in the class to help them successfully learn to read.

Ref. RD 11 M 8079

Differentiation and Acceleration Through Small-Group Reading Instruction

Introduction

There has always been a problem with grouping practices in reading programs (Caldwell and Ford 2002; Nagel 2001; Opitz 1998). The complexity of the interaction between readers, texts, and the contexts in which reading takes place is often ignored by educational decisions that suggest that one program, set of materials, instructional technique, or grouping arrangement can address the needs of all students in a classroom (Opitz and Ford 2001). Common sense and personal experiences would suggest however that one size rarely fits all (Gregory and Chapman 2002). Students vary in their background knowledge, readiness, language, learning preferences, interests, and reactions. A single instructional response to a group of diverse learners often means that the teaching technique will help some while it ignores others (Forsten, Grant and Hollas 2002). Furthermore, the exclusive use of the single instructional technique over time will magnify that flaw.

No one grouping pattern is inherently bad, but the exclusive use of one grouping pattern often leads to problems in the classroom (Caldwell and Ford 2002). In the past, the overuse of homogenous small groups often meant that many readers never had access to the same quality of instruction as others did. The grouping tactics themselves contributed to the establishment of a public stigma attached to reading instruction. These negative feelings about reading and school actually ran interference with even the highest quality small-group instruction. In the end, this type of small-group instruction did little to bring below-level readers up to proficiency or narrow the gap between readers in high and low groups. In fact, because of the inherent flaws in that model, the gap often widens between readers.

In the past, the overuse of homogenous small groups often meant that many readers never had access to the same quality of instruction as others did …
In contrast, the overuse of whole-group instruction often meant that many students—especially below-level readers—were not reading text appropriate for their levels.

Ref. RD 11 M 8079

In contrast, the overuse of whole-group instruction often meant that many students—especially below-level readers—were not reading text appropriate for their levels. These students weren't reading at all due to the frustration level of the material in front of them and the minimal amount of teacher support they were provided. On the other end, students were reading without adequate challenges. The difficulty of keeping a group of diverse students engaged with the same material often meant that some students—often those who needed help the most—were not engaged. Again this type of grouping did little to support the growth of below grade-level readers.

Differentiated instruction emerged as a practice to address these concerns. It acknowledges that all grouping patterns—large groups, small groups, teams, partners and individuals—have value because they all offer the reader slightly different experiences with different outcomes (Radencich and McKay 1995). When teachers plan, they consider the strengths and weaknesses of each grouping approach and then put them together to allow the teacher to best meet the needs of the classroom. The groups are formed and dissolved as needs change to allow for maximum flexibility, avoiding the static nature of the grouping patterns of the past (Opitz 1998.)

It is important to remember that while it is often possible to form and reform groups during a single lesson on any one day of instruction, it is more important to look at a classroom program over time. When we evaluate the program over time, we should be able to see that students have been involved in a variety of grouping arrangements, leading to a wide variety of reading experiences, accomplishing many reading outcomes. Differentiated instruction can be visible during any one lesson, but it is probably even more important that differentiation is seen over the course of many lessons.

The Role of Small-Group Reading Instruction: Why Is It Important?

Wright Group LEAD21 is designed to provide students with a variety of learning opportunities in a comprehensive literacy program. Some work is best done in large groups in which many voices add to the accumulation of knowledge. At other times, individual interaction is the key to effective teaching and learning. In between these two ends of the spectrum is small-group work. **Small-Group Reading Instruction (SGRI)** is one of the most critical components of a comprehensive literacy program. In small groups, students gain the advantage of interacting with other students but also have the potential for direct and constant contact with the teacher. SGRI allows the teacher to provide a layer of differentiation to whole-group instruction by providing opportunities to work with students whose needs are more alike than they are different. SGRI allows the teacher to vary the student membership of the groups and the level of texts used with each group. This helps the teacher target instruction to better meet the needs of the students in a manner that isn't as possible in large-group settings (Ford and Opitz 2008). This may be especially critical for the below grade-level reader.

Ref. RD 11 M 8079

Generally these learning opportunities are reflected in four key components that define reading instruction in **LEAD21**: reading to the students, reading with the students in large groups, reading with the students in small groups, and reading done by the student (Mooney 1990). These components lead to three instructional activities that comprise the major portion of the reading instructional block of **LEAD21**: Interactive Reading (community reading which includes read-alouds), Differentiated Reading (which includes Guided Reading), and Independent Reading (Fountas and Pinnell 1996). In **LEAD21**, typically Interactive Reading (Kindergarten through Grade 5) is a teacher-directed, large-group activity used with a heterogeneous mix of students. Independent Reading activities, on the other hand, provide for individualized approaches to achieve instructional or recreational goals of the reading program for specific students. *Guided Reading* is the primary vehicle for targeting specific, scaffolded instruction to intervene with smaller homogenous groups of students who share similar needs. The term *Guided Reading* often calls to mind a specific instructional approach for small-group reading instruction (Fountas and Pinnell 1996). So for the basis of this Program Research Base, we will use the broader phrase **Small-Group Reading Instruction** (SGRI) which includes the typical interpretation of Guided Reading but is not limited to that specific instructional approach. Since an important goal of **LEAD21** is the development of independent, strategic silent readers, SGRI is a means to an end, not an end in and of itself. SGRI is always used as a vehicle to further the development of independent, strategic readers, and as such, is labeled Differentiated Reading in **LEAD21**.

The term *Guided Reading* often calls to mind a specific instructional approach for small-group reading instruction (Fountas and Pinnell 1996). So for the basis of this White Paper, we will use the broader phrase **Small-Group Reading Instruction** (SGRI) which includes the typical interpretation of Guided Reading but is not limited to that specific instructional approach.

In **LEAD21** the typical components of a comprehensive literacy program do not stand alone as separate and unconnected activities. An intentional effort has been made to link instruction thematically across the literacy block. Effort has also been made to design the large-group, small-group, and independent activities collectively so that they offer a smooth flow of instruction in connected experiences (McLaughlin and Allen 2002). In a national survey of primary teachers, only half of the teachers linked their instruction thematically, and two-thirds of the teachers connected their shared and guided reading experiences (Ford and Opitz 2008). Typically, it is recommended that time be divided with one-third of the time devoted to whole-group activity and two-thirds devoted to small-group and independent activities. But in the survey only about 37% of instructional

time was devoted to small-group instruction (Ford and Opitz 2008). On the other hand, in a study of effective schools, over sixty minutes was devoted to small-group work, which was significantly more than for moderately effective and least effective schools, given the same demographic groups (Taylor, Pearson, Clark, and Walpole 1999).

The Purposes of Small-Group Reading Instruction

It is important to distinguish the purpose of whole-group instruction from that of SGRI. The whole-group setting is best suited for instruction and experiences for which all students are responsible. Whole-group instruction is also more conducive to learning experiences in which it is beneficial to hear multiple voices responding to those experiences. When it is essential that all students receive information, and when it is beneficial for many voices to respond to the experiences, whole-group instruction may be the most efficient and optimal vehicle for achieving those aims (Caldwell and Ford 2002).

It should be noted that the more successful whole-group instruction is, the less instructional burden is placed on SGRI. Since whole-group instruction is often the most efficient use of time and materials, it is important to maximize the benefits all students receive from that instruction. Clearly student engagement plays a critical role in reaching all students during large-group activities. In exemplary teachers' classrooms where teachers had the greatest impact on performance and achievement measures, engagement levels were as high as 90/90—90% of the students on task 90% of the time (Pressley 2006). Often whole-group instruction leads to more passive learning activities where one person does (often the teacher), while most of the others watch. These formats often allow students—many times those who need it the most—to easily tune out the instruction. Intentional efforts must be made in planning for and soliciting high levels of engagement during these times. Usually this means rethinking regular classroom routines and intensifying them. Intensification is an intentional effort to help more students get more mileage out of those classroom routines. Bomer (1998) suggested it's a way to turn up the heat and light on these practices so they are more effective for more learners. This may be true even when texts used in whole group are more difficult for some readers. Recent research suggests that difficult texts surrounded by effectively scaffolded, teacher-mediated instruction may actually accelerate the growth of below-grade level readers (Stahl, et al. 2005).

Even with intensified whole-group instruction, some students will still need additional attention. This creates a need for differentiated instruction. SGRI is the primary vehicle for differentiating instruction (Fountas and Pinnell 1996). The primary purpose of SGRI is to provide targeted, scaffolded instruction as an intervention for students with similar needs. SGRI allows teachers to address the diversity of needs and interests that exist in most contemporary classrooms that cannot be addressed in large-group instructional activities, without the pragmatic constraints of developing a totally individualized approach.

SGRI is also used for three additional purposes in **LEAD21.** First, SGRI is used to provide explicit instruction and demonstrations to smaller groups of students: Intensive, significantly below grade level; Strategic, below grade level; Benchmark, on level; Advanced, above level. Such demonstrations may be conducted as a follow-up to shared-reading instruction for students who need additional exposure to what was presented in the large-group setting. These demonstrations may also be specifically tailored to the group when the demonstrations are not appropriate for other students.

Second, SGRI is used to provide a forum for response across a shared text when a small group of students have read the same text and are asked to collaborate on their response to the text. The teacher plays a significant role in mediating the interaction, but the focus may be less controlled than typical scaffolded instruction provided during Guided Reading.

SGRI allows teachers to address the diversity of needs and interests that exist in most contemporary classrooms that can not be addressed in large-group instructional activities, without the pragmatic constraints of developing a totally individualized approach.

Finally, SGRI may also be used to provide a forum for response across texts when a small group of students have read different but related texts and are asked to collaborate on their responses across the texts. **LEAD21** provides just such different but related texts through Differentiated Readers. In this case, students of mixed achievement levels may be grouped together for SGRI, notably for Inquiry projects. While they have read different levels of texts, the related nature of the texts allows them to work together on a common focus to their response. Again in this case, the teacher plays a significant role in mediating the interaction, but the focus may be less controlled than typical scaffolded instruction (Opitz and Ford 2001). In **LEAD21**, SGRI is designed so that a teacher usually addresses multiple purposes during the lesson—providing a demonstration, targeting scaffolded instruction, and mediating responses.

Additional advantages of SGRI can be summarized as follows:

- Students are provided with additional practice for introduced skills by using reading materials more suited to their needs.
- Students can read a variety of texts at their instructional levels.
- Students interact with the teacher on a closer basis than is possible with large-group instruction.

Ref. RD 11 M 8079

- Students often work with other students who share similar backgrounds and needs.
- Students receive targeted attention that ensures greater success.
- Students can proceed at a pace that accelerates their growth.

General Description of the Typical Small Group

In a national survey of primary grade teachers about their guided reading practices (Ford and Opitz 2008), researchers found that in general small-group reading instruction included the following characteristics:

- Averaged a two-hour Reading and Language Arts block
- Used 37% (44 minutes) of the Reading and Language Arts block time for guided reading
- Averaged four groups
- Averaged six students per group
- Met with each group three to four times a week
- Spent about 20 minutes with each group
- Changed groups monthly

In contrast, **LEAD21** takes the small-group format and develops it into a more comprehensive teaching platform.

Guiding Principles for Effective Small-Group Reading Instruction in Wright Group LEAD21

In **LEAD21**, SGRI instruction is seen as more effective within the framework of a comprehensive literacy program (Cunningham, Hall, and Cunningham 2000; Kane 1995). In **LEAD21**, SGRI or Differentiated Reading is not independent of shared reading. Rather, it is connected to large-group instruction and is extended by independent work activities. SGRI supports themes and contributes to a deeper level of understanding of the key ideas. It provides a forum for reinforcing and practicing skills and strategies addressed in other lesson components. In **LEAD21**, SGRI often evolves from shared reading when single texts are being used but differentiated levels of support are needed (Opitz and Ford 2001). This may be especially true with informational texts, when differentiation within the texts and within levels of support are possible (McLaughlin and Allen 2002).

Ref. RD 11 M 8079

In **LEAD21**, the first guiding principle underlying SGRI is the need to differentiate instruction. It most often takes the form of four teacher-directed reading groups: Intensive, significantly below level; Strategic, slightly below level; Benchmark, at grade level; Advanced, above grade level. Differentiation is based on the use of key instructional strategies: targeted, instructional, leveled texts called Differentiated Readers, and adjusted levels of teacher support. During SGRI, students are provided a Differentiated Reader that has been selected by the teacher based on the needs of the students. The Differentiated Reader is from a set and is read by all students in the group (Fountas and Pinnell 1996). At times, a variety of texts that are related but at different levels may be used with a group when it is appropriate. In addition to text selection, differentiation is accomplished by adjusting the level of teacher support for different groups of learners. This may be seen in the degree of teacher involvement in demonstrations, scaffolded instruction or mediated, shared response across texts when working with different groups (Opitz and Ford 2001).

The second guiding principle for SGRI is the need to address two primary concerns of homogeneous small-group instruction of the past: 1) providing equitable access to high quality meaning-based instruction for all students; and 2) reducing the stigma of being a struggling reader (Caldwell and Ford 2002). Since expectations and tasks in **LEAD21** have been held constant for all students, and differentiation is based primarily on text choices and levels of teacher support, all students will have access to high quality meaning-based instruction. Similarly, because of consistent expectations and activities with related, similarly formatted, engaging texts, called Differentiated Readers, the daily reminders of the stigma of being a struggling reader, obvious in many classrooms, are less obvious in **LEAD21**.

The second guiding principle for SGRI is the need to address two primary concerns of homogeneous small-group instruction of the past: 1) providing equitable access to high quality meaning-based instruction for all students; and 2) reducing the stigma of being a struggling/striving reader (Caldwell and Ford 2002).

In **LEAD21**, a third guiding principle which governs the content of SGRI is the desire to shift the teacher focus from student progress to student proficiency. In the past, teachers have often focused on student progress in the use of guided reading materials. Teachers often saw student progress from a lower level to a higher level as an end goal for reading instruction. While progress is important, **LEAD21** shifts the teacher's focus from progress to proficiency. Teachers need to be less comfortable with a student's progress as evidence and more concerned with achievement of grade-level proficiency as the end goal. **LEAD21** clearly identifies targeted proficiency end goals (benchmarks) and then structures the pacing of SGRI to accelerate student progress

Ref. RD 11 M 8079

to lead toward the end goal of grade-level proficiency. Acceleration is an intentional effort in designing instruction to accelerate the pace of learning for those students with the greatest needs. For students who for whatever reasons find themselves below grade-level expectations, making progress may not be enough. The pace of that progress becomes a critical instructional consideration. In **LEAD21**, the end goal for SGRI is grade-level proficiency for all readers. Progress is important but only as a sign that students are moving closer to benchmark standards for their grade level.

> Teachers need to be less comfortable with a student's progress as evidence and more concerned with achievement of grade-level proficiency as the end goal.

In **LEAD21**, a fourth guiding principle is acceleration. Care has been taken to make sure that learning opportunities provided during SGRI work to close the gaps between learners and accelerate the progress of those learners with the greatest needs. This is accomplished through the following elements:

- Materials designed so that the number of texts with which students work equalizes practice opportunities across groups
- Texts designed with common features which allow a student to move more quickly to more difficult texts
- Targeted instruction within SGRI
- Links between SGRI and other components of the instructional lesson

In **LEAD21**, SGRI follows a gradual release model as the fifth guiding principal. (Au and Raphael 1998; Pearson and Gallagher 1983; Wilhelm 2001). This occurs in two ways: across the literacy block, and within the SGRI lesson. First, SGRI is connected to what happens in large-group activities. SGRI is seen as the opportunity to practice with guidance what has been taught and modeled in the large-group setting. What is practiced within SGRI with guidance is also connected to student independent work. SGRI is designed to equip students to transfer what has been learned toward self-initiated, self-regulated literacy activities.

Secondly, the lesson within SGRI is also designed to follow a gradual release model. The SGRI lesson design typically begins with explicit instruction in which the teacher provides information and demonstrations as needed. The lesson moves toward the reading of the text in which the teacher provides scaffolded instruction as the students read and respond. Finally, the lesson ends with *Respond*, in which the teacher provides an opportunity for students to demonstrate that they can work independently. Again, the goal in **LEAD21** is to ensure that the learner improves as an independent, strategic

Ref. RD 11 M 8079

reader. The gradual release model permeates the instructional design of the overall literacy block as well as individual lessons used during SGRI. A summary of the gradual release model is as follows (Wilhelm 2001):

1. Teacher does while students watch: Modeling and Demonstration
2. Teacher does while students help: Teacher-led Collaboration
3. Teacher does while students do: Guided Practice
4. Students do while teacher helps: Student-led Collaboration
5. Students do while teacher watches and assesses: Independent Practice

Finally, SGRI is informed by ongoing assessment: 1. Frameworks help teachers be very intentional in their instructional plans; 2. Authentic assessment techniques and tools guide teachers in using data to adjust subsequent instruction to target learners. The key to effective, scaffolded instruction is knowing where students are, where they need to be, and then building a bridge between those two points. This requires being able to use efficient, effective, ongoing assessment tools and adjust plans accordingly (Fountas and Pinnell 1996).

Typical SGRI Lesson Format

In **Wright Group LEAD21**, SGRI lessons are designed with consideration to the level of support the learners require. The format follows a typical pattern with attention to three phases of the lesson: before, during, and after the reading (Beuhl 2001). The "*before* phase" must frontload the lesson in order to guarantee the greatest number of students succeed both during and after the reading. The text must be introduced in ways that will encourage strategic reading and provide understanding. Frontloading addresses five key instructional objectives:

- Generating interest through Introduce the Theme to build momentum to sustain students during reading
- Activating schema so students bring their knowledge of the world to the page, through Activating Prior Knowledge
- Building Background knowledge that students will need to understand the reading, including addressing specific vocabulary demands of the text
- Setting Purposes to keep readers clearly focused while reading
- Providing explicit instruction related to skills and strategies that the Intensive and Strategic students need to be successful with the reading; Benchmark and Advanced students receiving reminders of those same skills and strategies

Many frontloading goals can be addressed in a teacher-directed preview of the text. In primary grades, variations on picture and print walks are often an effective way to prepare students for the reading. In the intermediate grades, previewing the text, especially nonfiction genres, may include analyzing the structure of the text and noting special features which assist the reader.

The "*during* phase" of the lesson has as its goal the reading and understanding of the text. Meaning-making needs to be at the heart of SGRI. It is important that students have opportunities to learn new strategies and practice previously introduced strategies while they read. Reading may involve a number of techniques:

- Students reading the text on their own
- Students reading the text to each other
- Students reading the text as partners
- Teacher monitoring as students read the text together
- Teacher leading students in reading the text together
- Students repeating part of the texts read aloud by the teacher
- The teacher reading aloud parts of the text to the students
- Any combination of the above techniques

The teacher should always try to use a technique that promotes as much independent reading as possible while monitoring to make sure students are successful. The teacher also needs to avoid techniques over-relied on in the past (such as round-robin reading) that have actually interfered with the outcomes of SGRI (Opitz and Rasinski 1998).

To enhance monitoring while students read, teachers need to develop a repertoire of questioning techniques based on word identification and comprehension strategies. (See Read and Guide Comprehension in **LEAD21**.) The teacher needs to be able to seize a teachable moment and pose the right question to the students to assist them in solving the problem encountered while reading (Fountas and Pinnell 1996).

The "*after* phase" of the lesson extends and builds upon the reading and understanding of the text. This may take place under the guidance of the teacher during SGRI, or may be initiated with teacher guidance but completed independently from the teacher. This may include follow-up explicit instruction based on skill or strategy needs that emerged during the reading. See *Respond* and *Respond and Write* in whole-group and small-group instruction, respectively. The "*after* phase" provides an opportunity to go in-depth to address difficulties in word identification and comprehension strategies that

emerged while monitoring students as they read. Teachers also need to monitor discussion after reading with effective questioning techniques in order to seize teachable moments so that students move toward the use of more sophisticated strategies. Students need assistance in solving problems while discussing and responding to what they have just read. The teacher's role in the after phase of the lesson includes any or all of the following (Kane 1995):

- Modeling how to talk about the text
- Inviting personal response
- Returning to the text for one or two teaching opportunities
- Assessing students' understanding of what is read
- Setting up extensions through other activities

The students' role in the after phase of the lesson may include any or all of the following (Kane 1995):

- Talking about the text
- Reacting personally to the text
- Revisiting the text to solve problems
- Rereading the text to partners or independently
- Engaging in extensions through other activities

Follow-up response and extension activities are designed so that students can demonstrate what they have learned in ways that are interesting and useful to them. The first priority is for these activities to provide students ample opportunities to read, write, speak, and listen. A secondary purpose is for these activities to create additional excitement about reading and writing through a variety of modes: discussion, writing, visual arts, performing arts, and multi-media. It is hoped that response and extension activities may actually lead students to additional related readings, thereby providing increased time with texts (Ford and Opitz 2002).

It is also important to address assessment issues after the reading of the text. Often this is conducted by the teacher, but also needs to involve self-evaluation techniques completed by the students.

Some activities used during SGRI may be designed as BDA activities—before, during, and after (Buehl 2001). These are structures that prepare students for the reading, facilitate comprehension while reading, and provide a forum for responding to the reading. For example, some graphic organizers are designed to provide space for

learners to record ideas before they read, keep track of details while they read, and synthesize information after they have read.

How Small-Group Reading Instruction Changes Across the Grades: A Vision for SGRI in the Intermediate Grades

Wright Group LEAD21 acknowledges that SGRI has developmental dimensions that are addressed in lesson adjustments as students move through the grades. Some have suggested that this change is seen in gradually moving from *guided reading* to *guiding readers*; from *guiding directly* to *guiding indirectly* (Fountas and Pinnell 2001; McLaughlin and Allen 2001). Developmental dimensions cover many facets, as discussed in the ensuing section.

As readers change, the purpose for SGRI shifts from demonstrations and intervention toward shared response to texts. We have argued that there are four primary purposes for SGRI: demonstration, intervention, shared response about the same text, and shared response across texts. Clearly, the model of SGRI for primary classrooms focuses heavily on demonstration and intervention. The scaffolded instruction at the heart of SGRI models moves teachers into the role of coaches and defines the nature of the interaction in these small groups. This does not mean that intermediate grade teachers would never use small groups for demonstration or intervention; however, as readers change, the need for a primary grade intervention model of guided reading in the intermediate grade is significantly reduced. Small groups are better used to help intermediate grade readers work collectively to comprehend and respond to and across texts (Fountas and Pinnell 2001).

As readers change, the nature of demonstrations provided to students in SGRI becomes more sophisticated in terms of examples of skills and strategies, literary elements, and procedures. While demonstrations are often not the prime focus of SGRI in the intermediate grades, when they are used, they should focus on building the skills, strategies, elements, and procedures already introduced and learned in the primary grades. SGRI is a time to raise the bar on the level of sophistication by which students are able to understand and respond to text. Demonstrations may also provide students with an increasing set of tools to use with less teacher guidance and support, as well as increase their ability to self-initiate and self-regulate work on an independent basis.

As readers change, the nature of intervention provided to struggling readers in SGRI more actively involves the learner in the scaffolded instruction. We know that in many intermediate grade classrooms, some students still may require a type of scaffolded instruction more typically identified for primary students. Certain techniques like retrospective miscue analysis and repeated reading, however, remind us that when older readers are still dealing with micro features of the text (letters,

sounds, word parts, word recognition, simple sentence structures), teachers need to begin to include students in recognizing oral reading patterns and identify self-regulating behaviors (Moore and Gilles 2005; Oczkus 2003). Another significant shift for intermediate grades is away from scaffolded instruction towards monitoring macro levels of the texts (vocabulary, text structures, comprehension strategies, response techniques). This is done usually through "tracking" response during discussion and using strategic prompts to move students towards more sophisticated levels of understanding and response. The teacher needs to take a "running record" of the conversation students have, analyze that conversation to get a sense of which skills and strategies are being used and which ones still need to be worked on, and then provide strategic interaction to build the bridge between the two points. Teachers must develop think-aloud and prompting language that helps students make connections, generate questions, visualize mental images, make inferences, determine importance, as well as synthesize and monitor during their reading and response.

As readers change, the nature of shared response in SGRI is refocused. Attention to the macro level of the text through response becomes increasingly more important. Response should extend to an increasing variety of texts and genres. Response becomes the vehicle for monitoring which skills and strategies students use in demonstrating their understandings of and extensions from the texts. Teachers should be able to show increasingly more sophisticated ways for students to respond to and extend texts. Response should be multi-modal, involving many literacies including oral language, written language, visual arts, performance arts, and the new technologies.

As readers change, the nature of the independent work away from SGRI changes. A combination of teacher-structured activities for meaningful seatwork and center-based activities and structures for independent work guides additional reading, writing and inquiry; sometimes it may be the same tasks as in SGRI but with more indirect teacher support. Structures for independent work that provide powerful learning opportunities like Writer's Desk, Book Corner, and Inquiry Projects may be the same tasks as in SGRI but with less teacher support and direction.

As readers change, the type of materials used during SGRI expands. While all readers need to be exposed to a variety of texts especially in considering the mix of nonfiction and fiction, intermediate grade readers should be able to handle an ever-expanding variety of texts with more complicated text features in increasingly more sophisticated ways. SGRI texts should be intentionally planned to provide this expanding exposure (Harvey 1998).

Aligning SGRI with Independent Work Structures: What Do the Rest of the Students Do When the Teacher Is Working with a Small Group?

In **Wright Group LEAD21**, SGRI is conceived and designed in conjunction with independent work structures, identified as Study Stations, Independent Practice, Self-Selected Reading, and Inquiry Projects. **LEAD21** believes the power of instruction away from the teacher needs to rival the power of instruction with the teacher during SGRI (Ford and Opitz 2002).

In addition, independent work structures are another critical component in differentiating instruction. Open-ended activities allow the greatest potential for differentiation. Structures may accommodate both heterogeneous and homogenous working groups of students, so that all learners have opportunities to work with peers of various abilities: Study Station work being largely homogeneous while Inquiry Project groupings are largely heterogeneous.

LEAD21 believes the power of instruction away from the teacher needs to rival the power of instruction with the teacher during SGRI (Ford and Opitz 2002).

Four primary structures have been considered as ways of organizing instruction away from the teacher: Study Stations, Independent Practice, Self-Selected Reading, and Inquiry Projects. Study Stations, Independent Practice, and Self-Selected Reading are part of the small-group rotation model. Inquiry Projects are built into Day 5 of the instructional plan.

- Meaningful small-group work at Study Stations may flow naturally out of shared reading activities. This work may be designed so that some groups or individuals will be able to work independently without direct guidance from the teacher,while the teacher works more directly, providing greater support to other groups or individuals (Caldwell and Ford 2002; McLaughlin and Allen 2002). For example, the Writer's Desk Study Station may be used to frame meaningful small-group and individual work away from the teacher. While some students are working more independently through writing assignments, other groups or individuals may be working more directly with the teacher (Cunningham, Hall, and Cunningham 2000).

Ref. RD 11 M 8079

- **LEAD21** has developed a number of classroom structures to provide ongoing independent work that flows from classroom instruction. Teachers are able to use the *Practice Companion* (K–5) and the *Phonics Companion* (K–2), as well as other independent seatwork activities to engage some groups and individuals, while teachers work more directly with other groups or individuals. These activities may also involve completing tasks to prepare for upcoming instruction.
- Self-Selected Reading time has been built into the LEAD21 instructional plan as part of the small-group rotation model to provide students with independent reading opportunities. Teachers may use their classroom libraries or LEAD21 reading materials for this purpose. Teachers may choose to have students work on their writing assignments or Inquiry Projects during Self-Selected Reading time, as well.
- **LEAD21** has developed classroom structures for small-group and independent inquiry as an ongoing alternative for engaging learners away from the teacher—the Inquiry Project. This self-directed and self-regulated inquiry links thematically to key questions guiding each of the units (Winebrenner 2001; Heacox 2002).

Inquiry is at the heart of **LEAD21**. Independent Inquiry Projects, scheduled for Day 5 of each week, are based on a self-directed learning cycle. Inquiry is used as a solid base for all learning within a unit, not as an add-on, or something to do as time permits. Each unit is guided by the Theme Question, posed to frame learning within the unit. Also in **LEAD21**, the inquiry strand is designed to produce life-long learners who know how to go about learning anything they want to know. The projects follow the basic steps, modified for learners' needs from grade to grade, listed below:

- Step One: Generate Ideas and Questions
- Step Two: Make a Conjecture
- Step Three: Make Plans to Collect Information
- Step Four: Organize and Synthesize Information
- Step Five: Confirm or Revise Conjecture
- Step Six: Develop Presentation

In addition to the Inquiry strand, **LEAD21** has developed a Study Station infrastructure to facilitate meaningful small-group work independent of the teacher. These Study Station Flip Chart activities are focused around four key strands: Word World, Grades 3–5,(activities with letters, sounds, word parts, words); Phonics Focus, Grades K–2, (activities with word sort cards, phonics elements cards and games); Writer's Desk, Grades K–5 (writing mechanics and process, spelling, publishing);

Book Corner , Grades 1–5 (directed and independent reading); and Vocabulary Central, Grades K–5 (working with vocabulary and vocabulary strategies). Flip Chart activities for each Study Station are designed to address different learning needs and to provide performance-based assessment evidence with minimal amounts of teacher planning and preparation. These structures lead to outcomes based on the scope and sequence but also have the ability to be modified by the teacher based on the needs of the students. They are intended to go beyond just keeping students busy, to actually providing students with meaningful opportunities to practice their literacy skills, strategies, and behaviors. The Study Stations are accessible (to be completed independently within the students' instructional levels) and purposeful (meaningful enough to be valued by the students). The Study Station Flip Charts offer numerous appropriate activities that students will be able to and want to do independently.

In **LEAD21**, the independent work structures (Study Stations, Independent Practice, Self-Selected Reading time, and Inquiry Projects) are designed with the following guidelines (Kane 1995):

- Teachers are given time to learn about their students before setting up structures. This allows teachers to be better able to adapt, modify, or create structures for independent work for a specific group of students.
- Independent work structures are initially introduced and practiced with the whole class. These structures often work best when they evolve from class routines. A potential flow might be as follows:

    1. Watch the teacher.

    2. Help the teacher.

    3. Student does in group.

    4. Student does with partner.

    5. Student does alone.

- When moving small groups and individuals to independent work structures, the teacher introduces the stations to groups one at a time.
- **LEAD21** creates an emotionally safe environment where students can work together and in small groups. It cannot be assumed that students will know how to work effectively independently. Teachers must teach students the interpersonal skills they need to work together and independently. These include turn-taking strategies, listening strategies, ways to work with partners, ways to respond to each other, ways to disagree with each other, ways to challenge each other, and how to make choices.

- Accountability measures are built into independent structures to foster engagement and provide assessment information. Techniques for daily, weekly, monthly and yearly assessment are integrated. These might include paper trails, performances, self-evaluations, contracts, learning center records, choice menus, reading tickets, center folders, and center boxes.

- Independent work structures may contain both required and optional learning experiences. Choice is inherently motivating for many students, so it is important to consider building choice into these work options.

- Independent work structures take advantage of the physical classroom environment most teachers operate within. Consideration is given to work spaces, storages spaces, display spaces, traffic patterns, and permanent fixtures. Other considerations teachers can incorporate might include creating a print rich environment, creating an inviting classroom library, student involvement (ownership) in arrangement, noisy versus quiet activities, permanent versus portable activities, and permanent versus temporary activities (retiring activities that are not being used or are overused).

- **LEAD21** encourages teachers to reexamine any independent work structures, so they can continually improve them for a greater likelihood of successfully providing meaningful learning opportunities away from the teacher.

Ref. RD 11 M 8079

Conclusion

Richard Allington said that most recent educational research can be boiled down to four words: "Kids Differ. Teachers Matter." He concluded that if that is true, then the key to effective reading instruction is finding a teacher who can effectively address the differences kids bring to that classroom. It begins by providing all students access to the best quality whole-group instruction. Intentional efforts must be made to design whole-group instruction to maintain high levels of student engagement. Large-group activities need to be intensified so that all students are surrounded by teacher-mediated instruction when working with common texts which might be difficult for some. It also includes providing teachers with the ability to handle the challenges of differentiation with SGRI. In order to meet the needs of the different students in any given classroom, the teacher must be flexible and adjust both instruction and materials to fit the student, rather than expect the student to adjust to the curriculum. Instruction always must focus on helping all students move toward proficiency. Grade-level proficiency is the end goal for all students who read below level, and for some students this means that instruction must be designed to accelerate the growth of those students. And advanced readers must be encouraged to continue to progress.

In **Wright Group LEAD21**, SGRI and the aligned independent work structures become the crucial vehicles in assisting classroom teachers for providing differentiated instruction. This aspect of the program allows teachers to selectively use specifically tailored texts and connected activities to effectively meet the varied needs of students. SGRI is planned to allow for varying degrees of teacher support in providing scaffolded instruction to accommodate the varied needs of students. These key aspects of **LEAD21** will help teachers to achieve the goal of meeting the needs of all students and help students become independent, lifelong learners.

Ref. RD 11 M 8079

LEAD21 Differentiation and Acceleration Pedagogy	
Research Says	**LEAD21 Delivers**
The exclusive use of one grouping pattern often leads to problems in the classroom (Caldwell and Ford 2002).	The instructional program provides four levels of grouping on a weekly basis: • Whole-group teaching directed at the entire class • Differentiated small-group instruction for homogenous groups • Independent work structures for homogenous groups • Weekly Inquiry Projects for heterogeneous groupings
All grouping patterns have value because they all offer the reader slightly different experiences with different outcomes (Radencich and McKay 1995).	All students within one classroom move from heterogeneous whole-groups to homogeneous small-groups, and to heterogeneous small-groups within the span of one week.
Groups should be formed and dissolved as the students' needs change (Opitz 1998).	Four Benchmark Weeks are built in to allow teachers to assess placement in the small reading groups.
Small-group instruction should be targeted to better meet the needs of the students in a manner that isn't as possible in large-group settings (Ford and Opitz 2008).	Four reading groups span twenty-seven reading levels across Intensive, Strategic, Benchmark, and Advanced.
Guided Reading has been the central feature of reading instruction (Fountas and Pinnell 1996).	Small-Group Reading Instruction enlarges the concept and renames it to include principles of differentiation.
Only half of teachers surveyed link their reading instruction thematically and two-thirds of the teachers connect their shared and guided-reading experiences (Ford and Opitz 2008).	Whole-class shared reading and small-group reading are linked thematically. The Literature Big Books, Concepts Big Books, and the Theme Reader—for shared reading experiences—are thematically linked to the Differentiated Readers, developed at each of four reading levels for small-group instruction.
In effective schools, over 60 minutes was devoted to small-group work—significantly more time than in moderately or least effective schools (Taylor, Pearson, Clark and Walpole 1999).	The instructional plan includes at least 80 minutes of small-group work each day.
Whole-group instruction is most beneficial in cases in which students need to hear multiple voices responding to the same experience (Caldwell and Ford 2002).	Whole-group instruction is used to introduce themes, develop vocabulary, and share small-group reading experiences. The Differentiated Readers, used in the small groups, extend the whole-group reading themes so that all students continue with the topic at their own instructional level—gaining unique perspectives on the theme. Then, back in the whole-class experience, each member has unique information to share with the class.
In exemplary teachers' classrooms, engagement levels were as high as 90/90; that is, 90% of students on task 90% of the time (Pressley 2006). Intensification of instruction is one way to get more students engaged (Bomer 1998).	Small-group work encompasses not only guided reading principles, but is also the chief means for differentiation. Lesson plans for small-groups are designed for more intense instruction for Intensive- and Strategic-level students.

Ref. RD 11 M 8079

Author Biography

Dr. Michael P. Ford has been actively involved in reading education for the past thirty years. Ford is a former first grade teacher and Title I reading teacher who left his university position to return to teaching first grade in 1997–98. During the 2008–2009 school year, Ford was on sabbatical visiting elementary classrooms in multiple districts to examine how teachers are meeting the daily challenges of small-group reading instruction. Since 1987, he has been responsible for teaching undergraduate and graduate reading education courses at the University of Wisconsin Oshkosh where he also served as Associate Dean for the College of Education and Human Services. Ford has published over fifty articles for journals including *The Reading Teacher, Language Arts, Childhood Education,* and *Learning Disabilities Quarterly*. His most recent publications are the chapter "Guided Reading: Now and Then" for the book *Essential History of Current Reading Practices* (IRA 2008) and the article "A National Survey of Guided Reading Practices: What We Can Learn from Primary Teachers" for the *Journal of Literacy Instruction and Research* both co-written with Michael Opitz. He is the co-author of *Reaching Readers: Flexible and Innovative Strategies for Guided Reading; Where Have All the Bluebirds Gone? How to Soar with Flexible Grouping; Books and Beyond: New Ways to Reach Readers;* and *Do-able Differentiation: Varying Texts, Groups and Support to Reach All Readers*. Ford has consulted with teachers throughout the world including recent international school conferences in Costa Rica, Columbia, Turkey, Holland, Germany, United Arab Emirates, Lebanon, and Bahrain. Most importantly, Dr. Ford is the father of two boys who inform his thinking about literacy programs on a daily basis.

Ref. RD 11 M 8079

References

Au, K. H., and T. E. Raphael, eds. 1998. Curriculum and teaching in a literature-based program. *Literature-based Instruction: Reshaping the Curriculum.* Norwood, MA: Christopher-Gordon Publishers, Inc. 123–148.

Bomer, R. 1998. Transactional heat and light: More explicit literacy learning. *Language Arts.* 76: 11–18.

Buehl, D. 2001. *Classroom Strategies for Interactive Learning.* Newark, DE: International Reading Association, Inc.

Burke, K. 2000. *What to Do with the Kid Who…Developing, Cooperation, Self-Discipline, and Responsibility in the Classroom.* Palatine, IL: Skylight Publishing, Inc.

Caldwell, J. S., and M. P. Ford. 2002. *Where Have All the Bluebirds Gone? How to Soar with Flexible Grouping*. Portsmouth, NH: Heinemann.

Cohen, E. 1986. *Designing Groupwork: Strategies for the Heterogeneous Classroom.* New York: Teachers College.

Cunningham, P., D. P. Hall, and J. W. Cunningham. 2000. *Guided Reading the Four-Blocks Way***.** Greensboro, NC: Carson-Dellosa Publishing Company, Inc.

Ford, M. P. 2005. *Differentiation through Flexible Grouping: Successfully Reaching All Readers.* Naperville, IL: Learning Point Associates.

Ford, M. P., and M. F. Opitz. 2002. Using centers to engage children during guided reading time: Intensifying learning experiences away from the teacher. *The Reading Teacher.* 55.8: 710–717.

————. 2008. A national survey of guided reading practices: What we can learn from primary teachers. *Literacy Research and Instruction*. 47.4: 209–331.

Forsten C., J. Grant, and B. Hollas. 2002. *Differentiated Instruction: Different Strategies for Different Learners.* Peterborough, NH: Crystal Springs Book.

Fountas, I. C., and G. S. Pinnell. 1996. *Guided Reading: Good First Teaching for All Children***.** Portsmouth, NH: Heinemann.

————. 2001. *Guiding Readers and Writers, Grades 3–6: Teaching Comprehension, Genre, and Content Literacy*. Portsmouth, NH: Heinemann.

Gregory, G. H., and C. Chapman. 2007. *Differentiated Instruction Strategies: One Size Doesn't Fit All.* Thousand Oaks, CA: Corwin Press.Harvey, S. 1998. *Nonfiction Matters: Reading, Writing, and Research in Grades 3–8.* Portland, ME: Stenhouse Publishers.

Heacox, D. 2002. *Differentiating Instruction in the Regular Classroom: How to Reach and Teach All Learners, Grades 3–12.* Minneapolis, MN: Free Spirit Publishing, Inc.

Hollas, B. 2005. *Differentiating Instruction in a Whole-Group Setting.* Peterborough, NH: Crystal Springs Books.

Kane, K. 1995. *Keeping Your Balance: Teacher's Guide for Guided Reading in the Early Grades.* Danbury, CT: Grolier Classroom Publishing.

McLaughlin, M., and M. B. Allen. 2002. *Guided Comprehension: A Teaching Model for Grades 3–8.* Newark, DE: International Reading Association.

Mooney, M. E. 1990. *Reading To, With and By Children.* Katonah, NY: R. C. Owens.

Moore, R. A., and C. Gilles. 2005. *Reading Conversations: Retrospective Miscue Analysis with Struggling Readers Grades 4–12.* Portsmouth, NH: Heinemann.

Nagel, G. K. 2001. *Effective Grouping for Literacy Instruction.* Columbus, OH: Allyn & Bacon.

Oczkus, L. D. 2003. *Reciprocal Teaching at Work: Strategies for Improving Reading Comprehension*. Newark, DE: International Reading Association.

Opitz, M. F. 1999. *Flexible Grouping in Reading: Practical Ways to Help All Students Become Better Readers.* New York: Teaching Resources.

Opitz, M. F., and M. P. Ford. 2001. *Reaching Readers: Flexible and Innovative Strategies for Guided Reading.* Portsmouth, NH: Heinemann.

————. 2008. *Do-able Differentiation: Varying Groups, Texts, and Supports to Reach Readers.* Portsmouth, NH: Heinemann.

Opitz, M. F., and T. Rasinski. 1998. *Goodbye, Round Robin: 25 Effective Oral Reading Strategies.* Portsmouth, NH: Heinemann.

Pavelka, P., L. Schenking, and J. Geida. 2005. *Differentiated Assignments.* Peterborough, NH: Crystal Springs Books.

Pearson, P. D., and M. C. Gallagher. 1983. The instruction of reading comprehension. *Contemporary Educational Psychology*. 8.3: 317–344.

Pressley, M. 2006. *Reading Instruction that Works: The Case for Balanced Teaching*, 3rd ed. New York: The Guilford Press.

Radencich, C. and L. J. McKay, eds. 1995. *Flexible Grouping for Literacy in Elementary Grades.* Columbus, OH: Allyn & Bacon.

Taylor, B. M., P. D. Pearson, K. F. Clark, and S. Walpole. 1999. Effective schools/ accomplished teachers. *The Reading Teacher.* 53.2: 156–159.

Tilton, L. 2003. *The Teacher's Toolbox for Differentiating Instruction: 700 Strategies, Tips, Tools and Techniques.* Shorewood, MN: Covington Cove Publications.

Tomlinson, C. A. 1999. *The Differentiated Classroom: Responding to the Needs of All Learners.* Alexandria, VA: Association for Supervision and Curriculum Development.

Tyner, B. and S. E. Green. 2004. *Small-Group Reading Instruction: Differentiated Teaching Model for Intermediate Readers, Grades 3–8.* Newark, DE: International Reading Association.

Winebrenner, S. 2001. *Teaching Gifted Kids in the Regular Classroom*. Minneapolis, MN: Free Spirit Publishing, Inc.

Wilhelm, J. D. 2001. *Improving Comprehension through Think Aloud Strategies: Modeling What Good Readers Do.* New York: Scholastic.

Ref. RD 11 M 8079

WRIGHT GROUP

LEAD21

LITERACY EQUITY ACCELERATION DIFFERENTIATION

Reading, the Digital Classroom, and LEAD21

Program Research Base

Mc Graw Hill Wright Group

Mc Graw Hill Wright Group

Contents

Executive Summary 1
Understanding Reading Comprehension in the 21st Century 2
What is offline reading comprehension? 2
How have new technologies shaped reading comprehension? 3
What is online reading comprehension? 3
Using Information and Communication Technologies (ICT) to Support Literacy Instruction in LEAD21 4
Computer-assisted instruction 4
Open-ended tool applications 5
Digitally supported reading environments 6
Online information technologies 7
Social networking and other Web 2.0 communication technologies 8
Models of Effective Literacy Instruction with ICT in LEAD21 9
Underlying practices for selecting new technologies 9
Classroom models for using new technologies in LEAD21 10
Electronic Book Activities 11
Electronic pre-reading activities 12
Electronic guided-reading activities 12
Electronic games and practice activities 14
Electronic writing and creative response activities 15
Inquiry Projects 16
Web Talk and Response 18
Conclusion 20
LEAD21 Reading and the Digital Classroom Instructional Pedagogy 21
Author Biography 22
References 23

Ref. RD 11 M 8080

Reading, the Digital Classroom, and LEAD21

Executive Summary

There is little doubt that the Internet is rapidly changing the way we think about literacy and learning in today's classrooms. A quick glance through recent publications in Time Magazine (Wallis 2006), the New York Times (Rich 2008), and PBS's Frontline (Frontline 2008), in addition to emerging collections of theory and research related to digital literacies (Coiro, Knobel, Lankshear, and Leu 2008; McKenna, Reinking, Labbo and Keiffer 2006) provides a myriad of evidence that emerging Internet technologies are not only transforming learning and teaching, they are also changing the very nature of childhood, school, and work experiences for today's learners.

In fact, the definition of literacy itself has "expanded from traditional notions of reading and writing to include the ability to learn, comprehend, and interact with technology in a meaningful way" (Selfe, cited in Pianfetti 2001). Digital texts (particularly those on the Internet) present students and teachers with new opportunities and new challenges—some that provide motivating ways to practice traditional reading skills; others that ask readers to extend their use of traditional comprehension skills to new contexts for learning; and still others that demand fundamentally different sets of literacy skills and strategies not currently covered in most reading and language arts curriculums (Coiro 2003). Given the rapidly changing nature of texts, reading, and learning tasks, it is not surprising that these changes have important implications for understanding effective literacy instruction, assessment, and professional development.

Wright Group **LEAD21** is committed to helping classroom teachers and curriculum designers respond to the broadening view of reading comprehension in the context of a digital age. **LEAD21** integrates opportunities for teachers and students to engage in comprehension and response activities using tools that cut across five categories of information and communication technologies (ICT): (1) computer-assisted instruction; (2) open-ended tool applications; (3) digitally supported reading environments; (4) online information technologies; and (5) social networking and other Web 2.0 communication technologies.

Furthermore, **LEAD21** has aligned specific components of the reading and writing curriculum to emerging classroom instructional models to guide teachers in seamlessly incorporating information and communication technologies (ICT) into a wide range of electronic book activities, age-appropriate online inquiry projects, and opportunities for interactive web talk and response. These activities are designed to be available within a safe online interface to foster the literacy development of elementary-aged students, at school and at home with their families. Supporting students' and teachers' understanding of key literacy concepts and their relationship to emerging technologies is a centrally important piece of the rapidly changing puzzle known as effective literacy instruction for 21st century learners.

Understanding Reading Comprehension in the 21st Century

A complete picture of reading comprehension in the 21st century incorporates the skills, strategies, dispositions, and practices required to comprehend and use a wide range of print, non-print, and digital texts for multiple purposes and with multiple audiences. Effective literacy instruction in a digital age considers how best to integrate instructional practices that develop students' offline reading comprehension ability and online reading comprehension ability.

Effective literacy instruction in a digital age considers how best to integrate instructional practices that develop students' offline reading comprehension ability and online reading comprehension ability.

What is offline reading comprehension?

A balanced and comprehensive literacy curriculum provides an evidence-based framework for integrating the essential components of offline literacy instruction in ways that help learners actively construct meaning through reading, writing, viewing, listening, speaking, and representing (Pearson and Raphael 1999; Pearson, Raphael, Benson, and Madda 2007). Comprehension is, in many respects, the central component of a literacy curriculum: it is the reason why we read. Offline reading comprehension can be defined as the skills, strategies, dispositions, and practices required to actively decode and construct meaning from the many text forms found offline, or not in electronic, networked environments. The RAND Reading Study Group (RRSG 2002) defined reading comprehension, as "the process of simultaneously extracting and constructing meaning through interaction and involvement with written language." According to the RAND group, reader characteristics include "all the capacities, abilities, knowledge, and experiences that a person brings to the act of reading." As described in **LEAD21**'s WhitePaper "Reading Comprehension: Program Research Base," offline reading comprehension involves reading strategies such as predicting, determining important information, summarizing, inferencing, visualizing, asking and answering questions, monitoring, and making connections (Raphael 2009). Other key components of offline reading comprehension ability include oral and written language (Roth, Speech, and Cooper 2002; Snow, Burns, and Griffin 1998; Tierney and Pearson 1983) and affective variables such as engagement, attitudes, motivations, and beliefs about reading books and other offline/printed materials (Guthrie, Wigfield, and Perencevich 2004; Malloy and Gambrell 2008).

How have new technologies shaped reading comprehension?

In its 2009 literacy and technology position statement, the International Reading Association (IRA) suggested that "traditional definitions of reading, writing, and viewing, and traditional definitions of best-practice instruction—derived from a long tradition of book and other print media—will be insufficient." The Rand Reading Study Group (2002) reported, "we live in a society that is experiencing an explosion of alternative texts" and that "electronic texts that incorporate hyperlinks and hypermedia introduce some complications in defining comprehension because they require skills and abilities beyond those required for the comprehension of conventional, linear print." More recently, the National Council of Teachers of English (NCTE 2008) recognized in their 21st century literacies policy brief that, "global economies, new technologies, and exponential growth in information are transforming our society" in ways that prompt "new literacies that are central to individual and community success." Clearly, reading and language arts communities recognize that texts and literacies have rapidly changed, and will continue to change, as new technologies emerge. Consequently, to prepare our students for success in school and society, we must expand the traditional understanding of reading comprehension to encompass new literacies.

While there are many perspectives associated with the terms "digital literacies" or "new literacies," the most recent review of this work concludes that all share a set of common assumptions: (a) new skills, strategies, dispositions, and social practices are required of readers and writers by new technologies for information and communication; (b) these new literacies are central to full participation in a global community; (c) new literacies regularly change as their defining technologies change; and (d) new literacies are multifaceted and benefit from analysis from multiple points of view (Lankshear and Knobel 2003; Gee 2003; Street 1999; Coiro, Knobel, Lankshear, and Leu 2008).

What is online reading comprehension?

Within the broader context of new literacies theory, online reading comprehension can be generally defined as the skills, strategies, dispositions, and practices required to actively decode and construct meaning from the many text forms found *online* (on the Internet). This perspective means that we should think of online reading comprehension as a problem-based inquiry process involving additional skills, strategies, and dispositions in order to ask important questions and then locate, critically evaluate, synthesize, and communicate answers to those questions with *online* information and communication technologies (Leu, Kinzer, Coiro, and Cammack 2004).

Within the broader context of new literacies theory, online reading comprehension can be generally defined as the skills, strategies, dispositions, and practices required to actively decode and construct meaning from the many text forms found *online* (on the Internet).

Recent work in this area indicates that traditional, offline reading comprehension skills are necessary, but not sufficient, to read and learn from information on the Internet (Coiro 2007). For example, in addition to knowledge of vocabulary and informational text structures—which are part of offline comprehension—skilled online readers must efficiently use search engines, navigate multilayered website structures, and monitor their relative location in an unbound, three-dimensional online space (Coiro and Dobler 2007). Moreover, for some tasks, online reading performance is not at all correlated with performance on a standardized test of offline reading comprehension (Leu, Castek, Hartman, Coiro, Henry, Kulikowich, and Lyver 2005; Leu, Zawilinski, Castek, Banerjee, Housand, et al. 2008). In fact, there are instances of *high* achieving offline readers who are *low* achieving online readers, and likewise, *low* achieving offline readers who read with *high* comprehension when reading online. In other words, a student's offline reading comprehension may, but does not necessarily, predict how well he or she will read and comprehend information encountered on the Internet.

Using Information and Communication Technologies (ICT) to Support Literacy Instruction in LEAD21

Information and communication technologies (ICT) is an umbrella term encompassing all technologies for viewing, manipulating, and communicating information. As we explore how best to prepare strong readers for the 21st century, classroom teachers, curriculum designers, school administrators, and policy makers must begin now to consider the roles of ICT in instruction for offline and online reading.

LEAD21 includes opportunities for teachers and students to use digital tools associated with five categories of technologies that have especially rich potential for enhancing classroom literacy instruction: (1) computer-assisted instruction; (2) open-ended tool applications; (3) digitally supported reading environments; (4) online information technologies; and (5) social networking and other Web 2.0 communication technologies. Each type of technology is used to address a particular set of literacy objectives.

- **Computer-assisted instruction** uses a computer to assist in the instructional process. It is typically provided in an electronic interface (computer-based instruction) and offers practice and reinforcement activities for skills previously introduced by the teacher. In the literacy curriculum, computer-assisted instruction might be used to practice letter identification, apply early phonics and decoding skills, sort vocabulary words to meet different criteria, or apply word study skills (Barker and Torgeson 1995; deJong and Bus 2002; Labbo and Reinking 1999; McKenna 1998). Often, computer-assisted skills practice is delivered within a series of interactive games and activities. Typically, skills in these environments are taught sequentially and, often, the computer electronically tracks student work and provides teachers with summary reports for each student.

  In **LEAD21**, a series of ePractice Games Activities and Games guides teachers in integrating computer-assisted instruction for phonics, vocabulary, and word study into digital lessons that align with each themed unit. Computer-assisted **ePractice Vocabulary Activities** for students in grades K–5 incorporate both theme and differentiated vocabulary to encourage students to revisit LEAD21 vocabulary skills and strategies introduced each week. These activities give students additional opportunities to interact with vocabulary words in a variety of engaging environments and contexts. Students receive both positive and corrective feedback as well as the opportunity to retry any missed items. In addition, engaging **ePractice Games** model contemporary online game play by incorporating motivating elements such as scoring, reward animations, and levels that progressively increase in complexity. Students are required to achieve a prescribed level of mastery before advancing to subsequent game levels. These games encompass phonics concepts at the K–2 level and word study concepts for students in Grades 3–5.

- **Open-ended tool applications** help students and teachers process, manipulate, organize, and communicate information they encounter at school and at home. These applications include word processors, newsletter programs, spreadsheets, databases, electronic graphic organizers, audio/video editors, and presentation programs. In an elementary school literacy classroom, open-ended tools provide opportunities for students to use computers for drawing, stamping, organizing data, recording, adding images, making slide shows, and revising their work before, during, and after reading experiences (Labbo, Love, Prior, Hubbard, and Ryan 2006; Zucker and Invernizzi 2008). Often, younger students are encouraged to work with a partner or small group while using these open-ended computer tools in order to encourage conversation, creativity, and collaboration. One example of a free, online, open-ended tool that may enrich reading instruction is Create a Graph at http://nces.ed.gov/nceskids/createagraph/, which enables students and teachers to work together to generate visual representations of information they have read.

  LEAD21 makes use of open-ended tool applications as part of the digital literacy experience. **The eTools21** application features two components in this category. The **Writing Tool**, designed for students in grades K–5, offers opportunities to practice the writing process in an online format. Simple text entry and posting options reflect the tool's ease of use and make it possible for the entire class to view each other's writing. **Story Starter** provides an interactive writing space where teachers use program-provided story starters—or they create their own—and then invite students to post threads to the starter as well as to each others' threads. This is similar to the "choose your own adventure" style stories. For each of these open-ended tool applications, teachers have the ability to monitor and delete students' postings. This format of online discussion introduces elementary students to the practice of participating in online discussion from within a safe, networked environment.

The **LEAD21** electronic books contain two additional open-ended tool applications, the first being a set of **electronic resource masters** in a pop-up database. This feature enables teachers to access a series of graphic organizer templates in PDF format that can be displayed and used on an interactive whiteboard. Also included is a Text Tool, which is a point-of-use, or "teachable moment" tool. While displaying a reading selection on an interactive whiteboard, teachers can use the **Text Tool** to grab a section of text from the page, enlarge it, and use highlight or underline features to support the ideas in the lesson or relate the text to another current subject or Language Arts concept.

- **Digitally supported reading environments** are electronic texts that have been intelligently transformed to increase access, support comprehension, and extend meaningful content-area learning. Well-designed digitally supported reading environments scaffold students' literacy learning with multiple means of representation, multiple means of expression, and multiple means of engaging with text (Meyer and Rose 1998).

  LEAD21 uses a wide range of digital reading supports to scaffold and enrich the literacy experience. First, all students readers in the LEAD21 print program have been reproduced digitally as electronic books, or **eBooks**. This includes the Concepts Big Books and Literature Big Books (Grades K–2), Theme Readers (Grades 3–5), and Differentiated Readers (Grades K–5). For each eBook, the content has been augmented to include a range of digital reading supports for students: (a) full-text audio; (b) a pop-up glossary of terms at point of use; (c) electronic Preview lessons; (d) electronic Online Coach lessons for comprehension support; and (e) Virtual Field Trip background-building videos. Each of these features is discussed in detail in the Electronic Book Activities section in the second half of this paper. The one-to-one print-to-digital offering of student readers ensures that students have access to digital reading supports in every unit of the program.

  Additional digital-reading supports are integrated into the **eTools21 Interactive Glossary**. The glossary This master glossary, which is a unique component that is accessed separately from the eBook glossaries, contains all of the vocabulary words and definitions for each grade-level unit. Students and teachers can augment the glossary entries by adding or uploading their own examples and images.

- **Online information technologies** constitute a rapidly growing collection of informational websites and resources available on the Internet for both children and adults. Online information technologies include search engines, informational websites, online databases, interactive simulations, geographic visualizations (Google Earth or Google Sky) and the like. On the one hand, online information technologies offer students opportunities to choose their own texts or explore information in a range of nonlinear, interactive, multi-modal formats (see, for example, NASA Kids' Club at http://www.nasa.gov/audience/forkids/kidsclub/flash/index.html or America's Story from the Library of Congress http://www.americaslibrary.gov/). These online texts (and the technologies that host them) can be used as part of the literacy curriculum to build background knowledge and content-area learning while also encouraging inquiry, problem solving, writing, and critical reading (Castek and Bevans 2006; Coiro 2003; Kara-Soteriou, Zawilinksi, and Henry 2007).

  However, online information technologies also present a series of challenges that require new approaches to reading comprehension as part of students' inquiry process (Coiro 2005). As mentioned earlier, traditional, offline reading comprehension skills are necessary to understand these sites and resources, but they are not sufficient for the comprehension necessary to locate the most useful and reliable information on such sites (Coiro 2007; Coiro and Dobler 2007; Leu et al. 2005). To be able to read these 21st century resources adequately, students need explicit and age-appropriate instruction in how to use the Internet to effectively question, locate, critically evaluate, and synthesize disparate sources of information hosted by online information technologies.

  LEAD21 integrates explicit instruction and age-appropriate opportunities to practice online reading and inquiry skills into a key component of the program called **Inquiry Projects**. Inquiry Projects feature web-based inquiry guides that accompany each unit beginning in the second half of first grade and going through the end of fifth grade. The online guides provide a webquest-style Internet walk-through that displays inquiry content in an easy-to-use, click-through format and scaffolds learners with explicit and age-appropriate support. Links to appropriate outside websites are provided for further research, while teachers are given the option of turning off these links if desired. Each unit's Inquiry project also provides brief tutorials on one or more 21st century skills, such as evaluating Internet sources, Internet safety, and collaborating within inquiry groups.

- **Social networking and other Web 2.0 communication technologies** encompass ways to communicate, exchange, and collaboratively create information with others connected through online networks at a local, national, international, or even global level. Many Web 2.0 tools can be tagged as communication technologies. Email, instant messaging, blogs, podcasts, wikis, nings, videos, document sharing, and web video conferencing are all ways to communicate and exchange information with the Internet. Social networking sites like FaceBook, Flickr, Del.icio.us, and Ning serve as communication tools too, especially among teens who increasingly "embrace the conversational nature of interactive online media" (Lenhart and Madden 2007). Social networking on the Internet involves grouping individuals into online communities with others who share a common interest or seek a common goal. The 2008 Horizon Report (a research effort to identify emerging technologies

likely to have a large impact on teaching, learning, and creative expression) indicates that video sharing and virtual collaboration webs continue to grow "at some of the most prodigious rates on the Internet" (New Media Consortium 2008). For many, the Internet has become the "third place" (the first and second places being home and work) where people connect with others, build a sense of community, and express themselves as a unique member of their community (The New Media Consortium 2007). It makes sense then, that elementary-aged students should have access to age-appropriate uses of social networking technologies and online experiences that scaffold participation in their school and home literacy communities.

To that end, **LEAD21** integrates several social networking technologies into its literacy program. Together, these components are called **eTools21**. First, each student is assigned his or her own **Student Homepage**, which is a fun, engaging interface, set up similarly to a social networking site. Students may choose their own avatar (digital image of themselves) from a predefined list if they wish. From the Home Page, students can link to all of LEAD21's electronic materials for the current unit or across the year (including eBooks, games, activities, and inquiry projects, as well as the suite of eTools21 applications.)

The first component of eTools21 is the **Interactive Glossary**. In addition to offering digital scaffolds with which students can communicate their ideas in multiple representations (images, definitions, or interpretations), the Interactive Glossary provides a networked forum in which students are invited to make personal connections to key concepts in the curriculum and to publicly share them with classmates and teachers. **eTools21** also includes a networked **Theme Wall** to post and exchange ideas about a unit's theme. Teachers can use the wall to pose questions on unit-specific themes, concepts, people, and places to which students can publicly respond with their own reflections and images to create a group library. Teachers have the ability to edit or delete comments as needed, and the Theme Wall is available to students at school, in the public library, or at home. As mentioned earlier, eTools21 also includes the **Story Starter** and **Writing Tool** features (described in the sections above) to round out students' online reading and response experiences. Together, these social networking and communication technologies support teachers in their efforts to harness the power of collective intelligence in ways that enrich learning and information exchange in the literacy classroom.

Models of Effective Literacy Instruction with ICT in LEAD21

Underlying practices for selecting new technologies

When selected carefully to fulfill logical, authentic, and significant educational goals, technologies for literacy and learning have considerable potential. It is not easy to articulate a flexible set of criteria that can serve to guide the selection and use of new information and communication technologies in the literacy curriculum; however, the starting point should always be the unique literacy learning needs and instructional goals for a particular group of students rather than the technology itself and its potential for education. A review of the research literature on this topic identified three promising practices for considering which technologies might be most useful for achieving particular learning goals (Coiro, Karchmer-Klein, and Walpole 2005).

First, the decision for using certain technologies as part of reading instruction should be grounded in authentic and purposeful literacy activities rather than by technology type or function. For instance, rather than identifying which technology function a certain resource addresses—skill reinforcement, simulation, blog, or interactive video—the selection of instructional supports should be guided by understanding which technologies provide important practice with decoding, vocabulary, fluency, or comprehension skills and which promote activities more holistically related to real-world reading and writing experiences.

First, the decision for using certain technologies as part of reading instruction should be grounded in authentic and purposeful literacy activities rather than by technology type or function.

Second, personal dimensions of both students and teachers play an important role in deciding which technologies might be matched most suitably to the overall climate of the larger classroom community. A careful focus on a student's particular learning needs is crucial for supporting literacy development with technology (Bader 2000). In addition, technology selection should consider the mode of instructional delivery (Hickey 1995); student reading level (Leu and Kinzer 2003); and the format of instruction and learning feedback (Bader 2000).

Third, particularly when selecting online information resources to use as part of literacy instruction, it is important to consider the impact of multi-modal and multicultural experiences that require a more global and critical stance. In elementary school, teachers should model for students a healthy dose of informed skepticism about printed *and* Internet texts, while helping students to understand who created the information, what their point of view might be, and for what type of audience the resource was designed (Coiro 2005; Lankshear and Snyder 2000).

Clearly, integrating new information and communication technologies into literacy instruction is a complex task, necessitating thoughtful, insightful, and knowledgeable teachers. The Wright Group **LEAD21** program supports teachers in their efforts to select and use new and emerging technologies in ways that build on the underlying practices outlined above. It aligns technologies with appropriate types of literacy

activities, matches tools to age-appropriate learning needs and individual learning styles, and integrates critical evaluation activities into Inquiry Project lessons.

Classroom models for using new technologies in LEAD21

Now that we have examined five categories of ICT use for supporting literacy and the principles underlying how those technologies are selected, let us examine three instructional models supported by **LEAD21** digital technologies that are especially promising for helping teachers design engaging literacy lessons:

1. **Electronic Book Activities:** digital books and activities that are housed within a self-contained digital environment, which may be either a CD-ROM or a controlled, password-protected online site. They include pre-reading, guided reading, reading games, and writing and creative response.
2. **Inquiry Projects:** a highly scaffolded instructional framework that guides students through each step of online Inquiry with carefully designed prompts, annotated links to resources, a series of cooperative learning tasks, and opportunities to share their findings with others.
3. **Web Talk and Response:** themed discussions or creative response activities in which students collaboratively compose and critique each other's work using online communication technologies such as blogs, wikis, social networking sites, or podcasts.

1. Electronic Book Activities

An electronic book activity (Coiro 2003b) is designed to make use of the range of technologies in a self-contained digital environment to provide opportunities for students to practice reading skills, and apply their skills in new contexts, before, during, and after reading instruction. The literacy learning opportunities in electronic book activities are endless, but they all typically seek to foster aspects of offline reading comprehension (decoding skills, fluency, content vocabulary, comprehension of printed texts). The technologies used most often in an electronic book activity include computer-assisted instruction, open-ended tool applications, and digitally supported reading environments. Given the different levels and types of supports that may be provided with these technologies, electronic book activities are well suited to meet the needs, interests, and ability levels of each individual learner. To be most effective, computer activities are linked to children's books in meaningful ways that extend and enrich authentic reading and writing experiences (Labbo, Love, Prior, Hubbard, and Ryan 2006).

It is easiest to think of an electronic book activity as a type of classroom-center activity designed to focus on a specific literacy learning purpose. For example, electronic-book activities provide varied methods for presenting text (imagery, animation, digital speech, with or without music. Most importantly, new ICTs offer options to easily tailor literacy-center activities to address an individual reader's needs, preferences, and skill levels by

pairing adjustable challenges and supports with timely and appropriate feedback (Meyer and Rose 1998).

Four research-based electronic book activities that can foster literacy as part of a learning center include: a) electronic pre-reading activities; b) electronic guided-reading activities; c) electronic games and practice activities; d) electronic writing and response activities.

a. **Electronic pre-reading activities** typically use images and video (or audio) to hook and actively engage students with important ideas introduced in a book. These visual texts are displayed on a computer and projected onto a large screen or electronic whiteboard to provide a large and common focus for students. Teachers engage students in discussion about the images to activate prior knowledge and establish a purpose for reading—without potential decoding difficulties standing in the way. Research suggests that pictorial introductions as a pre-reading activity can facilitate high-level inferences that help readers link disparate ideas found in the text. Anstey and Freebody (1987), for example, found that fifth graders favored pictures as a pre-reading activity, compared to groups of students asked to answer a set of comprehension questions, or to free-associate with the passage's title, or to complete an unrelated control task. In addition, the students given pictorial introductions performed best among the four groups on a measure of comprehension. Sharing and discussing visual images prior to reading is effective among English language learners as well (Kennedy and Canny 2002).

   LEAD21 provides two levels of pre-reading activities that gather together images both from within the reading and from outside sources. First, **Virtual Field Trip** videos are short, image-rich videos that introduce the main concepts associate with each unit's theme and link them to key vocabulary words. The videos launch from the Student Home page or concept selection eBook pages and can be projected on an electronic whiteboard. Also, electronic **Preview** activities launch from the title page of each selection. Each Preview walks the student through a number of key pages from the selection, focusing on images and/or headings that may contain clues about the text. The voice of a virtual teacher talks students through the Preview and prompts them to use their pre-reading skills, such as making connections, predicting, and setting a purpose for reading. After viewing the Virtual Field Trip and clicking through the Preview, students can share their connections with certain images and with their own experiences, and discuss their predictions about the text.

b. **Electronic guided-reading activities** offer students opportunities to read electronic books or eBooks, with audio and interactive supports that guide them through their reading experience. Generally, these texts are housed within closed, interactive systems. In the past, the delivery method for these systems was often

CD-ROM; however, more and more digital reading programs are being delivered via password-protected online sites, as is the case with LEAD21. These controlled online environments allow students to practice accessing texts and interacting with classmates in a self-contained space. Teachers may track students' use of activities and monitor what students choose to post.

eBooks provide an assortment of multi-sensory features such as audio support, animations, and video clips, which are not found in the traditional texts (Pearman 2008). These allow young students to follow along with synchronized highlighting as words, sentences, and/or entire passages are read aloud. Readers might also click on difficult words to get their pronunciation, definition, and/or a visual representation. This text-to-speech technology models appropriate fluency and reduces the decoding demands of many challenging texts, allowing students to focus their attention on meaning construction and response (Dalton and Strangeman 2006). eBook systems may also provide embedded supports that target metacognitive reading strategies, and vocabulary development (Proctor, Dalton, and Grisham 2007). By considering the range of features available within the **LEAD21 eBooks**, teachers can support the many learning styles of students and accommodate a variety of needs.

The LEAD21 eBooks include **full audio recordings** of each text. Students can click on the text or an icon to hear the text read aloud. As the audio plays, the text is highlighted sentence-by-sentence so that students can read along. Students can also access point-of-use vocabulary support through the **pop-up glossary** feature. Throughout the text, when highlighted vocabulary terms are clicked on, a window pops up displaying the term, its definition, and a sample sentence. Students can click on an icon to hear the entry read aloud. In addition to the program's tested vocabulary terms, the electronic pop-up glossaries also include an equal number of extension vocabulary terms for additional help with comprehension.

The **Online Coach** is another unique reading support included in LEAD21 eBooks. When students activate the Online Coach, the voice of a virtual teacher coaches them in reading skill and strategy application and illuminates key concepts in the text. The virtual teacher's voice is synchronized with coordinated graphic prompts that direct students' attention to relevant elements on the page. Students can access the Online Coach to reinforce their classroom teacher's reading lessons, receive help comprehending a challenging passage, or go deeper in their reading of the text. The Online Coach, along with the full-text audio and pop-up glossary features, can be used to create effective, engaging guided reading activities.

To set up electronic guided-reading activities for LEAD21, teachers should first become familiar with the features and supports embedded in the LEAD21 eBooks,

and understand how these supports address an individual's reading needs. Teachers then set instructional goals based on their knowledge of the learner. For example, children needing comprehension support may benefit from being asked to first read a text passage on their own while trying to answer the Stop and Think and Strategy Tool Kit questions, and then reading the same text with the help of the Online Coach.

Other children needing to increase their vocabulary might be tasked with focusing on new words in the eBook during their guided reading activity. They would first use visualization strategies and context clues to predict the words' meaning, and then verify or adjust their predictions by exploring the pop-up vocabulary supports offered for a particular word. And most children can benefit from exposure to many different forms of text that vary in reading level and challenge their reading development with embedded comprehension strategy prompts and model think-alouds. All children should have opportunities to interact with a range of eBook selections above and below their estimated reading level, while listening to expert models. The four differentiated reading levels in the Differentiated Reader eBooks, along with the embedded Stop and Think and Strategy Tool Kit features, give students just this sort of exposure. The full-text audio feature, vocabulary support at point of use, and the Online Coach allow students to access texts at reading levels above and below their tested levels.

By considering the range of features now available within electronic storybooks, teachers can support the many learning styles of students and accommodate a variety of needs.

When eBook guided-reading activities are offered in conjunction with comprehensive reading instruction in the classroom, "these supports and features amplify the strategies that students are using in their own learning" (Learning Media 2007). Research indicates that the effective use of electronic books as a reinforcement to systematic decoding instruction provides immediate decoding feedback to students (deJong and Bus 2002; Labbo and Kuhn 1998); increases emergent literacy skills and comprehension in kindergartners from low and middle SES backgrounds (Korat and Shamir 2008); fosters vocabulary gains among English language learners (Proctor, Dalton, and Grisham 2007); and helps improve students' comprehension and motivation (Doty, Popplewell and Byers 2001; Grant 2004; Pearman 2008).

c. **Electronic games and practice activities** are those that embed reading practice and reinforcement opportunities into a game or simulation-type interface. These activities often focus on early reading skills such as phonological awareness and

word recognition. Studies show that computer game-like activities designed to engage students in various phonological awareness tasks (rhyming, counting numbers of phonemes in isolated words, and pairing words based on similar initial, medial, or ending sounds) increased students' ability to segment, blend, and recognize words among at-risk kindergarten and first graders (Barker, and Torgeson 1995; Foster, Erickson, Foster, Brinkman, and Torgeson 1994). Other researchers found that students' fluency increased, and the number of reading miscues decreased with the use of a computer with digitized speech (Reitsma 1998). In LEAD21, Word Study Games (Grades 3–5) or Phonics Games (Grades K–2) accompany each unit of instruction. Differentiated Vocabulary Activities accompany each week of instruction and are differentiated for each of the four reading levels (Intensive, Strategic, Benchmark, Advanced).

While a more detailed explanation of how computer games and practice activities might foster literacy learning is outside the scope of this paper, a systematic review of 191 studies conducted between 1980 and 2002, with both typical and special populations, concluded that many different computer games and activities appear to contain the potential for supporting reading and writing development among elementary-aged children (Coiro, Leu, Kinzer, Labbo, Teale, Bergman, et al. 2003). However, this review also concluded that the potential for any electronic game-like environments to support the development of early literacy skills may only be realized when teachers make appropriate decisions about how the technology is used.

d. **Electronic writing and creative response activities** provide unique opportunities for students to explore new technologies that "allow them to draw, paint, write, listen, view, compose, and craft their ideas on a malleable computer screen through multimedia symbols systems and interactive tools" (Labbo et al, 2006, p. 9).

   The use of interactive whiteboards to foster literacy learning falls into this category. An interactive whiteboard is a touch-sensitive screen that works in conjunction with a computer and a projector. Learning activities with an interactive whiteboard might include manipulating text and images, taking notes in digital ink, viewing websites as a group, interacting with electronic lesson activities with templates and images, showing or writing notes over educational video clips, or showcasing student presentations (SMART Technologies Inc. 2004). LEAD21 has been designed so that all program features and components are interactive whiteboard compatible.

   A review of classroom case studies and research from the United States, United Kingdom, and Australia provides evidence that "the use of interactive whiteboards for learning demonstrated positive effects on student engagement and motivation as well as students' ability to review and retain information presented in class. In addition to student learning, observations also indicate that designing lessons around interactive whiteboards can help educators streamline their preparations and be more efficient in their ICT integration" (SMART Technologies Inc. 2004). A study conducted by independent literacy researchers from the University of Minnesota and the British Educational Communications and Technology Agency [BECTA] for ICT Research (2003) reported similar findings: While the digital whiteboard did not result in a significant improvement over traditional skill instruction, it helped teachers prepare and organize instruction while providing engaging ways to scaffold, model, and guide primary-level students through their literacy lessons (Solvie 2004). These preliminary findings suggest more research should now focus on instructional practices that may increase the learning potential of using interactive whiteboards to facilitate literacy learning in elementary school classrooms.

2. Inquiry Projects

Internet Inquiry may be a useful means to develop independent research skills and allow students to pursue a question that holds a special interest for them. Internet Inquiry may be conducted by small groups or individuals. Inquiry units usually begin with students identifying a topic and a question that they find personally important. After students develop a question, they use all of the strategies they have learned and practiced in more teacher-directed instructional models to use the Internet to locate and evaluate relevant sources, compose an answer to their questions, and share their answers or solutions with others.

Internet Inquiry may be a useful means to develop independent research skills and allow students to pursue a question that holds a special interest for them.

Importantly, however, Internet Inquiry requires students to "move beyond the 'Who, What, Where, When questions that so often form the basis of classroom research projects'…to engage in 'What does this mean, and how can I use this information' questions" (Owens, Hester, and Teale 2002). Internet Inquiry is intended to push students to expand their understandings by creating new connections in ways that increase engagement and motivation for authentic reading and writing.

LEAD21 incorporates an open-ended, thematically-related **Inquiry Project** in each unit. Students work in assigned inquiry groups and progress through a series of inquiry steps that include generating questions, making a conjecture, collecting information, reviewing the conjecture, and presenting findings. As described previously in this paper, in each unit students have access to an online inquiry guide that walks them through the inquiry steps, reviews important 21st Century Skills, and describes a variety of possible print and online presentation formats. To familiarize students with relevant and reliable Internet resources, the online guide also includes hyperlinks to theme-related, age-appropriate informational websites that have been pre-screened for safety, credibility, and authority.

While open-ended Inquiry occurs less frequently in the elementary grades than it does at older grade levels (due to child safety issues, challenges with emerging literacy skills, and limited navigation skills), a few exemplary models of primary school students engaged in inquiry that combined Internet research with offline investigations have emerged. In **LEAD21** the inquiry process is a key curricular element beginning in Kindergarten, with Internet Inquiry introduced in the middle of the first-grade year. The LEAD21 Internet Inquiry curriculum is carefully scaffolded to engage students at their specific developmental levels and help them become responsible and effective Internet researchers.

Research-based recommendations for Internet Inquiry with primary students also remind teachers to consider the advantages of online access to other people. Teachers working collaboratively in one first grade classroom observed the benefits of an email exchange between students and a local journalist sparked by a concern for social justice and celebrated with children's final projects that incorporated pictures, written responses, and digital photos used to spark further discussion and reflection about the issue (Crafton, Brennan, and Silvers, 2007). Researchers who have explored inquiry with new technologies in elementary school classrooms remind teachers of the following lessons they have learned:

- Approach projects with enthusiasm.
- Teach critical reading skills—comparing and contrasting information from different sources.
- Consider the importance of their role in facilitating inquiry by continuously discussing the project with students, asking questions to keep the inquiry meaningful, and monitoring students' ability to balance their use of new technologies with meaningful, informative content (Owens, Hester, and Teale 2002).

Teachers may wish to keep these principles in mind as they guide students through the inquiry process and strive to create an engaging, collaborative environment in which students identify and investigate their individual questions related to the theme of study.

3. Web Talk and Response

Web Talk and Response involves themed discussions and/or creative response activities in which students collaboratively compose and critique each other's work using online communication technologies such as blogs, wikis, social networking sites, or podcasts. This model of instruction is quite new and practices are steadily emerging as more and more teachers consider the potential for using new communication technologies in their literacy curriculum. Cutting-edge communication technologies offer "new and exciting ways to capitalize on the strengths of authentic writing, the power of the writing process, and the engagement of collaborative writing" (Boling, Castek, Zawilinski, Barton, and Neirlich 2008).

Web Talk and Response involves themed discussions and/or creative response activities in which students collaboratively compose and critique each other's work using online communication technologies such as blogs, wikis, social networking sites, or podcasts.

For those not familiar with these new technologies, three popular online communication tools are blogs, wikis, and podcasts. A *blog* is a website structured like an online journal (or *weblog*) that contains regular entries, commentaries, or other material such as photos or video. Blog entries are commonly displayed in reverse-chronological order, and most include space for other readers to comment on the entry with their own opinion or critique. A *Wiki* is a piece of server software that allows users to freely create and edit webpage content using any web browser. A wiki allows users to edit both the content and the organization of contributions on the page. Finally, a *podcast* is a series of audio or video digital-media files that are distributed over the Internet through web feeds or made available by direct download or real-time streaming technologies.

While these technologies pose challenges to schools concerned about the safety and privacy of young students, many classroom teachers have worked to develop acceptable use policies and are beginning to experience the benefits of providing students the opportunity to publish and critique their work for a global audience.

LEAD21 provides a unique opportunity for students to participate in social networking activities in a safe, learning-based environment. The **eTools21** components allow students to post ideas, writing, and images online as well as read and comment on the posts of their teacher and peers, all within the controlled, password-protected LEAD21 eSuite. There are four social networking components in LEAD21, each of which has been discussed earlier in this paper. First, in the **Theme Wall** students post facts, questions, ideas, and images related to the unit's theme. In the **Story Starter,** students participate in collaborative story writing by building story threads off of a story starter posted by the teacher. The **Writing Tools** allows students to complete and post their writing lessons online. Students have pop-up access to the units' writing models charts, checklists, and rubrics. The **Interactive Glossary** contains all tested vocabulary words from the student readers as well as the extension vocabulary included in the online eBooks. Students post alternate definitions, their own sample sentences, and/or related images to reinforce and demonstrate their understanding of the terms. The teacher has full editing authority on all eTools21 student postings.

Conclusion

Recent literature demonstrates that the Internet has become important because it provides us with information that improves the quality of our personal, civic, and professional lives. Access to this online information, however, requires new reading, writing, and communication skills. In the 21st century, being able to read, think critically, and communicate with the Internet has become just as important as being able to read a book and write a letter were during an earlier age. Within the walls of education, Wood (2000) described a "collision between two cultures...[namely] the literacy community with the techno-enthusiasts" and reported a hesitancy of adults to include digital text formats and tools in their repertoire of literary instructional strategies. Through the examples provided in this white paper, we have tried to show that research has demonstrated that students are ready for technology and excited about the changes. "Revolution is not restrained by the capabilities of the technology, but by our own imaginations and dedication to help provide guidance in the evolution of these new communication tools" (Boone and Higgins 2001). In terms of literacy instruction in the 21st century, "The question of what to teach is accompanied by one just as urgent: how to teach" (Wood, 2000). Reading on the Internet is different, and our definition of reading comprehension needs to reflect those differences. Our job now is to envision new constructs of reading comprehension that introduce students to strategies for interacting with these new online literacies alongside more foundational offline literacies. We must help students appreciate the distinctions of each and also be willing to explore digital information environments together in more thoughtful ways. We need to prepare our students to use these new information and communication technologies because they enable students to fully participate in our society and lead productive personal, civic, and work lives. Nothing is more important for the future of our children. This is the challenge we face as educators in a digital information age.

LEAD21 Reading and the Digital Classroom Instructional Pedagogy

Research Says	LEAD21 Delivers
Well-designed, digitally supported reading environments scaffold students' literacy learning with multiple means of representation, multiple means of expression, and multiple means of engaging with text (Meyer and Rose 1998).	A comprehensive suite of digital **eBooks** that reproduces the student readers and includes additional support features such as audio recordings of the text, an electronic pop-up glossary, and a student-activated Online Coach for comprehension support at point of use.
Research suggests pictorial introductions as a pre-reading activity can facilitate high-level inferences that help readers link disparate ideas found in the text (Anstey and Freebody 1987).	Multiple levels of electronic pre-reading reinforcement. • **Virtual Field Trip** videos use visual and audio cues to help students build background knowledge about the Unit Theme. • **A Preview feature** is included for each selection in the students' eBooks that allows students to view key images from the selection, make predictions, and set a purpose for reading.
A systematic review of 191 studies conducted between 1980 and 2002, with both typical and special populations, concluded that many different computer games and activities appear to contain the potential for supporting reading and writing development among elementary-aged children (Coiro, Leu, Kinzer, Labbo, Teale, Bergman, et al. 2003).	Electronic games and activities to support literacy development: • Differentiated digital vocabulary activities that reinforce student vocabulary acquisition in each week of the unit • Phonics Games for Kindergarten through Grade 2 • Word Study Games for Grades 3–5
Online texts (and the technologies that host them) can be used as part of the literacy curriculum to build background knowledge and content-area learning while also encouraging inquiry, problem solving, writing, and critical reading (Castek and Bevans 2006; Coiro, 2003; Kara-Soteriou, Zawilinksi, and Henry 2007).	Explicit instruction and age-appropriate opportunities to practice online inquiry skills. Web-based Inquiry guides accompany each unit for students beginning in Grade 1, Unit 5. These Inquiry guides parallel the print program's inquiry instruction and guide students in using online and offline technologies to conduct research, apply 21st Century Skills, and present their findings in an engaging way.
The 2008 Horizon Report (a research effort to identify emerging technologies likely to have a large impact on teaching, learning, and creative expression) indicates that video sharing and virtual collaboration webs continue to grow "at some of the most prodigious rates on the Internet" (New Media Consortium 2008).	Social networking technologies within its eTools21 suite: • The **Story Starter** allows a class to collaboratively write stories related to their reading. • The **Interactive Glossary** allows students to augment existing glossary entries by uploading representative pictures, providing example sentences and explanations, and sharing their own custom definitions. • The **Theme Wall** provides a forum for students to post and share ideas, questions, and images related to the main concepts taught in each unit. • Using the Writing Tool, students can draft their own writing, edit it, and "publish" it within the LEAD21 eSuite for their teacher and classmates to read and comment on.

Author Biography

Ms. Julio Coiro, M.S.

Dr. Julie Coiro is an assistant professor in the School of Education at the University of Rhode Island, where she teaches undergraduate and graduate level courses in reading. Previous to that, Julie worked as Co-Director of The New Literacies Research Lab at the University of Connecticut. Julie has a Bachelor's degree in Special Education with a focus on students with learning disabilities, a Masters' degree in Curriculum and Instruction from the University of New Orleans with a focus on reading, and a Ph.D. in Educational Psychology in the area of Cognition and Instruction from the University of Connecticut. Her research focuses on reading comprehension strategy instruction, the new literacies of the Internet, online reading comprehension, and effective practices for technology integration and professional development.

From 2003–2006, Dr. Coiro worked in school classrooms as part of the Teaching Internet Comprehension to Adolescents (TICA) Project, a federal research project funded by the U.S. Department of Education. In 2009, she was a distinguished finalist for the International Reading Association's Dissertation of the Year Award. Most recently, she is Co-Primary Investigator on a four year federally funded research project (2009–2013) designed to develop three different formats of valid, reliable, and practical assessments of online reading comprehension. Dr. Coiro is a former middle school and elementary school teacher and has provided professional development to teachers around the country for the past 20 years. Julie has published over 20 articles and book chapters in venues such as Reading Research Quarterly, The Reading Teacher, Educational Leadership, Journal of Adolescent and Adult Literacy, The Handbook of Research on Teaching The English Language Arts, Theoretical Processes and Models of Reading (5th edition) and The International Handbook of Literacy and Technology (2nd edition). She is also co-editor of the Handbook of Research on New Literacies (Erlbaum, 2008) and co-author of the 4th edition of the book Teaching with the Internet K–12: New Literacies for New Times (2004).

References

Anstey, M. A. and Freebody, P. 1987. The effects of various pre-reading activities on children's literal and inferential comprehension. *Reading Psychology,* 8(3), 189-209.

Ba and Tally 2002 http://escholarship.bc.edu/cgi/viewcontent.cgi?article=1009andcontext=jtla

Bader, M. J. 2000. Choosing CALL software: Beginning the evaluation process. *TESOL Journal,* 9, 18–22.

Balathjy, E. 2000. The effects of teacher purpose on achievement gains. *Reading and Writing Quarterly,* 16, 289–294.

Baildon, R. and Baildon, M. 2008, May. Guiding Independence: Developing a Research Tool to Support Student Decision Making in Selecting Online Information Sources. *The Reading Teacher,* 61(8), 636–647.

Barker, T. A. and Torgeson, J. K. 1995. An evaluation of computer-assisted instruction in phonological awareness with below average readers. *Journal of Educational Computing Research,* 13, 89–103.

Boling, E. C. 2005, February. A time of new literacies: Who's educating the teacher educators? *Teachers College Record*. Retrieved December 10, 2008 from http://www.tcrecord.org.

Boling, E., Castek, J., Zawilinski, L., Barton, K., and Nierlich, T. 2008. Collaborative literacy: Blogs and Internet projects. *The Reading Teacher,* 61(6), 504–506.

Boone, R. H. and Higgins, K. 2001. *EBooks and online text: Special education technology research.* Paper presented at the annual meeting of the National Reading Conference, San Antonio, TX.

British Educational Communications and Technology Agency (BECTA) ICT Research. 2003. *What the research says about interactive whiteboards.* Coventry, U.K. Retrieved December 10, 2008 from http://web.archive.org/web/20061208064641

Brown, A. L. and Palinscar, A. S. 1989. Guided cooperative learning and individual knowledge acquisition. In L. B. Resnick (Ed.), *Cognition and instruction: Issues and agendas* (pp. 292–451). Hilldale, NJ: Erlbaum.

Burmark, L. and Thornburg, D. 1996. Criteria for software selection. Retrieved November 2, 2003 from http://www.tcpd.org/Burmark/Handouts/SoftwareSelection.pdf.

Castek, J. 2008. *An examination of classroom instruction that integrates the new literacies of online reading comprehension: Exploring the contexts that facilitate acquisition and the learning outcomes that result.* Unpublished doctoral dissertation. University of Connecticut, Storrs.

Castek, J. and Bevans, J. 2006. Reading adventures online: Five ways to introduce the new literacies of the Internet through children's literature. *The Reading Teacher,* 59, 714–728.

Christenson, R. and Knezak, G. 2001. *Developing the teacher attitudes toward reading and technology questionnaire.* Retrieved December 15, 2008 from http://www.iittl.unt.edu/KIDS2001/html/ch12.htm

Coiro, J. 2003a. Reading comprehension on the Internet: Expanding our understanding of reading comprehension to encompass new literacies. *Reading Online.* [Article reprinted from The Reading Teacher, 56, 458-464]. [OnlineSerial]. Available at: http://www.readingonline.org/electronic/elec_index.asp?HREF=/electronic/rt/2-03_Column/index.html

Coiro, J. 2003b, May. *New technologies for reading and thinking: Building stronger connections to texts with electronic experiences.* In M. Moffett (Chair), Make a difference in reading: Using technology effectively. Pre-Conference Institute conducted at the 48th annual meeting of the International Reading Association, Orlando, FL.

Coiro, J. 2005. Making sense of online text. *Educational Leadership,* 63(2), 30–35.

Coiro, J. 2007. *Exploring changes to reading comprehension on the Internet: Paradoxes and possibilities for diverse adolescent readers.* Unpublished doctoral dissertation. University of Connecticut, Storrs.

Coiro, J. and Dobler, E. 2007. Exploring the comprehension strategies used by sixth-grade skilled readers as they search for and locate information on the Internet. *Reading Research Quarterly,* 42, 214–257.

Coiro, J., Karchmer-Klein, R., and Walpole, S. 2005. Critically evaluating educational technologies for literacy learning: Current trends and new paradigms. In M. C. McKenna, L. D. Labbo, R. D. Keiffer, and D. Reinking (Eds.). *International handbook of literacy and technology,* Volume II. Mahwah, NJ: Erlbaum.

Cope, B. and Kalantzis, M. (Eds.). 2000. *Multiliteracies: Literacy learning and the design of social futures.* London: Routledge.

Coiro, J. and Leu, D. J., Jr., Kinzer, C. K., Labbo, L., Teale, W., Bergman, L., Sulzen, J., and Sheng, D. 2003, December. *A review of research on literacy and technology: Replicating and extending the NRP subcommittee report on computer technology and reading instruction.* Paper presented at the 53rd annual meeting of the National Reading Conference, Scottsdale, AZ.

Coiro, J., Knobel, M., Lankshear, C., and Leu, D. J. (Eds.). 2008. *Handbook of Research on New Literacies.* Mahwah, NJ: Erlbaum.

Crafton, L. K., Brennan, M., and Silvers, P. 2007. Critical inquiry and multiliteracies in a first-grade classroom. *Language Arts,* 84(6), 510–518.

Dalton, B. and Strangeman, N. 2006. Improving struggling readers' comprehension through scaffolded hypertexts and other computer-based literacy programs. In D. Reinking, M. C. McKenna, L. D. Labbo, and R. D. Keiffer (Eds.). *Handbook of literacy and technology: Transformations in a post-typographic world.* Mahwah, NJ: Erlbaum.

deJong, M. T. and Bus, A. G. 2002. Quality of book-reading matters for emergent readers: An experiment with the same book in a regular or electronic format. *Journal of Educational Psychology,* 94, 145–155.

Dodge, B. 1997. *Some Thoughts About WebQuests.* San Diego State University, Educational Technology Department. Retrieved December 19, 2008, from http://webquest.sdsu.edu/about_webquests.html

Doty, D. E., Popplewell, S. R., and Byers, G. O. 2001. Interactive CD-ROM storybooks and young readers' reading comprehension. *Journal of Research on Computing in Education,* 33, 374–384.

Engstrom, M. E. and Jewett, D. 2005. Collaborative learning the wiki way. *Tech Trends: Linking Research and Practice to Improve Learning,* 49(6), 12–16.

Fabos, B. 2008. The price of information: Critical literacy, education, and today's Internet. In J. Coiro, M. Knobel, D. Leu, and C. Lankshear (Eds.). *Handbook of Research on New Literacies.* Mahwah, NJ: Erlbaum.

Foster, K. C., Erickson, G. C., Foster, D. F., Brinkman, D., and Torgeson, J. K. 1994. Computer administered instruction in phonological awareness: Evaluation of the DaisyQuest program. *Journal of Research and Development in Education,* 27, 126–137.

Frontline. 2008. *Growing up online.* PBS Frontline. Retrieved October 1, 2008 from http://www.pbs.org/wgbh/pages/frontline/kidsonline/

Gee, J. 2003. *What video games have to teach us about learning and literacy.* New York: Palgrave.

Grant, J. 2004. Are electronic books effective in teaching young children reading and comprehension? *International Journal of Instructional Media,* 31(3), 303–308. Retrieved December 8, 2008 from http://faculty.rcoe.appstate.edu/koppenhaverd/sum07/read/grant04.pdf

Guthrie, J. T. and Wigfield, A. 2000. Engagement and motivation in reading. In M. L. Kamil, P. B. Mosenthal, P. D. Pearson, and R. Barr (Eds.). *Handbook of Reading Research Volume III,* pp. 403≠424. Mahwah, NJ: Erlbaum Associates.

Guthrie, J. T., Wigfield, A., and Perencevich, K. C. (Ed.). 2004. Motivating reading comprehension: Concept-Oriented Reading Instruction. Mahwah, NJ: Erlbaum.

Hacker, D. J. and Tenant, A. 2002. Implementing reciprocal teaching in the classroom: Overcoming obstacles and making modifications. *Journal of Educational Psychology,* 94, 699–718.

Harris, J. 1998. *Virtual architecture: Designing and directing curriculum-based telecollaboration.* Eugene, OR: International Society for Technology in Education.

Hickey, M. G. 1995. More than drill and practice: Selecting software for learners who are gifted. *Teaching Exceptional Children,* 27, 48–50.

International Reading Association (IRA). 2002. *Integrating literacy and technology in the curriculum: A position statement.* Newark, DE: International Reading Association.

Kara-Soteriou, J., Zawilinski, L., and Henry, L. 2007. Children's books and technology in the classroom: a dynamic combo for supporting the writing workshop. The Reading Teacher, 60, 698–707.

Kennedy, T. J., and Canney, G. F. 2002. Collaboration across language, age, and geographic borders. In V. Risko and K. D. Bromley (Eds.). *Collaboration for diverse learners: Viewpoints and practices.* Newark, DE: International Reading Association.

Korat, O. and Shamir, A. 2008. The educational electronic book as a tool for supporting children's emergent literacy in low versus middle SES groups, *Computers and Education,* 50(1) 110–124.

Lankshear, C. and Knobel, M. 2003. New literacies. Maidenhead: Open University Press.

Labbo, L. D. 2004, April. Author's computer chair. *The Reading Teacher,* 57(7), 688-691. Reading Online. Retrieved December 15, 2008 from http://www.readingonline.org/electronic/rt/4-04_column/

Labbo, L. D. and Kuhn, M. 1998. Electronic symbol making: Young children's computer-related emerging concepts about literacy. In D. Reinking, M. C. McKenna, L. D. Labbo, and R. D. Keiffer (Eds.). *Handbook of literacy and technology: Transformations in a post-typographic world* (pp. 45–59). Mahwah, NJ: Erlbaum.

Labbo, L. D., Love, M. S., Prior, M. P., Hubbard, B. P., and Ryan, T. 2006. *Literacy links: Thematic units linking read-alouds and computer activities.* Newark, DE: International Reading Association.

Labbo, L. D., Love, M. S., and Ryan, T. 2007. A vocabulary word flood: Making words "sticky" with computer-response activities. *Reading Teacher,* 60(6), 582–588.

Labbo, L. D., and Reinking, D. 1999. Negotiating the multiple realities of technology in literacy research and instruction. Reading Research Quarterly, 34, 478–492.

Labbo, L. D. and Reinking, D. Winter, 2000. Once upon an electronic storytime. *New Advocate,* 13(1), 25–32.

Lankshear, C. and Snyder, I. 2000. *Teachers and techno literacy: Managing literacy, technology and learning in schools.* Crows Nest, AU: Allen and Unwin.

Learning Media. 2007. *Scaffolding students' learning with electronic storybooks: Case Study 1.* Learning Media, New Zealand. Retrieved December 5, 2008 from http://www.learningmedia.co.nz/nz/online/ednow/ednow3

Lenhart, A. and Madden, M. December, 2007. *Teens and social media: The use of social media gains a greater foothold in teen life.* Pew Internet and American Life Project Report. Retrieved December 8, 2008 from http://www.pewinternet.org/PPF/r/230/report_display.asp

Leu, D. J., Jr. 2001, March. Internet Project: Preparing students for new literacies in a global village [Exploring Literacy on the Internet department]. *The Reading Teacher,* 54(6). Available: http://www.readingonline.org/electronic/elec_index.asp?HREF=/electronic/RT/3-01_Column/index.html

Leu, D. J., Jr. 2002, February. Internet Workshop: Making time for literacy [Exploring Literacy on the Internet department]. *The Reading Teacher, 55*(5). Available: http://www.readingonline.org/electronic/elec_index.asp?HREF=/electronic/RT/2-02_Column/index.html

Leu, D. J., Castek, J., Hartman, D., Coiro, J., Henry, L., Kulikowich, J., and Lyver, S. 2005. *Evaluating the development of scientific knowledge and new forms of reading comprehension during online learning.* Final report presented to the North Central Regional Educational Laboratory/Learning Point Associates. Retrieved May 15, 2006 from http://www.newliteracies.uconn.edu/ncrel.html.

Leu, D. J., Coiro, J., Castek, J., Henry, L. A., Reinking, D., and Hartman, D. K. 2008. Research on Instruction and Assessment in the New Literacies of Online Reading Comprehension. In C. C. Block, S. Parris, and P. Afflerbach. (Eds.). *Comprehension instruction: Research-based best practices* (pp. 321–346). New York: Guilford Press.

Leu, D. J., Jr. and Kinzer, C. K. 2003. *Effective literacy instruction: Implementing best practices, 5th Edition.* Upper Saddle River, NJ: Merrill Prentice Hall.

Leu, D. J., Kinzer, C. K., Coiro, J., and Cammack, D. 2004. Towards a theory of new literacies emerging from the Internet and other ICT. In R. B. Ruddell and N. Unrau (Eds.). *Theoretical Models and Processes of Reading, 5th Edition,* 1570–1613.

Leu, D. J., Zawilinski, L., Castek, J., Banerjee, M., Housand, B., Liu, Y., and O'Neil, M. 2008. What is new about the new literacies of online reading comprehension? In A. Berger, L. Rush, and J. Eakle (Eds.). *Secondary school reading and writing: What research reveals for classroom practices.* NCTE/NCRLL: Chicago, IL.

McKenna, M. C. 1998. Electronic texts and the transformation of beginning reading. In D. Reinking, M. C. McKenna, L. D. Labbo, and R. D. Keiffer (Eds.). *Handbook of literacy and technology: Transformations in a post-typographic world* (pp. 45–59). Mahwah, NJ: Erlbaum.

McKenna, M. C. and Watkins, J. H. 1994, December. *Computer-mediated books on the development of beginning readers.* Paper presented at the annual meeting of the National Reading Conference, San Diego, CA.

McKenna, M. C. and Watkins, J. H. 1995, December. *Effects of computer-mediated books on the development of beginning readers.* Paper presented at the annual meeting of the National Reading Conference, New Orleans, LA.

McKenna, M. C. and Watkins, J. H. 1996, December. *Effects of computer-mediated trade books on sight words acquisition and the development of phonics ability.* Paper presented at the annual meeting of the National Reading Conference, Charleston, SC.

Malloy, J. A. and Gambrell, L. B. 2008. New insights on motivation in the literacy classroom. In C. C. Block and S. R. Parris, (Eds.). *Comprehension instruction: Research-based best practices* (pp. 226–238). New York: Guilford Press.

Meyer, D. and Rose, D. H. 1998. *Learning to read in the computer age.* Cambridge, MA: Brookline Books.

Morgan, B. and Smith, R. D. 2008. A wiki for classroom writing. Technology in Literacy Education Column. *The Reading Teacher,* 62(1), 80–82.

Morrow, L. M. 2002. *The literacy center: Contexts for reading and writing. 2nd Edition.* Portland, ME: Stenhouse Publishers.

National Council of Teachers of English (NCTE). 2008. *The NCTE definition of 21st century literacies: NCTE Position Statement.* Retrieved December 15, 2008 from http://www.ncte.org/positions/statements/21stcentdefinition.

National Reading Panel. April, 2000. Report of the National Reading Panel. *Teaching Children to Read: An Evidence-Based Assessment of the Scientific Research Literature on Reading and Its Implications for Reading Instruction.* National Institute of Child Health and Human Development.

New Media Consortium. 2008. The 2008 Horizon Report. Author. Retrieved December 8, 2008 from http://www.nmc.org/publications/2008-horizon-report/

O'Hear, S. 2005. *Inspirations from the blogosphere.* Retrieved December 15, 2008 from http://www.teachers.tv/video/167

Owens, R. F., Hester, J. L., and Teale, W. H. 2002. Where do you want to go today? Inquiry based learning and technology integration. *The Reading Teacher,* 55, 616–625.

Palinscar, A. S. and Brown, A. L. 1984. Reciprocal teaching of comprehension-fostering and comprehension-monitoring activities. *Cognition and Instruction,* 1, 117–175.

Pearman, C. J. 2008. Independent reading of CD-ROM storybooks: Measuring comprehension with oral retellings. *The Reading Teacher,* 61(8), 594–602.

Pearson, P. D. and Raphael, T. E. 1999. Toward a more complex view of balance in the literacy curriculum. L. Morrow and L. Gambrell (Eds.). *Balanced Literacy Instruction.* NY: Guilford

Pearson, P. D., Raphael, T. E., Benson, V. L., and Madda, C. L. 2007. Balance in the Literacy Curriculum: Then and Now. In L. B. Gambrell and L. M. Morrow (Eds.). *Best Practices in Literacy Instruction (3rd ed.)*. New York: Guilford Press.

Pianfetti, E. S. 2001. Teachers and technology: Digital literacy through professional development. *Language Arts,* 78, 255–262.

Proctor, C. P., Dalton, B., and Grisham, D. L. 2007. Scaffolding English language learners and struggling readers in a universal literacy environment with embedded strategy instruction and vocabulary support. *Journal of Literacy Research,* 39, 71–93.

RAND Reading Study Group. 2002. *Reading for understanding: Toward an RandD program in reading comprehension.* Santa Monica, CA: Rand.

Reitsma, P. 1988. Reading practice for beginners: Effects of guided reading, reading-while-listening, and independent reading with computer-based speech feedback. *Reading Research Quarterly,* 22, 197–218.

Rich, M. 2008, July 27. The future of reading: Literacy Debate – Online, R U Really Reading? *The New York Times.* Retrieved October 1, 2008 from http://www.nytimes.com/2008/07/27/books/27reading.html?_r=1andhp=andpagewanted=all

Rosenshine, B., and Meister C. 1994. *Reciprocal teaching: A review of the research. Review of Educational Research,* 64, 479–530.

Roth, F. P., Speech, D. L., and Cooper, D. H. 2002. A longitudinal analysis of the connection between oral language and early reading. *Journal of Educational Research,* 95(5), 259–72.

SMART Technologies, Inc. 2004, April. Interactive Whiteboards and Learning: A Review of Classroom Case Studies and Research Literature. Retrieved December 15, 2008 from http://dewey.uab.es/pmarques/pdigital/es/docs/Research%20White%20Paper.pdf

Smolin, L. and Lawless, K. 2003. Becoming literate in the technological age: new responsibilities and tools for teachers. *The Reading Teacher,* 56, 570–577.

Snow, C. E., Burns, M. S., and Griffin, P. (Eds.). 1998. *Preventing reading difficulties in young children.* Washington, DC: National Academy Press.

Solvie, P. A. 2004, February. The digital whiteboard: A tool in early literacy instruction [Teaching Tips department]. The Reading Teacher, 57(5), 484–487. Available: http://www.readingonline.org/electronic/elec_index.asp?HREF=/electronic/RT/2-04_column/index.html

Street, B. 1999. New literacies in theory and practice: What are the implications for language in education? *Linguistics and Education,* 10(1), 1–24.

The New Media Consortium. 2007. Social networking, the "third place" and the evolution of communication. A white paper presented at the New Media Consortium's series of online conferences. Retrieved July 1, 2009 from http://www.nmc.org/pdf/Evolution-of-Communication.pdf

Tierney, R. and Pearson, P. 1983. Toward a composing model of reading. *Language Arts,* 60, 568–580.

Wallis, C. 2006, December 10. How to bring schools out of the 20th century. Time Magazine Online. Retrieved October 1, 2008 from http://www.time.com/time/magazine/article/0,9171,1568480,00.html

Weir, L. 2008. *Voicethreads: Extending the classroom with interactive multimedia albums.* Edutopia - The George Lucas Educational Foundation. Retrieved December 8, 2008 from http://www.edutopia.org/voicethread-interactive-multimedia-albums

Wilkinson, L. C. and Silliman, E. R. 2000. Classroom language and literacy learning. In M. L. Kamil, P. B. Mosenthal, P. D. Pearson, and R. Barr (Eds.). *Handbook of Reading Research Volume III,* pp. 337–360. Mahwah, NJ: Erlbaum Associates.

Wise, B. 1992. Whole words and decoding for short-term learning: Comparisons on a "talking computer" system. *Journal of Experimental Child Psychology,* 54, 147–167.

Wood, J. 2000. Literacy: Charlotte's Web meets the World Wide Web. In D.T. Gordon (Ed.). *The Digital Classroom* (pp. 117–126). Boston: Harvard Education Letter.

Zawilinski, L. 2009. HOT Blogging: A framework for blogging to promote higher order thinking. *The Reading Teacher*, 62(8), 650–661.

Zucker, T. A. and Invernizzi, M. 2008, May. My eSorts and digital extensions of word study. *The Reading Teacher,* 61(8), 654–658.

WRIGHT GROUP

LEAD21

LITERACY EQUITY ACCELERATION DIFFERENTIATION

Writing

Program Research Base

Mc Graw Hill Wright Group

Contents

Executive Summary	1
Early Language Development: Oral Precursors to Writing	3
Writing Goes to School	5
Language, Culture, and Thought	8
Talk about Text	10
Forms and Genres	13
Learning a New Literacy Future	15
LEAD21 Writing and Language Arts Instructional Pedagogy	18
Author Biography	19
References	20

Writing in LEAD21

Executive Summary

This white paper addresses one of the most complex strands of the elementary school curriculum—the teaching of writing. It provides information about and background for content, methods, and assessment in the area of writing in **LEAD21**. Writing is instructionally complex for many reasons, and perhaps because of its complexity, *while it is one of the most commonly used tools for teaching and assessing learning, it is typically taught and assessed least out of all the content areas*. This problem has persisted in the United States educational system throughout the past century.

Writing is a tool for authentic communication within the classroom's everyday life. Students write in many settings and for many purposes in school. As a taken-for-granted part of classroom culture, writing is invisible, its processes and genres almost impervious to instruction. However, its technical aspects, what we often call mechanics—spelling, punctuation, penmanship, and grammar—are taught, practiced, and assessed as if, taken together, they amount to written communication and therefore constitute a content area in their own right.

Today, however, writing is neither "content free" nor merely reduced to its "mechanics." Moreover, teachers find that they can no longer teach the content areas free of instructional support for the writing that ordinarily accompanies them. More importantly, parts of the language arts curriculum, which had been separated into reading, writing, speaking, and listening, are now integrated: the individual language arts strands are both researched and taught as people use them—as sociocognitive processes for making sense and interpreting the sense of others. Writing has come of age within the school, and some would say that its maturity is long overdue. Others say that its arrival as a central part of literacy education is just in time. Globalization has increased immigration, interlanguage contact among people in schools and the world of work, and the profusion of alternative media by which we communicate across distance and context, mostly by use of written language. Writing is taking on increasing significance. In an era of rapid connectivity, we must all be flexible, knowledgeable, and confident writers.

Writing has come of age within the school, and some would say that its maturity is long overdue. Others say that its arrival as a central part of literacy education is just in time.

The first section of this paper locates writing in the child's early development and describes the oral precursors of writing. Section two deals with the role of the teacher and school in teaching writing and considers what students need to learn that requires standards, formal instruction, and curriculum. Section three describes the threads that weave reading and writing together: oral language, culture, and thinking.

Ref. RD 11 M 8081

In this weaving, conversation plays an important role. Therefore, section four discusses what can be learned by means of "talking about text." Such talk moves reading, writing, and oral language into the social ecology of human life (Barton 1994).

The ecological view of literacy asserts that reading, writing, and oral language cannot be separated in their learning and in their use to learn subject matter. They are inter-related because they are all part of communication and are meaningful within social groups, contexts, knowledge, and activities. Section five discusses genre, not as the label that is attached to a text for the purpose of marketing or shelving it in the library or book store, but as a way to teach, use, and assess the combination of features of a text in social context. Genre in this contemporary sense is the form, purpose, topic, and author/audience of written text, all working together (Bakhtin 1986). Section six looks at several twenty-first century needs for writing instruction: teaching writing to English Language learners (ELL), differentiating instruction to address students' special needs, and using rapidly changing tools for writing as new technologies develop and alter purposes and situations for communication. All of this is part of the teaching and learning of writing in school and is therefore incorporated into **LEAD21**.

Ref. RD 11 M 8081

Early Language Development: Oral Precursors to Writing

Human beings are social, and all human societies engage in talk. Most activities in society involve the uniquely human capacities of teaching, learning, and using language to communicate (Cole 1996). Talk has been well studied by linguists, anthropologists, sociologists, and educational researchers for more than a century (Erickson 2004). We know a great deal about the acquisition, for example, of a first language and also of language-in-use, especially in educational settings. We also know a great deal about learning a second language either by immersion or by some form of systematic language instruction (Wittrock 1986). But it is difficult to put all of these instances of oral language development together, much less to see how they lay the foundation for learning to write. How is early speech a precursor of writing—both its informal acquisition of writing at home, and its formal instruction in school writing? How can speech serve as a powerful resource for learning to write—in everything from teaching and learning the alphabetic principle to learning and using text genres?

Human beings are social, and all human societies engage in talk.

As a precursor to writing, humans must acquire a first language, a process that includes mastering its sound patterns, increasing in its vocabulary, forming idea units to follow grammatical rules, and expressing and understanding talk in social situations (Morrow 2008). This process is a marvel of mixing human genetics, social relations, and informal teaching (Cole 1996). The capacity to do all of this in real time, improvisationally yet as part of an "ensemble"—that is, in face-to-face contact with others—is part of the richness and complexity of humans learning to talk (Gumperz 1982). Childrens' additional awareness of context that is not physically present in the immediate interaction demonstrates that in this accomplishment they develop a sense of time, place, activity, relationship, role, strategy, and tactics for written communication (Cook-Gumperz 1982).

To the extent that educators take this development for granted, or do not capitalize on it as a resource for teaching, they deny the power of what linguist James Gee (2008) calls the child's "primary discourse," which is a tool for entrée into the "secondary discourses" that school introduces (reading, writing, talking about ideas). The loss of this potential is a problem for all children. But it is most pronounced among those who have learned a "primary discourse" comprised of a dialect or language other than what is commonly called formal or Standard American English (Gee 2008). It is also a problem for children from a nondominant culture that has different occasions for reading and writing from those used in the common classroom, or that has culturally diverse traditions for when and how to tell a story. We can find examples of these differences and the problems they can cause for teachers and students alike in a myriad

Ref. RD 11 M 8081

of research—most prominently in the pioneering ethnographic study of children's language and schooling in three speech communities in *Ways with Words*, by Shirley Brice Heath (1983).

No matter how emergent literacy presents itself at the classroom door, good teachers with strong writing programs capitalize on the foundational learning of language and literacy that young children bring with them to school. If prior to school, the child's opportunity to activate emergent literacy is minimal (that is, if it differs from the ordinary expectations of monolingual, middle-class teachers), Gee asserts that teachers must nonetheless take up literacy development within the classroom because it is as essential to learning literacy as is school-based instruction. He argues that catching up children's emergent literacy is a moral obligation, since so much of their life opportunities depend on them becoming literate.

No matter how emergent literacy presents itself at the classroom door, good teachers with strong writing programs capitalize on the foundational learning of language and literacy that young children bring with them to school.

Children need opportunities for language acquisition to support subsequent school-based instruction. Gee differentiates "acquisition" (that knowledge which we develop by doing something) from "learning" (that knowledge which we develop by being taught about it). Thus, children's learning about writing, their gradual acquisition of page orientation, or left to right placement of print (or proto-writing which we might call "scribble,") is qualitatively different from their learning of conventions (for example, direct teaching of print; teaching of forms, such as parts of a business letter or an invitation; the sounds of English, in which different sounds can be associated with the shifting positions of symbols, such as *b*, as it shifts to *b,p,q,d*).

The distinction between acquisition and learning can be further clarified by considering both the *what* of their learning (informal versus formal rules) and the *how* of their learning (acquisition through everyday literacy events in the family and community, compared to learning in a formal school context, which includes assessment). Both are necessary, and children who arrive at school lacking rich opportunities for acquisition often are plunged into instruction prematurely. That is why a strong literacy program recognizes varied prior knowledge and background and offers a rich blend of opportunities to learn to write in English both in the doing and by means of instruction in the early years, and for newcomers to English, at any elementary grade.

In the examples above we can see that acquisition and learning by instruction are not rigidly divided. Many children have acquired such principles in English, such as the top-down, left-to-right orientation of print, in an adults' lap while listening to and

looking at the words and pictures in a bedtime story. But what the direct teaching of concepts of print affords is the capacity to make that knowledge explicit and to be able to anticipate it in reading, apply it in writing, and articulate the principle in revision. We move then from acquisition, to instruction, to independent, self-regulated use of print. From acquisition, or learning by doing, comes fluency and tacit knowledge. Knowledge gained by direct instruction is more metacognitive in nature. Though its users may be less fluent, they may be still able to assert underlying rules and principles. Thus we learn to speak grammatically before we study grammar—both are important for our development as fluent communicators.

Needless to say, students need both acquistion and direct teaching—particularly to master an array of communication and also to create ways of expressing themselves in a world increasingly characterized by generativity and connectivity. Both acquisition by working alongside others and learning by means of direct teaching are important to writing instruction: both can be practiced in school. Comprehensive writing programs offer principled opportunities for each of these. Indeed, some aspects of written language may lend themselves to direct instruction while other aspects are indeterminate and therefore require coaching, modeling, and expansion of the sort that we see in the adult/child interactions in which early acquisition occurs.

Writing Goes to School

Human beings are, in psychologist Lev Vygotsky's words, "natural symbolists" (Vygotsky 1934/1987). Our ability to teach, learn, and use language gives us access to what psychologist A. R. Luria called the "tool of tools" (Luria cited in Cole 1996). Language is our social and genetic birthright and holds enormous value for both the individual learner and the society. Mastering the language of one's culture is an individual accomplishment that depends greatly on interaction with others. In studying the development of language and thought in society, Vygotsky described this process in his "general law of cultural development" as follows:

> Any function in children's cultural development appears twice, or on two planes. First, it appears on the social plane and then on the psychological plane. First, it appears between people as an interpsychological category and then within the individual child as an intrapsychological category….social relations or relations among people genetically underlie all higher functions and their relationships (Vygotsky cited in Cole 1996).

Here Vygotsky is telling educators two things of significance:

- First, language and literacy develop in social interactions and authentic activities.
- Second, there is an intimate relationship between students' learning to think and their learning of language and literacy.

In short, we cannot deny the weave of language, community, and thought in human development. Vygotsky's law places the onus on adults to help beginners organize experience in ways that support language development.

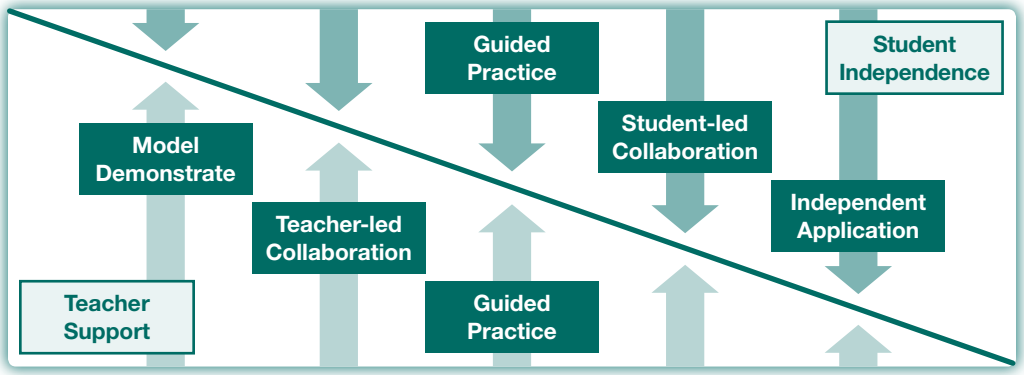
While humans may be genetically primed to acquire language, human development depends on the interaction of social and individual history, as well as context. Cole notes that the interdependence of child development with adults' "arrangement of environments that optimize that development" leads us to another Vygotskian idea—that of a "zone of proximal development" (Cole 1996). That zone, according to Cole, "Affords the proximal, relevant environment of experience for development. It is the foundation upon which, in an ideal world, the education of children would be organized." The adult's work with the child within this metaphorical zone, in Cole's term, "braids" individual and cultural development. Being a part of a language community is the source of powerful learning. However, it is also the source of shared knowledge of a communication system that is normative but not deterministic—that is, the ability to communicate with others enables the student's transformation through critical examination of the student's community (Gee 2008).

While humans may be genetically primed to acquire language, human development depends on the interaction of social and individual history, as well as context.

Another scholar, Jerome Bruner, also concerned with culture and education, dubbed this process of learning and development through communication with more experienced members of a community, the "instructional scaffold" (Bruner 1996). Scaffolding is, like Vygotsky's zone, a metaphor to help us understand how and why the teacher and student should engage one another in activities in which the student can succeed with instructional support—the scaffold the teacher provides as the student builds complexity in knowledge and understanding.

As the student becomes more proficient, the teacher gradually releases control, offering less assistance until the student has assumed the independent, self-regulated ability to complete the learning task (Au, Mason, and Scheu 1995). This is the removal of the scaffold.

Gradual Release of Responsbility Model



However, because development continues, the teacher continues to "up the ante," raising the scaffold once again beyond that which the student has already mastered or can currently do with assistance. A thoughtful program that includes integrated literacy instruction attends to this dynamic with methods, materials, benchmarks, and standards that explicitly lay out where the student is headed. Although such a curriculum, embodying Dewey's "end in view," (1990) points all students in the same direction, it also allows students to move along at different paces, begin from different entry points, or bring varied background knowledge to the process (Au, et al. 2008). This has been called a staircase approach to curriculum development and can be of use to all teachers (K–5) in a school. It enables continuity within and across grade levels as well as among students with varied writing or reading ability at the outset.

Additionally for Bruner, this process is not as simple as "onward and upward," rather, he theorized a "spiral curriculum" in which children are taught and retaught concepts that are important to their learning, at increasing levels of complexity. Thus, in writing, for example, a drawing with a few letters beneath it can become a series of descriptive sentences illustrated by a drawing, and ultimately a research report with a picture, chart, or graph to represent complex information. Building complexity by teaching a concept as part of a conversation that revisits that concept in new and more complex ways is a key way to work toward higher-order reasoning as learners develop.

Ref. RD 11 M 8081

Language, Culture, and Thought

In the case of oral language development, we can observe very young children interacting in various highly scaffolded ways right from the start, as even newborns are welcomed into the family and its activities. Observational research shows us that children receive, both spontaneously and intentionally, a range of instruction from parents, who model, coach, and direct them. Depending on the situation, a child's simple utterance may be expanded (and infused with intention) as the adult responds to it, as in the following interaction loosely based in many examples available in Cazden's summary of her own and her colleagues early child language research (Cazden, 1972):

Child: Mommy juice (holding her empty cup toward the mother)

Mother: Oh, Baby Katie wants some more juice in her cup (taking the cup and adding juice)

Yet when the toddler reaches toward the hot stove, Mother may not wait for the child to say a word. Instead, she might issue direct instruction:

Mother: No! Don't touch the stove. It's hot!

To which the child might reply, withdrawing her hand:

Child: No! 'tove hot!

Thus, we can observe the first examples of the dynamic tension between variation and predictability that marks all language use, both oral and written. We can observe the mother teaching by taking the child's meaning seriously and acting upon it and also by her expansion of the utterance toward a more mature, conventional expression of it. We see both parent and child express multiple kinds of meaning in even the smallest exchange (very rich context). And we also see parental support of the child's development toward a more complex way of speaking. This is all done via informal support, which more experienced members of the family offer the child—as innately as a child initiating an exchange with a two-word request (Brown 1977, cited in Cazden 1988).

We can also see how, over time, children grow in their capacity to speak within a group. Although the interactions in which they participate are novel and variable, the path of the child's language acquisition systematically increases in complexity (Block and Mangieri 2003). In the following example we see the linking of language, culture, and thought. We can see that what the more experienced speaker affords the novice is an opportunity to reflect upon the observation and transform it. In this way, the novice approximates cultural knowledge about categorizing animals from general to specific—yet also perhaps learns about them from specific to general.

When a grandfather walks with his young grandson and a hairy, four-legged creature approaches them wagging a tail, the child may shout, "Max!" In response, grandfather is apt to say something like, "Yes, this is a dog and you have a dog, too. Your dog is named Max" (Rosaen and Florio-Ruane 2008).

Rosaen and Florio-Ruane (2008) note, in this example, that "so much has happened by way of the linguistic mediation of experience and the authentic engagement of a more- and a less-experienced member of the culture. Most important perhaps is that in the intimacy of adult-child interaction, language and concept development proceed almost incidentally, and context is immensely important to the process."

This teaching arises through informal chats with one's grandfather, but it is made more systematic in school. Still it should not lose its essential qualities of authenticity, communication, and closeness to the learner's emergent understanding. Families send their children to school precisely so that teachers who are certified experts in the teaching of reasoning and communication can work with their children toward systematically higher standards of language as well as "language about language and ideas" (Cole 1996). In schools, and especially for more complex literacy practices such as comprehension and composition, the informal teaching by the family is more than supplemented by systematic curriculum design, instructional planning, and assessment (Morrow 2008).

A beginner's speaking and thinking repertoire for complex ideas is limited but expandable by adult response. With growing interaction within the physical world and among experienced members of a culture, a beginner's thought and language become increasingly complex. Ultimately thought, which began on the social plane, is internalized and personalized in cognitive networks of words, ideas, and experiences. These have been learned and have meaning in the company of others (Rosaen and Florio-Ruane 2008). They are the stuff of experience out of which students write.

With growing interaction within the physical world and among experienced members of a culture, a beginner's thought and language become increasingly complex.

Language and culture shape thought, yet by a continuous process of development and interaction, speakers/writers can use language to reflect their thought and impact readers. Writers and readers together remake, even transform, culture. When, for example, a group of middle-school students noticed their peers were throwing away nearly full containers of the milk they were required to take with the school cafeteria lunch, they wrote a script for a video about the waste of resources called, "Got Milk?" The script was filmed and screened for all the students in the school, and the requirement of taking milk was changed. Waste was decreased. The micro-culture of the school community was changed because students wrote (Ferdig 2001).

Talk about Text

There are no national standards prescribing the kind of instructional support grandfathers give to children, but teachers need to base their instructional decisions on knowledge of best practices. Professionalism, specialized knowledge, and pedagogy differentiate their work from the language-learning support provided by engaged families. Therefore it is important for literacy programs to be planned with clear attention to what we know, based on rigorous research on a variety of topics, and conducted from multi-disciplinary perspectives. The body of multi-disciplinary, applied research on literacy is not intended to script the teacher's work. Rather, in the complex, fast-paced and indeterminate world of teaching and learning, it is important to have principles and standards that help educators organize, convey, teach about, and assess the appropriate expectations for their grade level. When publishers produce research-based materials consistent with the goals and standards of effective instruction, they can add greatly to teachers' ability to use best practices across the multiple subjects for which they are responsible in elementary school.

Professionalism, specialized knowledge, and pedagogy differentiate [the teachers'] work from the language learning support provided by engaged families.

In the case of teachers' communication with students about literacy, evidence from studies suggest options for instruction regarding optimal moments to use direct instruction, modeling, explanation, guided discovery, and other approaches. The historical absence of research-based guidance for teaching literacy was lamented by Block and Mangiere, and it was not until the 1990s, when they designed and conducted extensive research on a large sample of teachers working with diverse children, that we began to have a sense of what effective literacy instructors do in varied contexts. Their work resulted in an accessible set of principled case descriptions of successful teachers, tools for situating strategies in one's own lesson planning and learning activities, as well as tools for self-assessment and skill-building (Block and Mangieri 2003). In all cases, of course, the goal is to help all children reach independence and self-regulation as readers and writers. In response to the latest research, **LEAD21** builds Modeled Writing, Shared Writing, Interactive Writing, and Independent Writing into every writing lesson for students in Kindergarten and Grade 1. As students develop as young writers, the writing process is introduced in the second half of grade 1. By grade 3, students are working for extended timeframes on longer pieces of writing. Table 1 shows the structure of the Writing Process at Grades 3–5.

Ref. RD 11 M 8081

Table 1. Grades 3–5 Writing and Language

LEAD21 Writing Process Lesson Structure (Grades 3–5)

	DAY 1 • Prewrite	DAY 2 • Prewrite	DAY 3 • Prewrite	DAY 4 • Draft
WEEK 1: WRITING	**Activities Prior Knowledge** **Study the Writing Model** Talk about Text Characteristics of the form Organization of the form **Set Writing Goals**	**Study the Writing Model** Talk about Text **Choose a Topic** Reading/Writing Connection **Generate Questions** **Write and Confer** Independent Writing Conference with Students **Reflect on Writing**	**Study the Writing Model** Talk about Text **Organize Information** **Write and Confer** Independent Writing Conference with Students **Reflect on Writing** **Grammer**	**Study the Writing Model** Talk about Text **Write a First Draft** **Write and Confer** Independent Writing Conference with Students **Reflect on Writing** **Grammer**

	DAY 1 • Draft	DAY 2 • Revise	DAY 3 • Edit	DAY 4 • Publish/Present
WEEK 2: WRITING	**Study the Writing Model** Talk about Text **Write a First Draft** **Write and Confer** Independent Writing Conference with Students **Reflect on Writing**	**Revise the Model** **Revise the Draft** **Peer Review** Author's Chair **Write and Confer** Independent Writing Conference with Students **Reflect on Writing** **Grammar**	**Edit the Model** **Edit the Draft** **Write and Confer** Independent Writing Conference with Students **Reflect on Writing** **Grammer**	**Study the Writing Model** Talk about Text **Publish Final Draft** Choose a Format Review Evaluation Rubric **Present Final Draft** Author's Chair Class Library **Reflect on Writing**

Ref. RD 11 M 8081

Teachers have many children to attend to in classrooms. Classrooms are formal, public places where, by definition, teachers and students share less background knowledge of one another than in families. Schools operate within a climate of equitable treatment of students and focus on students' achievement of predetermined goals, assessment of growth toward those goals, and discussion of complex subject matter. Therefore, teaching writing is a matter of gradual release of control among learners who are widely diverse and in situations marked more by formality than the intimacy of family life. For these reasons, teachers need to know each student by a series of steps:

- administering pre-assessment
- identifying the needs of diverse learners
- differentiating instruction
- assessing progress
- maintaining a shared sense of the classroom as a place where written communication matters

Teachers also need to use formats for writing instruction that utilize a rich mixture of social interactions among students, and between teachers and students, for the purpose and practice of writing. This, too, is a deliberate feature of writing instruction in **LEAD21**.

Teachers scaffold students' development in a variety of ways. They vary the configurations for activities (whole class, pairs, small group) by offering varied kinds of instructional support (mini-lessons, conferring, questioning, modeling). And they pace writing in ways sensitive not only to students' readiness but also to a process that, for each child and for the entire group, moves from planning through completion of the writing task. In the case of writing, students in **LEAD21** experience all of these instructional arrangements depending on their needs, the teacher's instructional goals, and other features of the instructional context. Writing instruction thus can take varied forms, some quite different from the typical recitation format of Teacher Initiation-Student Reply-Teacher Evaluation (IRE) first described in research on classroom discourse by sociologist Hugh Mehan (1976) and replicated in many studies of classroom oral discourse.

Ref. RD 11 M 8081

Forms and Genres

Written literacy is a second-order symbol system in that it uses textual signs corresponding to the sound-based signs of meaning in speech. In alphabetic writing systems such as English, this means that letters represent sounds and combine in particular ways to make words: words are linked in sentences to represent objects or ideas. When sentences are linked, they are referred to as written "discourse" and generally take culturally patterned forms of meaning that we call "genres." Thus, oral and written systems of representation combine to enable verbal communication using culturally shared patterns of written marks.

Written literacy is a second-order symbol system in that it uses textual signs corresponding to the sound-based signs of meaning in speech.

Here is an opportunity for teachers to integrate instructional strategies and concepts in reading comprehension and written composition. In both cases, the learner is working with patterned uses of print beyond the level of the sentence. This means that closed-ended grammatical or phonemic-rule systems no longer support students when they are attempting to interpret or to design text. What supports students at this operating level are culturally shared schema (for example, story grammars) for composing or interpreting text. These are tied, however, to genres—that is, to the constellation of relationships among author role, purpose, intended audience, topic, and voice. Word choice, the crafting of sentences and the fulfillment of the schema for a particular genre give each text its particular voice. The authors' craft is as relevant a study in composition as it is in comprehension. When students are working at this level, it is not surprising that reading and writing mutually support one another and are often linked by discussion and contrastive analysis.

Table 2.

Examples of Writing Forms and Genres
Expository: class rules, social studies report, science report, news report, paragraph, comparison essay
Messages: friendly letter, e-mail, invitations, thank-you notes, announcements, business letter
Procedural: directions with maps, how-to
Reader Response: book reviews, letter to author, retellings
Poetry: quatrains, concrete, couplets, cinquains, haiku, free verse, limerick
Narrative: personal narrative, folktale, biography, autobiography, fable, realistic fiction, science fiction, mystery, short story, journal writing
Descriptive: descriptive posters with labels and captions, descriptive paragraph, essay
Persuasive: ads, letters, posters, paragraph, essay

Ref. RD 11 M 8081

In extensive research on reading, writing, and oral language in both student and adult book clubs, Florio-Ruane and Raphael found that texts under discussion often shaped talk and writing about them, not only in theme or topic, but in genre as well (Florio-Ruane with deTar 2001; Raphael 2004). For example, discussion of an autobiography frequently called forth personal narrative in response. Students who wrote in response to text in a "Stories of Self" book club unit further demonstrated increased length, complexity, conventionalized vocabulary, and character development as they alternately read, talked about, and wrote autobiographical text.

There is much to be learned about this synergy—how it might be applied to motivate writing or accelerate students' reading comprehension as well as their writing of extended text. **LEAD21**'s feature called Reading/Writing Connection continually works to build bridges between the students' reading and writing experiences. However, if genre helps us differentiate particular contexts and purposes for language as well as heuristics for structuring text, then it is important that genre study be central to comprehension instruction, through talk about text and the learning of composition strategies. In the words of Cope and Kalantzis:

> Genre is a category that describes the relation of the social purpose of text to language structure. It follows that in learning literacy, students need to analyze critically the different social purposes that inform patterns of regularity in language—the whys and the hows of textual conventionality, in other words (Cope and Kalantzis 1993).

Culture is not only central to the sociolinguistic processes occurring when one reads or writes an essay (or a history report, an editorial, a memoir, or a poem), but it is also sustained and transformed by the process. This is what researchers call the "reflexive" relationship between language (both oral and written) and culture (Rosaen and Florio-Ruane 2008).

To learn to read and write, students must master the sound patterns of their language, the ways these sounds combine into words, and ways that words combine to make sentences and longer units of discourse. They must also master the ways an author uses written conventions to express meaning. But students also learn how to use figures of speech—metaphors, similes, and symbols. It is the combination of a text's form and function along with the power of its rhetoric (all of which are taught and learned by means of literacy education) that makes literature the repository of a culture's experience.

Learning a New Literacy Future

Learning the second-order symbol system of written literacy is more complex, takes longer, and needs more systematic, instructional support than learning to speak. However, students do not come to reading and writing in school without some very powerful resources. Merely because the writing system does not require the use of speech (and the author need not be present in order for the reader to make sense of his or her text) does not mean that writing is not social. In fact, it is intrinsically social both in its development and in the ways that communities develop norms or rules for making meaning. This is especially the case when writers create text longer than a single sentence—when there is no precise way to predict how they will combine words and sentences to convey their ideas.

The social nature of writing appears early. Just as in speech, beginners do not "crawl before they can walk" but attempt to convey meaning in a holistic, if immature, way. Situation and context matter to intelligibility more than mastery of all the complexities of written expression. This means that scribbles can function as a birthday card. While it would be untrue to say that the young child who has made the card is really writing, it would be accurate to say that the child has acquired some knowledge about writing, which includes basic principles of orthography, text arrangement, language use for social functions, authorship, and audience. Good teaching capitalizes upon and does not underestimate the powerful context and emergent knowledge about text that very young children possess and continue to develop as they grow and learn.

Situation and context matter to intelligibility more than mastery of all the complexities of written expression. This means that scribbles can function as a birthday card.

It is a pleasing irony that research on what is called "pre-literacy" or "emergent" literacy has much to teach us that is far beyond how children initially approach writing (Temple, Nathan, Burris, and Temple 1988). It teaches us about how anyone approaches a new literacy—regardless of their mother tongue, learning style, or even the medium in which that literacy is expressed (for example, texting, e-mail, online socializing). Researchers find that just as young children participate actively in their acquisition of speech, those raised in a literate society also reach toward written literacy in their social and cognitive development even before coming to school (Teale and Sulzby 1986). Preschool children engage in handling books, pretending to read books aloud and silently, holding writing implements, as well as "writing" in strings of squiggly lines to imitate adult cursive (Clay 1975; Ferriero and Teberosky 1983).

Ref. RD 11 M 8081

Just as in speech acquisition, children actively engage in give and take around text with adults during activities that gradually extend their understanding. They elicit caregivers' authentic responses, as in the naming of pictures in storybook reading or in making "written" messages for adults (playing school or pretending to run a restaurant) (Ninio and Bruner 1976). They "read" what they have produced in the "restaurant" or "school." They follow along as adults read familiar books to them, often turning the page at appropriate points, imitating adult expression, and reciting familiar lines. Wanting very much to be participants and to master the conventions of the written code, young children imitate adults' reading and writing within both everyday situations and imaginary play. They move on to using the language in equally authentic projects and assignments as they grow able to take notes, write reports, craft mysteries, and so on. Parents welcome this, as do good teachers. **LEAD21** taps into this natural progression by linking Oral Language Development in Kindergarten and the beginning of Grade 1 with writing. The strand creates a seamless blending of children's natural oral language with early writing. But **LEAD21** does not lose sight of the mature ends of education toward which these scaffolded activities are directed. That end is the literate adult able to participate in the economy, cultural life, and democratic processes of the community.

Drawing from research on early language and literacy development, we can summarize some of the lessons learned that, taken as a whole and utilized by thoughtful teachers, seem to lead writers toward conventions of written language and toward authentic and increasingly mature writing.

- Assume interest and competence on the part of the student writer.
- Develop a relationship with the writer/student, and work on literacy activities in meaningful contexts.
- Share an interest with the writer's sense-making and problem-solving in the writing task at hand.
- Follow the writer's lead as he or she assumes the role of author.
- Teach with a spirit of inquiry by capitalizing on errors and uncertainty as opportunities to learn more about and support the learning of the writer (Florio-Ruane 1991).

In contemporary classrooms, where ELL students are reaching toward literacy in English, or where children are diverse in their starting points but are reaching for the shared goal of adult literacy, or where everyone (including the teacher) is reaching toward new literacies in an era with enormous amounts of information exchanged (via the Internet cell tower), we might all think of ourselves as emergent readers and

writers. In a sense, we are all lifelong students of writing as we master underlying principles and are encouraged by others with more experience to risk expressing ourselves and interpreting the expressions of others in new ways. In spite of this contemporary plethora of information, it is yet possible to organize, prioritize, and write a curriculum with a strong research base, an array of instructional best practices, and wise assessments that are both valid and informative. These are the goals of the writing strand in **LEAD21**. The following table offers key examples of this process as it links program content with research-based knowledge about the learning and development of writing and effective instructional practices.

Ref. RD 11 M 8081

Table 3.

LEAD21 Writing and Language Arts Instructional Pedagogy	
Research Says	**LEAD21 Delivers**
All human societies engage in talk. Most activities in society involve the uniquely human capacities of teaching, learning and using language (Cole 1996).	Activate Prior Knowledge begins every writing lesson.
No matter how emergent literacy presents itself at the classroom door, good teachers with strong writing programs capitalize on the foundational learning of language and literacy that young children bring with them to school (Heath 1983).	Activate Prior Knowledge includes overt encouragement of students' sharing their past experiences and present abilities to express themselves.
Cole notes that the interdependence of child development with adults' "arrangement of environments that optimize that development" leads us to another Vygotskian idea—that of a "zone of proximal development" (Cole 1996).	Modeled Writing by the teacher leads into Shared Writing and Interactive Writing with the whole class as a regular feature of the Writing and Language Arts strand in Kindergarten and Grade 1. In Grades 2–5, teacher modeling is an integral part of the various stages of the writing process that frames instruction.
As the student becomes more proficient, the teacher gradually releases control, offering less assistance until the student has assumed independent, self-regulated ability to complete the learning task (Au, et al. 1995).	Modeled Writing, Shared Writing, and Interactive Writing all give way to Independent Writing and Peer Reviews in Kindergarten and Grade 1. In Grades 2–5 students use a dynamic and flexible writing process to structure their work over extended timeframes. Teacher modeling, peer review, and partner work are all central to the process.
Ultimately thought, which began on the social plane, is internalized and personalized in cognitive networks of words, ideas, and experiences. These have been learned and have meaning in the company of others. They are the stuff of experience out of which students write (Rosaen and Florio-Ruane 2008).	In **LEAD21** students • Choose topics based on experience and interests • Develop and research ideas • Organize information into logical patterns for communication • Interact with peers for review and revisions • Write and confer daily
Texts under discussion often shaped talk and writing about them, not only in theme or topic, but in genre as well. (Florio-Ruane with deTar 2001; Raphael 2004)	Students are encouraged to Talk About Text in **LEAD21** through a series of teacher-led questions. Students discuss the author's word choice and the author's text structure as they learn the form and function of the genre. Also Book Corner encourages further discussion of texts read in the class.
• Assume interest and competence on the part of the student writer. • Develop a relationship with the writer/ student, and work on literacy activities in meaningful contexts. • Share an interest with the writer's sense-making and problem-solving in the writing task at hand. • Follow the writer's lead as he or she assumes the role of author. • Teach with a spirit of inquiry by capitalizing on errors and uncertainty as opportunities to learn more about and support the learning of the writer (Florio-Ruane 1991).	Developing the teacher-student relationship as part of a writing community is demonstrated throughout the writing lessons in **LEAD21,** during which students engage in the complete process. • Study and discuss the writing model that is part of the learning structure in **LEAD21** throughout the writing process from first draft to the final edit of their writing. • Make reading/writing connections to the text they are currently reading in the unit, including vocabulary and comprehension skills. • Write and confer throughout the writing process with the teacher as well as their peers. • Reflect on their own writing with the use of Evaluation Rubrics. • Utilize grammar skills in their writing. • Use Peer Evaluations as well as Revising Checklists to revise their writing. • Use self-evaluation to improve their writing.

Ref. RD 11 M 8081

Author Biography

Dr. Susan Florio-Ruane is Professor of Teacher Education and served as a Senior Researcher in the MSU Institute for Research on Teaching from 1977–87. In that role she co-coordinated the Written Literacy Forum, a collaborative research project bringing together the insights of campus-based ethnographers and educational psychologists with those of elementary and secondary school teachers of writing. During her time with the Institute for Research on Teaching, she also received funding from the National Institute of Education for a study of "Schooling and the Acquisition of Written Literacy."

From 1987–93, she coordinated the Learning Community Teacher Education Program where she pursued an active program of research on Learning to Teach Writing. Her paper entitled "The Social Organization of Classes and Schools" won the 1990 Division K Research in Teacher Education Award of the American Educational Research Association (AERA).

Dr. Florio-Ruane served as President of the Council on Anthropology and Education from 1994–96. She teaches ethnographic research methods and analysis of discourse at the doctoral level as well as masters- and undergraduate-level courses in literacy education and has written widely about ethnographic and sociolinguistic research, literacy education, and the preparation of teachers. She was an External Evaluator of the federally funded National Center for Research on Writing at University of California, Berkeley and Carnegie Mellon University, serves on the advisory board of the Teachers College Press Practitioner Inquiry Series, and was the principal investigator in a study of "Autobiographies of Education and Cultural Identity: Preparing Teachers to Support Literacy Learning in Diverse Classrooms" funded by the Spencer Foundation.

She is currently a senior researcher at the Michigan State University Literacy Achievement Research Center (LARC), where she studies and teaches about effective literacy instruction in urban schools. She has won two awards from her university for outstanding teaching of both graduate and undergraduate students and is Co-Lead Editor of the *Journal of Literacy Research* published by the National Reading Conference.

Dr. Florio-Ruane has published in many books and journals including *The American Educational Research Journal, Anthropology and Education Quarterly, The Elementary School Journal, Journal of Curriculum Studies, Theory into Practice, Research in the Teaching of English, Teaching and Teacher Education: An International Journal of Research and Studies,* and *English Education*. Her book (with Julie deTar) entitled, *Conversation and Personal Narrative: Transforming Teacher Learning about Literacy and Culture,* was published by Lawrence Erlbaum (2001) and received the Edward L. Frye Award from the National Reading Conference.

Ref. RD 11 M 8081

References

Au, K. H., J. M. Mason, and J. A. Scheu. 1995. *Literacy Instruction for Today*. NY: HarperCollins.

Au, K. H., T. E. Raphael, and K. Mooney. 2008. In S. B. Wepner and D. S. Strickland, eds. *The Administration and Supervision of Reading Programs, Fourth Edition.* New York, NY: Teachers College Press.

Barton, D. 1994. *Literacy: An Introduction to the Ecology of Written Language, First Edition.* Malden, MA: Blackwell Publishers Ltd.

Block, C. C., and J. N. Mangieri, 2003. *Exemplary Literacy Teachers: Promoting Success for All Children in Grades K-5.* New York, NY: Guilford Press.

Brown, R. 1977. Cited in Cazden, C.B. 1988. Classroom Discourse. Portsmouth, NH: Heinemann Educational Books.

Bruner, J. S. 1996. *The Culture of Education*. Cambridge, MA: Harvard University Press.

Cazden,C. B. 1972. Child language and education. NY: Holt, Rinehart, & Winston.

Cazden, C. B. 1988. Classroom discourse. Portsmuth, NH: Heinemann.

Clay, M. 1975. *What Did I Write?: Beginning Writing Behaviour.* Portsmouth, NH: Heinemann. Ferriero, E., and A. Teberosky. 1983. Writing Before Schooling. Portsmouth, NH: Heinemann.

Cole, M. 1996. *Cultural Psychology: A Once and Future Discipline.* Cambridge, MA: Harvard University Press.

Cook-Gumperz, J. 1975. The child as practical reasoner. In M. Sanchez and B. Blount, eds. *The Sociocultural Dimensions of Language Use: Language, Thought, Culture.* New York, NY: Academic Press.

Cope, B., and M. Kalantzis. 1993. *The Powers of Literacy: A Genre Approach to Teaching Writing.* Pittsburgh, PA: The University of Pittsburgh Press. 2.

Dewey, J. 1990. The School and society/ The child and the curriculum. Chicago: The University of Chicago Press.

Erickson, F., Qualitative research. Cazden, C., Classroom discourse. 1986. In M. C. Wittrock, ed. *Handbook of Research on Teaching, Fourth Edition.* New York, NY: MacMillan.

Erickson, F. 2004. *Talk and Social Theory: Ecologies of Speaking and Listening in Everyday Life.* London, UK: Polity Press.

Ferdig, Richard. 2001. Psychological investigations of education with technology: Understanding what makes a "good innovation." Unpublished doctoral dissertation. East Lansing, MI: Michigan State University.

Florio-Ruane, S. 1991. Instructional conversations in learning to write and learning to teach. In L. Idol, and B. F. Jones, eds. *Educational Values and Cognitive Instruction: Implications for Reform.* Hillsdale: NCRLL/Erlbaum. 365–386.

Florio-Ruane, S., with J. deTar. 2001. *Teacher Education and the Cultural Imagination: Autobiography, Conversation and Narrative.* Mahwah, NJ: Lawrence Erlbaum Associates.

Gee, J. P. 2008. *Social Linguistics and Literacies: Ideology in Discourses, Fourth Edition.* London UK: Routledge.

Gumperz, J. J. 1982. *Language and Social Identity: Studies in Interactional Sociolinguistics.* Cambridge UK: Cambridge University Press.

Heath, S. B. 1983. *Ways with Words: Language, Life, and Work in Communities and Classrooms.* Cambridge UK: Cambridge University Press.

Luria, A. R. 1996. In M. Cole, *Cultural Psychology: A Once and Future Discipline.* Cambridge, MA: Harvard University Press. 108.

Mehan, H. 1976. *Learning Lessons.* Cambridge, MA: Harvard University Press.

Morrow, L. M. 2008. *Literacy Development in the Early Years: Helping Children Read and Write.* (Sixth Edition). Englewood Cliffs: Prentice Hall.

Ninio, A., and J. Bruner. 1976. The achievement and antecedents of labelling. *Journal of Child Language*, 5:1-15.

Raphael, T. E., S. Florio-Ruane, M. George, N. L. Hasty, and K. Highfield. 2004. *Book Club Plus: A Literacy Framework for the Primary Grades.* Lawrence, MA: Small Planet Communications, Inc.

Rosaen, C., and Florio-Ruane, S. 2008. The metaphors by which we teach: experience, metaphor, and culture in teacher education. In M. Cochran-Smith, S. Feiman-Nemser, D. J. MacIntyre, and K. E. Demers, eds. *Handbook of Research on Teacher Education: Enduring Questions in Changing Contexts, Third Edition.* New York, NY: Routledge.

Teale, W. H., and E. Sulzby, eds. 1986. *Emergent Literacy: Writing and Reading.* Norwood, NJ: Ablex Publishing.

Temple, C., R. Nathan, N. Burris, and F. Temple. 1988. T*he Beginnings of Writing, Second Edition.* Boston, MA: Allyn & Bacon.

Vygotsky, L. S. 1934/transl.1987. Thinking and speech. New York: Plenum Press.

Vygotsky, L. S. 1996. In M. Cole, *Cultural Psychology: A Once and Future Discipline.* Cambridge, MA: Harvard University Press. 110–111.

WRIGHT GROUP

LEAD21®

LITERACY EQUITY ACCELERATION DIFFERENTIATION

Phonemic Awareness and Phonics Instruction

Program Research Base

Mc Graw Hill Wright Group

Contents

Executive Summary 1
Phonemic Awareness and Phonics Instruction in LEAD21
- Phonemic Awareness and Phonics 2
- LEAD21 Model for Effective Phonemic Awareness and Phonics Instruction 3
- Phonemic Awareness Instruction in LEAD21 5
- Phonics Instruction in the LEAD21 Kindergarten Program 6
- Phonics Instruction in the LEAD21 Grade 1 and Grade 2 Program 8
  - Whole-Group Instruction 8
  - Small-Group Work 12
  - Independent Practice of Phonics Elements 14
- The Phonics-Spelling Connection in LEAD21 14
- Word Study and Vocabulary in LEAD21 15

Conclusion 16
LEAD21 Phonics Pedagogy 17
Author Biography 18
References 19

Ref. RD 11 M 8082

Phonemic Awareness and Phonics Instruction in LEAD21

Executive Summary

Phonemic awareness and phonics have been identified as two of the five essential elements of reading instruction (National Reading Panel 2000) and represent a critical component of instructional programs for emergent and beginning readers. **Wright Group LEAD21** provides systematic and explicit instruction in phonemic awareness and phonics to ensure that all students have the basic tools necessary to break the code and become independent and strategic readers.

Instruction related to phonemic awareness, the ability to distinguish and manipulate the individual sounds (phonemes) in spoken language, begins from the very start of the school year in kindergarten. Children are taught to hear and distinguish rhymes, blend and split syllables, and perform phonemic segmentation and manipulation tasks. The phonemic awareness lessons are 10-15 minutes in duration, resulting in 20 hours of instruction over the school year, as recommended by the National Reading Panel. Lessons are taught in a whole-group setting, with many opportunities for children to practice and apply skills in individual literacy station activities. A phonemic awareness component continues into the first grade program.

Instruction related to phonics, the relationship between the sounds of language and the alphabetic symbols (letters) used to represent those sounds, is introduced in kindergarten and further developed in first and second grades. Phonics is taught and reviewed in a whole-group setting in kindergarten through Grade 2. Students are also provided with the opportunity to practice phonic elements individually in centers.

LEAD21 teaches sound-symbol connection in the context of appealing, accessible texts at an appropriate interest level. Students are engaged in blending sounds and reading Decodable Readers. The elements taught in the phonics lessons drive the word list in the weekly spelling lessons for first grade and second grade.

LEAD21 draws upon the most current research findings and best practices in early literacy instruction to support students' acquisition of phonemic awareness and phonics skills. The concepts are carefully sequenced from the most accessible to the most complex, with multiple opportunities for review, reinforcement, and practice.

Ref. RD 11 M 8082

Phonemic Awareness and Phonics Instruction in LEAD21

Phonemic Awareness and Phonics

Reading has four cueing systems: semantic, syntactic, pragmatic, and graphophonic. The semantic system focuses on the meaning of individual words. The syntactic system focuses on word order in sentences. The pragmatic system focuses on social and cultural context. And, the graphophonic system focuses on the alphabetic symbols (letters) used to represent the forty-four different sounds in the English language. Proficient readers are able to use all of the cueing systems simultaneously and effortlessly to construct meaning from written texts.

After five years of listening to the language and up to four years of speaking the language, students come to school with some facility for using the semantic, syntactic, and pragmatic cueing systems. However, most students have the least amount of experience with the graphophonic cueing system. That is the reason that phonemic awareness and phonics justifiably receive the time and attention that they get in early elementary classrooms.

Phonemic awareness is the ability to distinguish and manipulate the individual sounds (phonemes) in spoken language. Instruction in phonemic awareness includes these skills:

- phoneme identification
- phonemic isolation
- separating the beginning sound in a word (onset) from the rest of the sounds in the word (rime)
- blending individual sounds into a spoken word
- separating (segmenting) a spoken word into individual sounds
- deleting and manipulating phonemes in a word

(Additional skills are covered in **LEAD21** in the broader category of phonological awareness: identifying rhyming words, word awareness, and syllable segmentation.)

Stanovich (1993–1994) emphasizes the importance of phonemic awareness, stating that it is a potent predictor of success in learning to read. His research found that phonemic awareness is more highly correlated to reading proficiency than tests of general intelligence, reading readiness, and listening comprehension. Adams (1990) found that lack of phonemic awareness is the most accurate predictor of the failure to learn how to read.

Ref. RD 11 M 8082

Phonics is the relationship between the sounds of language and the alphabetic symbols (letters) used to represent those sounds. Knowledge of phonics helps beginning and struggling readers learn how to read and spell. The English language is based on the alphabetic principle, and hence understanding this principle is absolutely essential for learning how to read English. When students understand the connection between phonemes and the alphabetic symbols, they can map these sounds and symbols together to break the code. Students who succeed in breaking the code do not need to devote energy and attention to print processing. Processing becomes automatic. Then students can focus on the important task of comprehending—the true purpose of reading.

Phonics has been one of the most polarizing issues in the history of reading instruction in American education. Educators have engaged in debates about how much phonics should be taught, when it should be taught, how it should be taught, and even whether it should be taught at all! However, four major research reviews over a period of two decades have yielded consistent findings on the importance of phonics in reading instruction (Anderson, et al. 1985; Adams 1990; Snow, et al. 1998; National Reading Panel 2000). One simply can no longer dispute the critical role of phonics in reading instruction.

One simply cannot any longer dispute the critical role of phonics in reading instruction.

LEAD21 draws upon the most current research findings and best practices in early literacy instruction to develop a program that supports students' complete acquisition of phonemic awareness and phonics skills. The concepts are carefully sequenced from the most accessible to the most complex, with multiple opportunities for review, reinforcement, and practice.

LEAD21 Model for Effective Phonemic Awareness and Phonics Instruction

LEAD21 uses a framework based on sound research to teach phonemic awareness and phonics skills. The lessons begin with explicit instruction and move students to independent use of a skill, as described below (Pearson and Gallagher 1983).

Introduce the Skill. In the first level of instruction, the teacher explains the phonemic awareness or phonic element. Then the teacher engages the students in reproducing the sound (or reading the rhyming pictures, and so on). This instructional process takes place in a whole-group setting. This level of explicit instruction has the highest level of teacher support.

Ref. RD 11 M 8082

Model the Skill. The teacher models the use of the phonemic awareness or phonics element. The teacher might blend sounds into words, or segment a word into sounds. The teacher modeling is done using the Theme Reader: Concepts Big Book, the board, or the picture or word cards. Teacher modeling takes place during whole-group instruction, which is followed up or reviewed in small groups, as needed. This level of instruction also has a high level of teacher support.

Practice the Skill. The teacher invites students to participate in the activity. The students blend, segment, or spell with teacher support. The teacher points to the letters on the board and blends along with the students. In a phonics activity, the teacher might also engage students in shared writing to provide practice for the focused phonics element. When the students demonstrate a level of competence, the teacher withdraws his/her oral support but continues to point. The amount of teacher support is lower at this level of instruction; the level of student control increases.

Guided Literacy. The teacher relinquishes the responsibility of blending, segmenting, reading, or writing for, to, or with the students. The teacher provides support as the students blend, segment, or spell words. The teacher monitors and evaluates the students' level of proficiency to determine when they seem ready to move on to doing the task on their own or learning a new phonic element. Guided practice is usually done in small groups. The teacher's role is to observe, monitor, and coach, if needed.

Independent Use. This occurs in independent reading and writing settings rather than in a whole-group or a small-group setting. Students practice and solidify their knowledge of phonics elements via literacy stations, independent reading of Decodable Readers, and writing. The students use their knowledge of phonics elements in meaningful reading and writing. Teachers give students encouragement and support through questioning and reminders, which help them effectively apply the taught skills.

Ref. RD 11 M 8082

Phonemic Awareness Instruction in LEAD21

Phonemic awareness instruction begins in kindergarten and continues through first grade in **LEAD21.** In accordance with the National Reading Panel recommendations, phonemic awareness is explicitly and systematically taught in a carefully developed scope and sequence of lessons and routines. The daily phonemic awareness lessons combined with the daily phonics lessons are ten to fifteen minutes in duration, totaling approximately twenty hours of instruction over the school year, per the National Reading Panel's recommendations, and are presented in a whole-group format.

The phonological and phonemic awareness instruction in **LEAD21** begins with the most basic and accessible lessons. Adams (1990) identified five levels of phonemic awareness activities from the simplest to the most complex:

- demonstrating an ear for the sounds of words, measured by knowledge of nursery rhymes
- comparing and contrasting the sounds of words for initial, medial, and final sound matches
- splitting off and blending together phonemes of single-syllable words
- performing phonemic segmentation (such as counting out the number of phonemes in a word)
- performing phoneme manipulation tasks (such as adding or deleting a particular phoneme and regenerating a word from the remainder)

The phonemic awareness instruction in **LEAD21** begins with the most basic and accessible lessons during the first weeks of kindergarten.

In **LEAD21**, phonemic awareness instruction in kindergarten was developed with the goal of introducing the simpler activities in the above list. The students are engaged in distinguishing individual phonemes in words, identifying matching phonemes, and phoneme manipulation tasks.

The National Reading Panel recommends teaching letters of the alphabet in conjunction with phonemic awareness lessons. This helps students apply their phonemic awareness skills to reading and writing. **LEAD21** used that recommendation in developing the phonemic awareness lessons for units three through eight in the kindergarten program. These lessons introduce and review the phonetic elements with phonemic awareness instruction.

Ref. RD 11 M 8082

Phonological and phonemic awareness lessons in the **LEAD21** kindergarten program feature these skills:

- Orally segmenting words into syllables
- Phoneme matching initial, final, and medial sounds
- Orally blending words into onsets and rimes
- Blending phonemes to make one-syllable words

The National Reading Panel points out that while phonemic awareness instruction is a "key component that contributes significantly to the effectiveness of a beginning reading and spelling program, it does not constitute a complete reading program." The **LEAD21** kindergarten program carefully balances the phonemic awareness lessons with other essential components of literacy acquisition, including oral language development, vocabulary development, story comprehension, and content area concepts. The phonemic awareness lessons are structured to provide a natural and logical bridge to phonics instruction.

Phonemic awareness instruction in kindergarten and first grade appears at the beginning of each day, and it is integrated into phonics instruction. A Phonemic Awareness Warm Up precedes the explicit instruction of specific phonic elements. For instance, in Unit 5 of first grade, the students work on reading and spelling words with the /ō/ sound spelled *o_e*. Before the students are shown any letters, the teacher reads a list of words and asks the students to raise their hands when they hear a word that contains the /ō/ sound. In follow-up activities, students can apply their experience in blending phonemes to decoding words with the /ō/ sound.

Phonics Instruction in the LEAD21 Kindergarten Program

When students begin to gain some facility with alphabetic knowledge in kindergarten, phonics is introduced. The first phonics lessons in kindergarten are focused on consonant sounds. Consonant sounds are easy for students to hear and identify because they are fairly regular. Instruction begins with the consonants that are among the easiest for students to hear and distinguish: /s/, /m/, and /d/. After a week of practice, three new consonants are introduced: /p/, /h/, and /t/. A student who knows consonant sounds and has some facility in the other cueing systems has a very powerful tool in his/her arsenal to take on the task of reading. In the supportive setting of a lesson using the Differentiated Readers, students are offered the opportunity to try applying their fledgling reading skills.

Ref. RD 11 M 8082

When the first five consonants have been introduced, the first vowel, short *a*, is taught. With a repertoire of consonants, short *a*, and extensive practice in phoneme blending, kindergarten students using **LEAD21** are ready to decode one-syllable words such as *pad* and *map*. Students are now well on their way to successful experiences in breaking the code.

The instructional sequence in Kindergarten introduces a new phonics element on Day 1 and Day 3 of each week, and then reviews skills on Day 2 and Day 4 of each week. Then all of the phonics elements introduced during the week are again reviewed on the fifth day of instruction. The fourth week of the month is a review week; no new phonics elements are taught. This basic weekly sequence of instruction continues through the first grade program, described in the next section.

In the kindergarten program, the phonics elements introduced to students are the consonant sounds and the short vowels. To ensure continued success, the phonics lessons in Units 1 and 2 of the first grade program review virtually all the consonants and short vowel sounds before any new elements are introduced.

See the charts on pages 9 through 11 for an overview of the phonics instruction in Kindergarten through Grade 2.

Phonics Instruction in the LEAD21 Grade 1 and Grade 2 Program

Phonics instruction in the first and second grade program is carefully developed through a variety of proven experiences and routines. Reflecting research recommendations (Anderson et al., 1985; Adams 1990; Snow, et al. 1998; National Reading Panel 2000), the instruction is explicit and systematic. Students receive instruction in whole group, and they get independent practice in Study Stations. The spelling concepts taught in each lesson are derived from the phonics elements.

The basic sequence for Grade 1 phonics instruction is carefully laid out so that two new phonic elements are introduced each week:

- A new phonic element is introduced on Day 1, then reviewed and reinforced on Day 4.
- Another new phonic element is introduced on Day 3, then reviewed and reinforced on Day 2 of the following week.
- Day 5 offers time for pursuing an Inquiry project.
- Week 4 is designated as a review week—no new phonic elements are taught.

The sequence in Grade 2 phonics instruction reflects the students' growing knowledge:

- A new phonic element is introduced on Day 1.
- The new element from the previous week is reviewed and reinforced on Day 3.
- Day 5 offers time for pursuing an Inquiry project.
- Week 4 of each unit is a review week—no new phonic elements are taught.

Whole-Group Instruction

In whole-group lessons, the teacher introduces words with the phonic element, models blending, and leads the students in practicing blending the sounds. The whole-group format is an efficient way to provide all students with key information on the phonic element that will be practiced throughout the week of instruction. The whole-group activities are interactive and scaffolded to allow all students to participate. The teacher follows up whole-group lessons with Study Stations to reinforce instrction. There is also opportunity for quick reviews in small groups.

Also covered in the whole-group setting is Spelling and Word Study instruction. Spelling lists change weekly, providing focused practice for the phonics skills. Word Study skills are introduced once per week to the whole class and are practiced once during that week. A *Phonics Companion* page is written for each Word Study skill and phonic element. Although the instruction for all these strands takes place in whole-group, the *Phonics Companion* is completed independently.

Ref. RD 11 M 8082

Grade K Whole-Group Phonics Instruction				
Day 1	**Day 2**	**Day 3**	**Day 4**	**Day 5**
Phonics • Introduce Skill • Phonemic Awareness Warm-Up • Practice Segmenting • Practice Skill • Use Alphabet/ Sound Card • Connect Sound to Letter • Practice Connecting Sound to Letter	**Phonics** • Review Skill • Phonemic Awareness Warm-Up • Review Connecting Sound to Letter • High-Frequency Words • Reread Decodable Reader	**Phonics** • Introduce Skill • Phonemic Awareness Warm-Up • Practice Segmenting • Practice Skill • Use Alphabet/ Sound Card • Connect Sound to Letter • Practice Connecting Sound to Letter • High-Frequency Words • Introduce Pre-Decodable or Decodable Readers	**Phonics** • Review Skill • Phonemic Awareness Warm-Up • Practice Skill • Review Connecting Sound to Letter • Practice Word Families • High-Frequency Words • Reread Pre-Decodable or Decodable Reader	**Phonics** • Phonemic Awareness Warm-Up • Segment Words • Review Skills • Practice Skills
Letter Writing • Write Letter • Practice Writing Letter	**Letter Writing** • Review Writing Letter • Practice Writing Letter	**Letter Writing** • Write Letter • Practice Writing Letter	**Letter Writing** • Review Writing Letter • Practice Writing Letter	

Week 4 includes a review of skills.

Ref. RD 11 M 8082

Grade 1 Whole-Group Phonics Instruction

Day 1	Day 2	Day 3	Day 4
Phonics • Introduce Skill • Phonemic Awareness Warm-Up • Use Sound-Spelling Card **1.** Show Example Words **2.** Model Blending **3.** Practice Blending **4.** Practice Blending in Context • High-Frequency Words • Introduce Decodable Reader	**Phonics** • Review Skill • Phonemic Awareness Warm-Up • Practice Blending* • Practice Blending in Context* • Build Words* • Review Word Pattern* • High-Frequency Words • Reread Decodable Reader	**Phonics** • Introduce Skill • Phonemic Awareness Warm-Up • Use Sound-Spelling Card **1.** Show Example Words **2.** Model Blending **3.** Practice Blending **4.** Practice Blending in Context • High-Frequency Words • Introduce Decodable Reader	**Phonics** • Review Skill • Phonemic Awareness Warm-Up • Practice Blending* • Practice Blending in Context* • Build Words* • Review Word Pattern* • High-Frequency Words • Reread Decodable Reader
Spelling • Pretest	**Spelling** • Practice	**Spelling** • Practice	**Spelling** • Practice
	Word Study • Introduce Skill		**Word Study** • Review Skill

* Lessons include two of the review activities listed: Practice Blending, Practice Blending in Context, Build Words, Review Word Pattern.

The spelling posttest is administered on Day 5.

Week 4 includes a review of skills.

Ref. RD 11 M 8082

Grade 2 Whole-Group Phonics Instruction			
Day 1	**Day 2**	**Day 3**	**Day 4**
Phonics • Introduce Skill • Use Sound-Spelling Card **1.** Study Example Words **2.** Model Blending **3.** Practice Blending **4.** Practice Blending in Context • High-Frequency Words • Introduce Decodable Reader	**Word Study** • Introduce Skill • High-Frequency Words • Reread Decodable Reader	**Phonics** • Review Skill • Practice Blending* • Practice Blending in Context* • Build Words* • Review Word Pattern* • High-Frequency Words • Reread Decodable Reader	**Word Study** • Review Skill
Spelling • Pretest	**Spelling** • Practice	**Spelling** • Practice	**Spelling** • Practice

* Lessons include two of the review activities listed: Practice Blending, Practice Blending in Context, Build Words, Review Word Pattern.

The spelling posttest is administered on Day 5.

Week 4 includes a review of skills.

Ref. RD 11 M 8082

Small-Group Work

One of the unique aspects of **LEAD21** is the built-in differentiated instruction at four levels of achievement for small-group instruction:

- Intensive—students in need of the most support
- Strategic—students in need of extra support
- Benchmark—students working at the expected level of achievement
- Advanced—students exceeding the expected level of achievement

Students working at the Intensive and Strategic levels receive multiple and varied opportunities to practice the phonic elements in the lesson, including opportunity to reread the Decodable Reader.

Phonics review in small groups gives students the opportunity to apply the designated phonics skill under the watchful eye of the teacher. The teacher is ready to step in and provide a scaffold or a bit of coaching as needed. Small-group work consists of a variety of experiences to ensure success: Intensive and Strategic students can read Decodable Reader, and teachers are encouraged to isolate the phonic element when it is encountered while all groups are reading Differentiated Readers. Each of these experiences is now discussed in more detail below.

Students working at the Intensive and Strategic levels receive multiple and varied opportunities to practice the phonics elements in the lesson, including opportunity to reread the Decodable Reader.

1. Reading Decodable Readers

LEAD21 includes Decodable Readers to give students practice in applying the phonic elements that they have learned. Decodable Readers are books that are specially written to infuse a larger than normal number of words utilizing a specific phonic element. The balance of high-frequency words and words utilizing the focused phonic element gives students the unique opportunity to engage in practicing sound-symbol correspondence while actually reading. Juel and Roper-Schneider (1985) found that first-grade students' knowledge of phonics and their overall reading achievement were both positively correlated with their opportunities to read from decodable texts. Students' accuracy and word recognition skills have also been shown to be positively and significantly correlated with reading a greater number of highly decodable texts (Hoffman et al. 2001).

Teachers might follow up the review of the whole-group lesson by engaging the small group in reading a decodable book. Students will get multiple opportunities to apply the phonic element while reading the book. The same book can then be used for independent practice. In **LEAD21,** Decodable Readers are only one of the

Ref. RD 11 M 8082

types of books available in the program. There are also the following: Theme Reader: Literature Big Book (Grades K–2); Theme Reader: Concepts Big Book (Grades K–2); Differentiated Readers (Grades K–5); Theme Reader: Literature Little Book (Grades K–2). The Decodable Readers have a very specific purpose—to practice applying phonic elements while reading. All students have the Differentiated Reader as the main text and get to practice other aspects of reading by using the other books included in the program.

All students have the Differentiated Reader as the main text and get to practice all other aspects of reading by using the other books included in the program.

2. Practicing in the *Phonics Companion*

LEAD21 provides a *Phonics Companion* as another option for practicing phonic elements. Teachers can use the *Phonics Companion* to solidify instruction. Some students will benefit from additional instruction, especially instruction that involves an additional modality of learning. In the other phonics lessons, students have used listening, speaking, and reading. The *Phonics Companion* adds the modality of writing. Teachers can encourage students to pronounce the sounds while writing in the workbook to involve the students in simultaneously seeing, hearing, reading, and writing, which engages them in a powerful learning experience.

3. Phonic Elements Within the Core Text

The ultimate goals of phonics instruction are for students to break the code to make print processing automatic, and for them to have access to effective use of the graphophonic cueing system when they need it (Stahl 1992). While students read the selection in the core reading text, they will encounter words using the focused phonic element. This offers students the opportunity to apply the skill that they have learned in a variety of phonics lessons (whole group, small group, Decodable Reader, *Phonics Companion*) to an in-context reading experience.

The experience of encountering a phonic element while reading a "regular text" (as opposed to a decodable text) supports students in using the cueing systems fluidly and simultaneously. Students are also explicitly taught to use context clues in **LEAD21**. Context clues refer to the use of syntactic and meaning clues to help identify an unknown or difficult word in a text that is being read. Knowledge of phonic elements provides extra confirmation to the students' use of context clues. All of the selections in core reading texts include words that utilize the focused phonic element.

Independent Practice of Phonic Elements

The final level of the early literacy lesson framework is independent application of the skills taught. Students are provided numerous opportunities to apply phonics skills in **LEAD21.** They can independently read the variety of texts provided in the program. Students can practice applying phonics skills in tasks and games at the Study Stations. They can apply phonics skills in their writing. Most of all, students can apply their phonics skills in independent *Phonics Companion* work, as well as independent reading of Decodable Readers, Differentiated Readers, trade books, books in the classroom and other libraries, and books that families purchase for children in bookstores and school book club programs.

The Phonics-Spelling Connection in LEAD21

The elements taught in the phonics lessons drive the word list in the weekly spelling lessons for first grade and second grade. The reciprocity among reading, phonics, and spelling has been clearly documented in numerous studies (Bear and Templeton 1998; Ehri 1997, 237–269; Juel 1991, 2:759–788). The National Reading Panel reports that phonics instruction contributes to students' ability to apply their knowledge of the alphabetical system to spell words. Spelling engages students in encoding words—a higher application of sound-symbol relationships, thus deepening their knowledge of phonics. Since phonics and spelling are aligned in **LEAD21**, the spelling lessons follow the same scope and sequence of skills as the phonics elements taught—starting with the simplest and gradually increasing in difficulty to the most complex. All spelling lists are introduced by administering a spelling pretest to students early in the week. However, before the pretest is administered, the students have already participated in a variety of activities using the focused phonics elements. They have done a phonemic awareness warm-up led by the teacher, using the sounds featured in the week's spelling list. They have read sentences featuring words using the spelling pattern. They may have read a Decodable Reader with the same sound-spelling elements in a small group or individually. Therefore, students come to the spelling pretest having already experienced the spelling pattern in a number of ways.

Students are given multiple opportunities to practice spelling the words throughout the week. They are engaged in activities such as spelling games, word sorts, literacy station tasks, and word hunts. The teacher continues to stress the spelling pattern used in the word list. Most of the spelling lessons are taught in the whole-group setting.

It is important that the spelling patterns become part of the students' writing vocabulary. The goal of spelling in **LEAD21** is to teach students how to spell—not to teach them to spell the words on the weekly list.

Ref. RD 11 M 8082

Word Study and Vocabulary in LEAD21

Knowledge of phonics elements and spelling patterns significantly contribute to the goal of becoming a proficient reader. However, there are other features of language that children need to know. In the grades 1 and 2 Word Study sequence of instruction, students learn affixes, contractions, compound words, plural constructions, inflected endings, and multisyllabic words. In **LEAD21**, the Vocabulary Strategies sequence of instruction covers such topics as homophones, synonyms, antonyms, word relationships, and dictionary use.

In all grades, the goal of **LEAD21** is to teach students word-learning skills that support comprehension. For example, explicit instruction in prefixes and suffixes such as *pre-*, *mis-*, and *-tion* supports students in deriving the meaning of unknown words.

Ref. RD 11 M 8082

Conclusion

LEAD21 provides teachers with a systematic and explicit phonics instructional plan as part of an integrated literacy program. Students are taught that their phonics work is a means to an end; that they can use phonics to break the code in engaging, age-appropriate texts. The program provides carefully leveled texts for students to begin applying phonics lessons, as well as texts with graduated difficulty for students who are immediately ready to work on broader comprehension tasks.

Ref. RD 11 M 8082

LEAD21 Phonics Pedagogy	
Research Says	**LEAD21 Delivers**
Phonemic awareness is a "potent predictor of success" (Stanovich 1993–1994).	Daily phonemic awareness routines.
Phonics plays a critical role in reading instruction, (Anderson, et al. 1985; Adams 1990; Snow, et al. 1998; National Reading Panel 2000).	Daily phonics routine linked to Spelling strands in Grades 1 and 2.
National Reading Panel recommends explicit and systematic phonics instruction, averaging twenty hours per academic year (National Reading Panel 2000).	Daily phonics instruction and practice, totaling over twenty hours of instruction annually, in Grades 1 and 2.
National Reading Panel recommends teaching alphabetic knowledge, (National Reading Panel 2000; Barr, et al. 2004)	Units 1 through 2 in Kindergarten are devoted to alphabetic knowledge, with follow-up letter production. Phonics begins in Unit 3 and continues through unit 8.
Research has identified four methods of differentiation: change in content, change in the amount of teaching, change in the level of instruction, change in the intensity of instruction (Gibson and Hasbrouck 2008; Norlund 2003; Tomlinson 2003).	• Small-group work is not just devoted to reading, but incorporates opportunities for differentiation and allows the teacher to adjust the intensity of instruction. • Differentiated Readers at four different levels allow teachers to change level of instruction, while keeping all students in the same thematic content. • Intensive and Strategic groups get extra practice with Decodable Readers, with teacher support to change the amount of instruction. • Intensive and Strategic groups apply the phonics skill in Differentiated Readers. • Benchmark and Advanced groups apply their phonics knowledge to texts written at their level, with reduced teacher support. • Scaffolded teaching opportunities in whole-group instruction as well as small-group instruction target students who need more phonics support.
Phonics instruction develops automatic word recognition skills (Stahl 1992).	Instruction and Independent Practice for all students in the in *Phonics Companion* and *Decodable Readers* help develop word recognition skills.
Linked phonics and spelling instruction supports reading success (Bear and Templeton 1998 to 1998; Ehri 1997; Juel 1991).	Systematic, weekly spelling instruction is linked to the phonics skills, appearing with the phonics sequence of instruction.

Ref. RD 11 M 8082

Author Biography

Dr. Sharon Frost has had a varied professional life as an educator. She has served as a classroom teacher, a reading specialist, a staff developer, and an instructor at the university level. Dr. Frost taught grades kindergarten through fifth in the Chicago Public Schools for more than 25 years. Her classroom has been featured in instructional videos by the National Council of Teachers of English, Celebration Press, Scott Foresman, the State of Illinois, the CTELL Project, and the Annenberg Teaching Reading K–2 video series. Dr. Frost was awarded the Golden Apple Award for Exemplary Teaching in 2000.

Dr. Frost earned a bachelor's degree in Elementary Education from Northeastern Illinois University in 1973 and a master's degree in reading from the same institution in 1991. Her doctorate degree in Reading and Language was completed at National-Louis University in 1998. Currently, Dr. Frost is the director of the Literacy Partners Project, a collaboration between National-Louis University and the Chicago Public Schools. In this role, she works directly with teachers and children in classrooms to support the improvement of literacy instruction. She also supports and provides professional development for the literacy coaches in National-Louis University's Coaching Collaborative.

Dr. Frost is an active member in professional organizations including National Council of Teachers of English, where she has assumed a variety of leadership roles. For the past three years, she has been a member of the advisory board for the Literacy Coaching Online website, sponsored by the International Reading Association and the National Council of Teachers of English. She is a regular columnist on Choice Literacy, an online publication, where she frequently writes about literacy coaches. She has authored articles in professional journals and magazines as well as chapters in professional books.

Ref. RD 11 M 8082

References

Adams, M. J. 1990. *Beginning to read: Thinking and learning about print.* Cambridge, MA: MIT Press 80.

Anderson, R. C., E. H. Hiebert, I. A.G. Wilkinson, and J. A. Scott. 1985. *Becoming a nation of readers.* Champaign, IL: Center for the Study of Reading.

Barr, R., C. L. Z Blachowicz, R. Buhle, J. Chaney, C. A. Ivy, T. Pigott, G. Suarez-Silva, and A. Uchtman. 2004. *The Illinois snapshots of early literacy: Technical report.* Springfield, IL: Illinois State Board of Education.

Bear, D. and S. Templeton. 1998. Explorations in developmental spelling: Foundations for learning and teaching phonics, spelling and vocabulary. *The Reading Teacher,* 52:222–242.

Ehri, L. C. 1997. Learning to read and learning to spell are not the same, almost. In C. A. Perfetti, L. Rieben, and M. Fayol, eds. *Learning to spell: Research, theory, and practice across languages.* Mahwah, NJ: Lawrence Erlbaum.

Fountas, I. C. and G. S. Pinnell. 1996. *Guided reading: Good first teaching for all children.* Portsmouth, NH: Heinemann.

Gibson, V. and J. Hasbrouck. 2008. *Differentiated instruction: Grouping for success.* Boston: McGraw-Hill.

Hoffman, J. V., N. L. Roser, E. Patterson, R. Salas, and J. Pennington. 2001. Text leveling and "little books" in first grade reading. *Journal of Literacy Research,* 33:3, 507–528.

Juel, C. 1991. Beginning Reading. In R. Barr, M. Kamil, P. B. Mosenthal, and P. D. Pearson, eds. *Handbook of reading research.* New York: Longman Press.

Juel, C. and D. Roper-Schneider. 1985. The influence of basal readers on first grade reading. *Reading Research Quarterly,* 20:134–152.

Norlund, M. 2003. *Differentiated instruction: Meeting the educational needs of all students in your classroom.* Lanham, MD: Scarecrow Education.

National Reading Panel. 2000. *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and implications for reading instruction.* Washington, D.C.: National Institute of Child Health and Human Development.

Snow, C. E., M. S. Burns, and P. Griffin, eds. 1998. *Preventing reading difficulties in young children.* Washington, D.C.: National Academies Press.

Stahl, S. A. 1992. Saying the "p" word: Nine guidelines for exemplary phonics instruction. *The Reading Teacher,* 45:618–625.

Stanovich, K. E. 1993-94. Romance and Reality. Distinguished Educator Series. *The Reading Teacher,* 47:4, 280–91.

Tomlinson, C. A. 2003. Differentiating instruction for academic diversity. In M. Cooper, ed. *Classroom teaching skills*, 7th ed. Boston: Houghton-Mifflin. 149–180.

Ref. RD 11 M 8082

SCHOLASTIC

Do The Math®:

Math Intervention in New York City Schools

IMPACT STUDY

SCHOLASTIC

Do The Math®

Created by Marilyn Burns

"One thing I learned is that I take too much for granted in the classroom. I've assumed that students' know things they really don't. The* [Do The Math] *program reveals their misconceptions."

—ESL and AIS Math Teacher

Abstract

In spring 2008, the Scholastic Research and Validation Department collaborated with independent research consultants to conduct a study in six public schools in New York City to gather data and document the impact of implementing *Do The Math*. Developed by Marilyn Burns and a team of Math Solutions master classroom teachers, *Do The Math* is a research-based intervention program designed to support students who are struggling with elementary arithmetic. With an emphasis on Number and Operations—the cornerstone of elementary math education—the program helps students build a strong foundation in computation, number sense, and problem solving for immediate and long-term learning.

Researchers found that the program could be implemented within various intervention models, including before and after school, pull-out, and self-contained special education classrooms. With regard to impact, researchers found that diverse populations of students, including students with special needs, English language learners, and general elementary school students who have been identified as low performing, made gains in their understanding of and skill at performing multiplication. Researchers also discovered that students acquired key academic math vocabulary, and that students' confidence levels in themselves as math learners improved as a result of their participation in the program. In addition, all participating teachers, regardless of their experience and expertise, were able to implement the program successfully. Teachers also reported that through teaching the program, they gained a deeper understanding of multiplication and learned new strategies for teaching it.

Student achievement data and descriptive portraits distinct to each school provide detailed information about student performance and scenarios of implementation. While each school's situation is unique and had its share of challenges, the results of the program revealed overall benefits for both students and teachers.

Table of Contents

Introduction **3**

Study Participants and Implementation **7**

Data Collection and Measures **10**

Key Findings **12**

- Research Question 1: *Does using* Do The Math *Multiplication A or B result in improved performance in math achievement and vocabulary?* **12**
- Research Question 2: *Do students' dispositions toward learning math and their confidence in doing math improve as a result of their participation in* Do The Math*?* **18**
- Research Question 3: *Is using* Do The Math *effective in a variety of settings and with a variety of implementation models?* **19**
- Research Question 4: *What effect does using* Do The Math *have on teachers' math knowledge and instructional practices?* **20**

Implementation Challenges **21**

Conclusion **22**

References **23**

Appendix **24**

- School Implementation Portraits

General Education Schools

Upper West Side Elementary School (After School) **24**
Washington Heights Elementary School (Pull-Out) **25**
Brooklyn Elementary School (Before School) **26**

Special Education Schools

Queens Special Education School (Self-Contained) **27**
Bronx Special Education School # 1 (Pull-Out/Self-Contained) **28**
Bronx Special Education School # 2 (Self-Contained) **29**

Acknowledgments **30**

Introduction

At the end of eighth grade, roughly two-thirds of students score at or below basic level as measured by the most recent National Assessment of Educational Progress (NAEP) Mathematics test (Lee, Grigg, & Donahue, 2007). This downward trend in math achievement can be attributed to curricula that quickly move students through extensive math content in the early grades. In March 2008, the National Mathematics Advisory Panel, charged with providing guidance on how to improve mathematics achievement for all students, released a report that calls for streamlining the curricula to focus on three key foundational topics that are critical for students' success with algebra. Two of the three foundations, fluency with whole numbers and fluency with fractions, were identified as being the major emphasis for elementary curriculum. Considering that two-thirds of eighth grade students in the United States score at or below basic level as measured by the NAEP Mathematics test, students are not fully prepared to achieve success in algebra.

"Conceptual understanding, computational procedural fluency, and problem solving skills are equally important and mutually reinforce each other."

—National Math Panel, 2008

To compound this challenge, one percent of school-age children have a math disability not associated with any other learning disability, and two to seven percent experience serious math deficits. Students with math disabilities and deficits struggle to perform as well as their peers on basic operations, and the discrepancy between them and their peers increases with age (Cawley, Parmar, Yan, & Miller, 1996). Learning math may also present a challenge for many English language learners, as this content area possesses its own unique academic vocabulary, which is often presented abstractly.

One of the goals articulated by the National Council of Teachers of Mathematics in their *Principles and Standards For School Mathematics* (2000) is that all students become mathematical problem solvers, learn to communicate and reason mathematically, use representations to model problem situations, and make connections among mathematical ideas. In addition, the National Mathematics Advisory Panel (2008) recommends that math curricula for elementary and middle school be a coherent progression of key foundational topics with an emphasis on proficiency within these key topics. For students who struggle, meeting these goals is challenging, especially if they only receive the 50 minutes that schools generally dedicate to math instruction each day. These students need instruction that helps them build the foundational mathematical concepts that they are missing.

Do The Math aims to address these learning challenges that students face. The program's instructional design applies what is known about reaching a wide variety of students who struggle with math to achieve proficiency with arithmetic concepts and skills. This report shares the results of a research study that was conducted on the implementation and impact of *Do The Math* during the spring of 2008 in six New York City schools.

Do The Math

Do The Math is a research-based arithmetic intervention program that will help educators reverse the downward trend in mathematics achievement. Developed by Marilyn Burns and a team of Math Solutions master classroom teachers, the program gives students who are at risk of falling behind or who have already fallen behind the chance to catch up and keep up with grade-level content. The program carefully and intentionally scaffolds four key topics (Addition & Subtraction, Multiplication, Division, and Fractions) to build fluency with whole numbers and fluency with fractions, both of which are critical foundations that prepare students for success with algebra.

Do The Math gives students who have fallen behind the chance to catch up and keep up by offering:

- carefully scaffolded and sequenced content, in small chunks and with appropriate pacing that allows students to build conceptual understanding and skills;
- instruction that gradually moves students from explicit instruction, guided practice, and cooperative pair work to working independently;
- visual directions that support students who may not read well or who are developing English skills;
- consistent routines of having partners work together to solve problems, communicate their ideas, and explain their reasoning;
- explicit instruction that presents carefully sequenced experiences through which students develop understanding of concepts, learn skills, see relationships, and make connections among mathematical ideas;
- concrete manipulatives and models to help students build understanding and practice skills;
- games and literature that engage and motivate students, providing them with opportunities to strengthen and reinforce their learning;
- carefully selected vocabulary and simple sentence structures that support students' understanding of the mathematics;
- explicit instruction based on the *see it, hear it, say it, write it, read it* routine for learning mathematical vocabulary; and
- access to materials that teachers can use immediately to meet students' diverse needs.

Math Solutions Professional Development

Founded by Marilyn Burns, Math Solutions offers professional development in several formats for teachers who are implementing *Do The Math*. For this research study, Math Solutions provided two days of professional development with the goal of preparing the teachers to implement the program, make them aware of the instructional strategies built into the *Do The Math* lessons, and to the uses and management of the program.

The Study

Research was conducted on the implementation and impact of *Do The Math* in six schools in New York City between January 30 and June 15 of 2008. Scholastic partnered with the New York City Department of Education (NYC DOE) to select schools that would represent the city's diverse student population and where the program could be implemented with fidelity. Half were general education elementary schools, and half were within District 75, a district that serves students with special needs. Entire classes or small groups of students were instructed using one of two *Do The Math* multiplication modules. Multiplication A focuses on the basic concepts underlying multiplication, and Multiplication B focuses on multiplication facts through 12 x 12. Administrators, math coaches, and in some cases Academic Intervention Specialist (AIS) coordinators, often in collaboration with teachers, selected those students who were most in need of additional instruction and support in math to receive the treatment. The fourteen participating teachers received the two-day professional development introductory course provided by Math Solutions.

Research Questions

The purpose of the research was twofold: First, to determine the impact of *Do The Math* on students from diverse populations, including special education, English language learners, and general education students in Grades 3 through 6; and second, to document student attitudes and teacher perceptions about math as a result of the treatment. The research sought to address these four questions:

1. *Does using* Do The Math *Multiplication A or B result in improved performance in math achievement and vocabulary?*

2. *Do students' dispositions toward learning math and their confidence in doing math improve as a result of their participation in* Do The Math?

3. *Is using* Do The Math *effective in a variety of settings and with a variety of implementation models?*

4. *What effect does using* Do The Math *have on teachers' math knowledge and instructional practices?*

Study Participants and Implementation

Schools

There were three criteria for selecting the six case-study sites. Researchers first looked for sites where there would be a significant number of students with special needs, students who are developing English skills, and/or students who have been identified as low performing. Secondly, researchers sought to select sites that would represent a geographic dispersion among the five boroughs of New York City (four of the five boroughs are represented in the study). Lastly, researchers wanted sites that would be representative of the different implementation models typically used for intervention. For specific details on each of the six schools, see the Appendix.

In collaboration with the NYC DOE, three general education elementary schools, two of which serve a large number of English language learners, and three District 75 schools that serve special education students were selected. All three of the special education schools chosen serve students in Kindergarten through Grade 8 and have a population of students who are designated as "ungraded." Four of the five boroughs of New York were represented by two schools in Manhattan, one in Brooklyn, one in Queens, and two in the Bronx.

Teachers

From the six schools, fourteen teachers were chosen to teach *Do The Math* to either small groups or entire classes of students. The teachers implementing *Do The Math* have a wide range of experience and expertise and hold various positions in the school system. Within the group, there is a school math coach, an Academic Intervention Specialist (AIS) coordinator, three AIS math teachers, an English as a Second Language (ESL) teacher, two general education classroom teachers, a special education math coach, a special education AIS teacher, and four self-contained special education teachers. The experience among the group of teachers ranges from a first-year teaching fellow to a 30-year veteran. Their expertise in math also ranges from a math coach who has attended numerous professional development workshops focused specifically on teaching math, to an ESL teacher who normally doesn't teach math. All teachers participated in the two-day professional development course on *Do The Math* conducted by a Math Solutions master classroom teacher. The first day of training was held on January 30, 2008, and the second on March 18, 2008.

Students

In all six schools, students selected to participate in *Do The Math* were those who were struggling with elementary arithmetic. Administrators and teachers worked together to review the results of multiple assessments, including state test score data, periodic assessment data, and in most cases, teacher recommendation and judgment to select the students. These students then took the Beginning-of-Module Assessment included in *Do The Math* Multiplication A. If a student's score was greater than 80% on the assessment, the student was placed in Multiplication B.

The study was conducted on 94 students across the six schools. The sample was divided into students in the general education schools who participated in *Do The Math* (54 students or 57% of the sample) and students in the special education schools (40 students or 43% of the sample). Seventy-eight students (82% of the sample) participated in Multiplication A and 16 students (18% of the sample) participated in Multiplication B. The sample of students was ethnically diverse (Table 2). Also, 60% were boys, and 83% of the total students were eligible for free or reduced lunch (Table 1).

Table 2: Student Race/Ethnicity

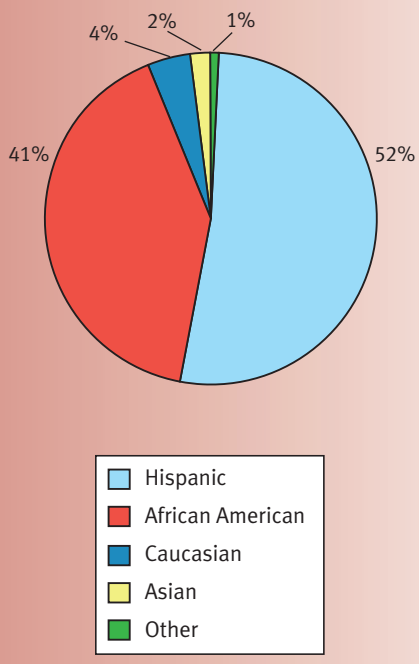


Table 1: Student Demographics

Schools	Total Students N	Boys N (%)	Free or Reduced Lunch N (%)	ESLs N (%)	Special Education Students N (%)
Upper West Side Elementary School (UWS)	20	8 (40%)	10 (50%)	3 (15%)	5 (25%)
Washington Heights Elementary School	23	10 (43%)	17 (74%)	12 (52%)	0%
Brooklyn Elementary School	11	4 (36%)	11 (100%)	7 (64%)	0%
Queens Special Education	14	14 (100%)	14 (100%)	0%	14 (100%)
Bronx Special Education #1	11	9 (82%)	11 (100%)	0%	11 (100%)
Bronx Special Education #2	15	11 (73%)	15 (100%)	0%	15 (100%)
Overall	94	56 (60%)	78 (83%)	22 (23%)	45 (48%)

Implementation Models

While all participating students received the same dosage of *Do The Math* (one module consists of thirty 30-minute lessons), three different implementation models are represented within the six schools in the study. They are: 1) before and after school, which in New York City is referred to by the Department of Education as "Extended Day" and conducted for 37.5 minutes either before or after the school day begins or ends; 2) pull-out, which occurs at designated times during the school day; and 3) self-contained special education classrooms, which means that the program is implemented during regular school hours within the classroom. Typically with before or after school, students receive the intervention from an Academic Intervention Specialist (AIS), a math coach, or a regular classroom teacher. In a pull-out program, students are pulled out of their regular classrooms at specified times. They generally work with an AIS teacher or math coach in a space or classroom separate from their regular classroom. In some models, the AIS teacher(s) works with groups of up to 24 students; in others, he/she works with a small group of eight students or fewer. In a self-contained classroom, the regular classroom teacher teaches the program to either the whole group of students or a small group within the classroom (Table 3).

Table 3. Implementation Information

Location	Implementation Model	Teacher	Grade Levels	Number of Students	Number of Groups	Number of Days per Week
Upper West Side Elementary School (UWS)	After School: Extended Day	Math coach and two classroom teachers	3rd, 4th, 5th	20	3 groups	4 days a week
Washington Heights Elementary School	Pull-out during school day	AIS Coordinator and two AIS math teachers	4th and 5th	23	4 groups	5 days a week
Brooklyn Elementary School	Before School: Extended Day	AIS math teacher and ESL teacher	4th and 5th combined	11	1 group	5 days a week
Queens Special Education	Self-contained classroom	Two Special Education teachers	3rd, 4th, and 5th combined	14	2 classes	5 days a week
Bronx Special Education #1	Pull-out and Self-contained classroom	Math coach and two Special Education teachers	6th, 7th, and 8th combined	11	2 classes and small groups	5 days a week
Bronx Special Education #2	Self-contained classroom	One AIS math teacher	6th, 7th, and 8th combined	15	2 classes	5 days a week

Data Collection and Measures

The independent research consultants designed and customized research instruments to learn as much as possible about each of the six schools. They collected results from the program's Beginning-of-Module Assessment (pretest) and End-of-Module Assessment (posttest), administered student surveys, and conducted classroom observations. Formal interviews with the teachers and informal interviews with students provided information beyond the assessment results. Researchers analyzed all of the data collected to draw conclusions about the impact of the program's implementation.

Student Achievement Data

Teachers administered the Beginning-of-Module Assessment for either Multiplication A or Multiplication B, and the End-of-Module Assessment after completing all thirty lessons. Even though the questions on the Beginning-of-Module Assessment and the End-of-Module Assessment differed slightly, they measured the same set of specified multiplication objectives.

Multiplication A Objectives:

- Calculate products with factors 1 through 6;
- Represent combining equal groups with related addition and multiplication equations;
- Write a multiplication equation for a word problem;
- Write a word problem for a given multiplication equation;
- Calculate the product when one factor is 0; and
- Apply the *Commutative Property of Multiplication* using factors 0 through 6.

Multiplication B Objectives:

- Calculate products with factors 0 through 12;
- Represent arrangements of equal rows and rectangles with multiplication equations;
- Use the *Commutative Property of Multiplication* to solve problems; and
- Recall products for facts through 12 x 12.

Student Surveys

The student survey consists of six multiple-choice questions that focus on students' disposition toward math, confidence levels in themselves as math learners, and beliefs in the importance of math in terms of their future success. One question asks students about their preference regarding the way they like to work in math class (small group, with a partner, by themselves, using a computer, listening to teachers, or whole class discussions). Two open-ended questions asks students to share what they like best and least about math. The same survey was administered before the implementation period began and after it ended.

Site Visits

During the months of February, March, and April 2008, researchers conducted multiple site visits to each one of the six schools. During visits, researchers observed teachers teaching and students participating in *Do The Math*. Observations took place wherever teachers at each site normally taught the program, be it before, during, or after school. After the observation, researchers conducted informal interviews with the instructor. In many instances, researchers also talked informally with students about their experiences.

Data Analysis

Researchers conducted paired t-tests and ANOVA (Analysis of Variance) to determine the statistical significance of the change in scores between the Beginning-of-Module Assessment (pretest) and the End-of-Module Assessment (posttest). Then they analyzed and compared the pretest and posttest scores with students' responses to the two administrations of the student survey to determine how they statistically correlate.

Key Findings

Research Question 1: ***Does using* Do The Math *Multiplication A or B result in improved performance in math achievement and vocabulary?***

Analysis of students' results on the Beginning-of-Module Assessment (pretest) and the End-of-Module Assessment (posttest), along with data from the classroom observations and teacher interviews, reveals that students experienced the following with regard to impact:

A. gains in multiplication; and
B. acquisition of key academic vocabulary in math.

"I have noticed that it* [Do The Math] *alleviates anxiety for some of the students. They will say to one another, 'Just use Circles and Stars.' They now have tools and strategies that they can use to solve problems."

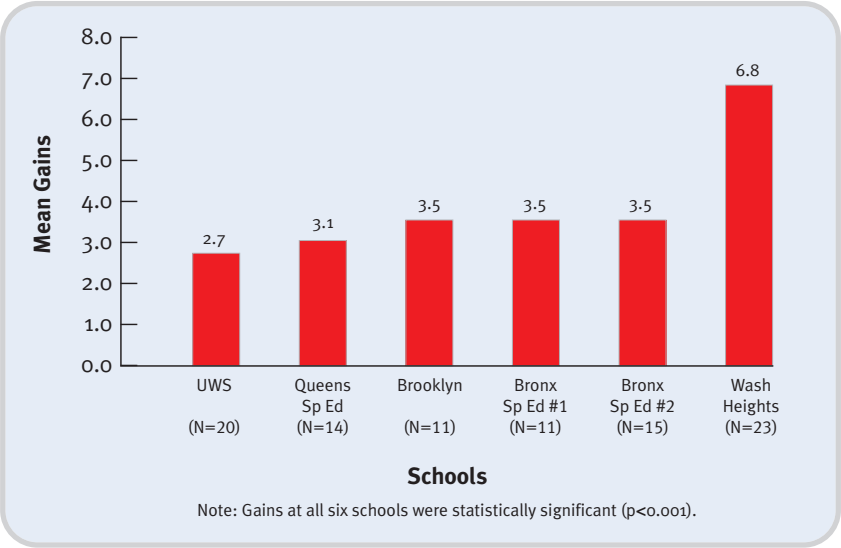
—Grades 3, 4, and 5 combined self-contained Special Education teacher, Queens

A. Students made gains in multiplication that were statistically significant.

In all six schools, treatment students, including English language learners, students with special needs, and general education students, made gains in multiplication that were statistically significant (t=11.45, p<0.001). The results of the 20-item Beginning-of-Module Assessment (pretest) and End-of-Module Assessment (posttest) revealed that whether students received instruction in Multiplication A (n=78) or Multiplication B (n=16), whether they were in a general education school (n=54) or a special education school (n=40), or whether they received treatment in a before or after school program (n=31), pull-out situation (n=23), or a self-contained special education classroom (n=40), they made significant gains (Graphs 1-4).

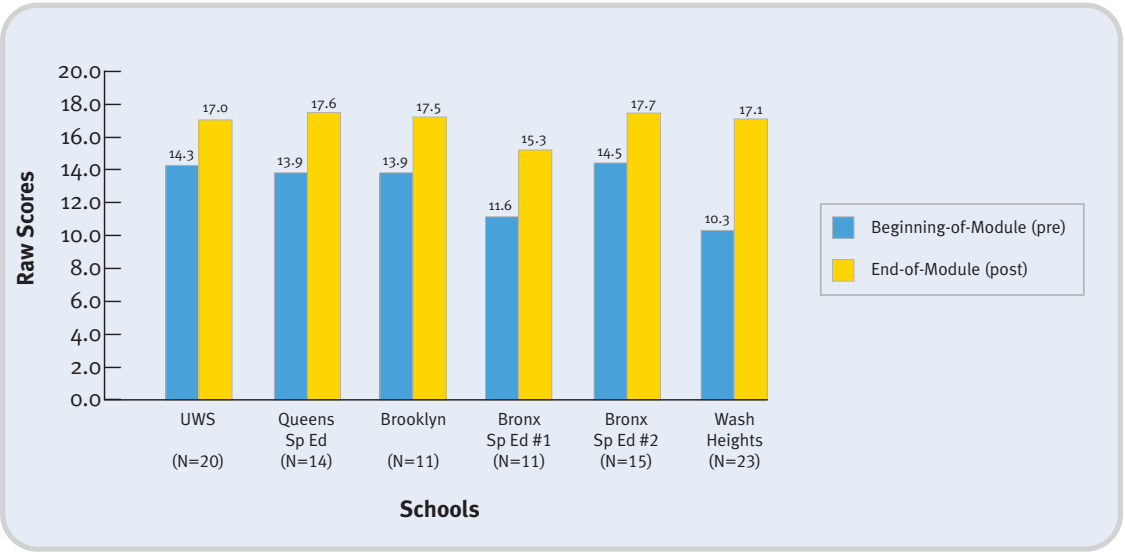
As shown in Graph 1, students made gains in each school that were statistically significant: Washington Heights (t =8.72, p<0.001), Brooklyn (t=7.01, p<0.001), UWS (t =5.37, p<0.001), Bronx Special Education #1 (t =4.19, p<0.001), Queens Special Education (t =3.67, p<0.001), and Bronx Special Education #2 (t =3.33, p<0.001). Mean gains ranged from 2.7 to 6.8 points on a 20-point scale. A significant finding was that the greatest overall mean gains (6.8 points) made by students occurred where teachers pulled small groups of students out of regular classroom settings to receive *Do The Math* instruction.

Graph 1: Mean Gains Between Pretest and Posttest Scores



Note: Gains at all six schools were statistically significant (p<0.001).

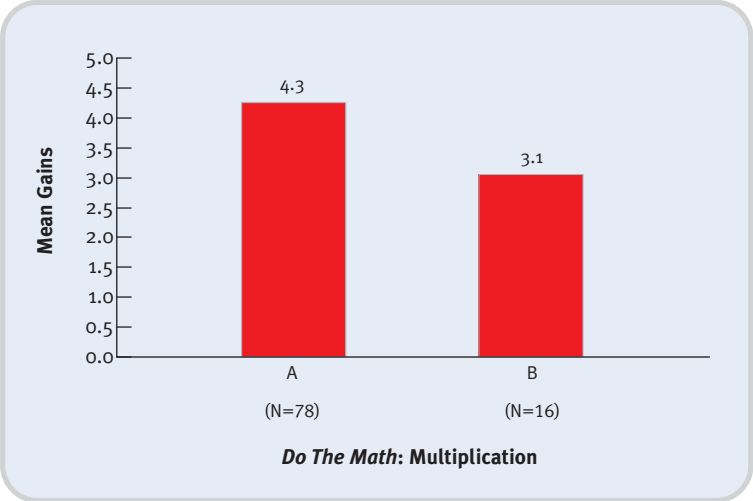
Graph 2: Comparison of Raw Scores for Pretest and Posttest Scores



Graph 2 shows that the End-of-Module Assessment mean results ranged from 15.3 questions correct to 17.7 correct out of 20 questions. The differences in pretest scores by school were statistically significant ($F(5, 94)=4.85$, $p<0.001$).

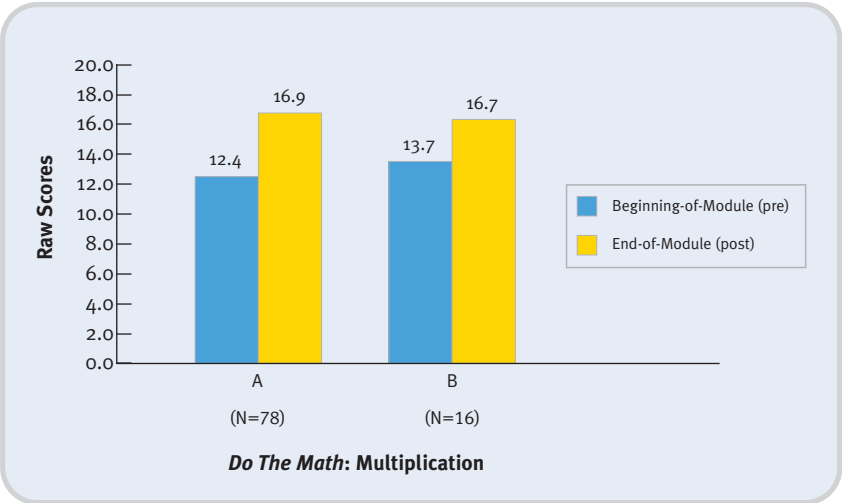
Overall, the 78 students who participated in Multiplication A made slightly higher gains (mean gain of 4.3 points) than the 16 students who participated in Multiplication B (mean gain of 3.1 points). However, because of the large difference in sample sizes, the small sample in Multiplication B, and the slight difference in the Multiplication A and Multiplication B assessments, any comparisons drawn between the two groups should be viewed with caution. The sixteen students who received Multiplication B attended two out of the three general education elementary schools.

Graph 3: Comparison of Mean Gains of Students' Posttest Scores for Multiplication A and Multiplication B



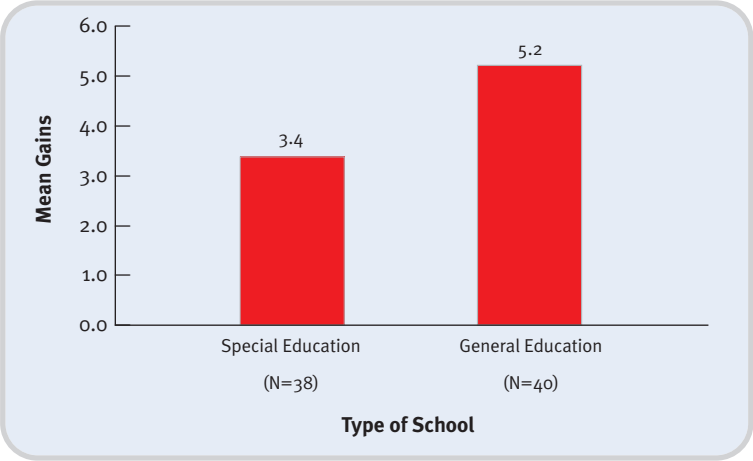
The pretest and posttest data for students who participated in Multiplication A and Multiplication B reveal roughly a one-point difference in gains made (Graph 3). Differences in the Beginning-of-Module Assessment (pretest) results by module were not statistically significant, suggesting that both groups began with relatively equivalent scores on their respective pretests. Pretest and posttest averages by module are presented in Graph 4.

Graph 4: Comparison of Average Gains in Raw Scores Between Multiplication A and Multiplication B Pretest and Posttest



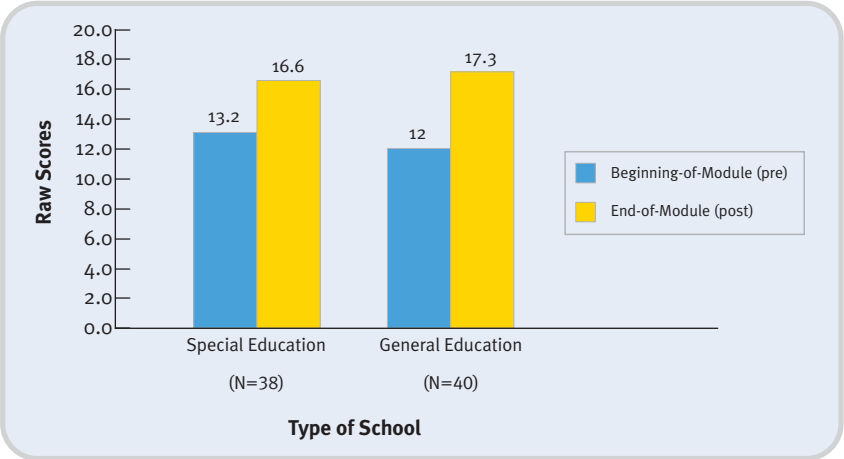
Disaggregating the results by general education and special education schools reveal that significant effects persisted for both groups (Special Education: t=6.33, p<0.001; General Education: t=9.79, p<0.001). Students in the general education schools made slightly higher gains than students in special education schools–approximately 26% growth as compared to 17% growth (Graphs 5 and 6). Overall, students in the three general education schools achieved a mean gain of 5.2 on a 20-point scale, and students in the special education schools achieved a mean gain of 3.4 points on a 20-point scale. Only the results for Multiplication Module A are represented in Graphs 5 and 6, as no students in the special education schools received instruction in Multiplication B.

Graph 5: Comparison of Mean Gains of Students' Posttest Scores for Multiplication A between Special Education and General Education Schools



The pretest data reveal that students in the general education schools scored lower than the students in the special education schools. While the differences in pretest scores were not statistically significant, the trend revealing an average lower performance for the general education students may be due to the fact that those students were in earlier grades (third, fourth, and fifth) as opposed to the students in the special education schools, two-thirds of whom were in sixth, seventh, and eighth grade.

Graph 6: Comparison of Average Gains in Raw Scores for Multiplication A between Special Education and General Education Schools



Teachers in special education schools confirmed the positive results with anecdotal evidence about individual students. Many of these students were initially unable to complete independent work. Teachers relayed that with *Do The Math* several of these students were able to work independently, some for the first time.

In both the general and special education schools, teachers attributed students' overall success to having gained access to new, comprehensible, easy to implement strategies to solve multiplication problems, such as *Circles and Stars*. Teachers also credited students' achievement to the ongoing success they experienced while participating in the program. When armed with the new strategies, students were able to solve problems correctly and efficiently, and thus, they grew increasingly more confident. As a result, according to teachers, many students who previously had not liked math not only began to succeed but also began to enjoy doing math.

"The specific detailed steps gave him the language and tools he needed to articulate what he was learning. When he couldn't express himself he would open up his book, point to examples, and with support, tell us what he was thinking."

—Special Education district-level math coach

B. Students acquired and utilized the key academic math vocabulary presented in the program.

A qualitative analysis of the teacher interview data reveals that students who participated in *Do The Math* acquired the key math vocabulary presented in the program and began to communicate using those vocabulary words. These interview findings were consistent with data obtained from classroom observations in that the researchers also noted that students were using words such as *factor, product, equation,* and *Commutative Property*, correctly and with regularity, both when they participated in the lesson, while playing the games, and completing independent work.

Several teachers noted that they did not realize before teaching *Do The Math* how important it is to explicitly teach key math vocabulary. According to teachers, it was the consistency and structure of the program that supported students in achieving fluency with the vocabulary words and mastering the underlying concepts. Teachers at schools with large populations of English language learners were especially appreciative of the program's emphasis on vocabulary and language development.

"One of the things we learned is that the students need language development. They don't know the words 'equation' and 'sum,' for example. The teachers didn't know that the students didn't know these terms until they started using the* [Do The Math] *program."

—ESL teacher, Brooklyn

Multiplication A Key Math Vocabulary:

- Commutative Property of Multiplication
- Equal
- Factor
- Multiplication
- Multiplication equation
- Multiply
- Product
- Times

Multiplication B Key Math Vocabulary:

- Multiplication equation
- Factor
- Product
- Commutative Property of Multiplication
- Square number
- Multiple
- Zero Property of Multiplication

"The* [Do The Math] *program empowered kids who really struggle with mathematics and have for years. It gave them confidence.... The program enabled them to become more involved and understand the concepts behind what has previously been a blur of 'facts' and misunderstanding. It was eye opening and a welcome relief to them to actually finally understand and enjoy what they were doing."

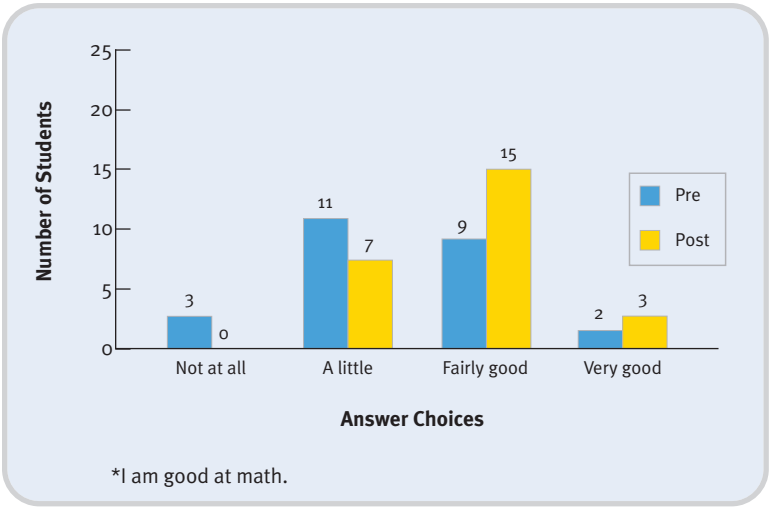
—Special Education district-level math coach

Research Question 2: Do students' dispositions toward learning math and their confidence in doing math improve as a result of their participation in* Do The Math*?

An analysis of pre- and post-surveys was conducted to reveal results about students' attitudes toward learning math, confidence in their own math abilities, and their perceptions of themselves as math learners. Surveys were distributed to all teachers; however, pre- and post-survey results were collected for only 25 student participants attending three of the six participating schools. The three schools are: Brooklyn Elementary School, Upper West Side Elementary School, and Queens Special Education School. Teachers from the remaining three schools administered the student surveys, but only at one time-point, which was either before the implementation period or afterward.

The analysis of the responses from the 25 surveys revealed that students' confidence improved from the time they began to participate in the program until they completed it (Graph 7). In interviews, teachers also reported observing a rise in students' confidence levels. In fact, several teachers in both the general and special education schools described watching *Do The Math* students actually teach fellow classmates, who were not in the program, strategies such as *Circles and Stars* and games like *Capture* and *Pathways*.

Graph 7: Comparison of Responses to Survey Item 2* Before and After completing *Do The Math* (N=25)



*I am good at math.

Little change was found in regard to students' attitudes toward learning math and their beliefs about whether good math skills will help them to get good jobs and go to college, but it should be noted that student responses in the pre-survey generally were positive—all participants reported that they like math at least a little. Almost 65% of students also reported that their favorite way to work in math class is working with others (22% prefer to work with a partner, and 23% prefer to work in a small group). Working in a small group and with a partner are at the core of *Do The Math*'s gradual-release process.

Research Question 3: Is using* Do The Math *effective in a variety of settings and with a variety of implementation models?

Analyses of the pre-post data, classroom observations, and teacher interviews revealed that *Do The Math* could be implemented with success using various implementation models. Across the six schools, three models were represented including before or after school, extended day, pull-out, and special education self-contained classes. Students in all three of the intervention models made positive gains on the End-of-Module Assessment. Students who participated in a pull-out model at the Washington Heights elementary school made the greatest gains (6.8 points on a 20-point scale–Graph 1). At this site, AIS teachers pulled out small groups of four to six students during the school day. These groups represented the fewest number of students per group in the study. Students therefore may have received more individualized attention that addressed their specific needs. Teachers at all six schools implemented *Do The Math* as an intervention for both Tier 2 and Tier 3 students within a Response to Intervention (RTI)* Framework.

According to teachers, *Do The Math* was easy to implement because New York City's Extended Day program provides 37.5 minutes per day to be dedicated to instruction for those students who need it. Teachers found that because each *Do The Math* lesson is 30 minutes long, they could teach one lesson a day and use the remaining 7.5 minutes for setup and cleanup. Some teachers mentioned that in the case of some lessons, they would have liked to have had more than 30 minutes for children to practice the skill taught, or play a game that had been introduced.

In the special education self-contained classrooms teachers reported that certain students required more time to master key math concepts or skills. In general, special education teachers struggled more than those teachers in the general education schools to carve out the time necessary to implement the program because most special education schools did not have an Extended Day program, and the math block during the school day was designated for teaching the district–selected core math program. To solve this implementation issue, at some schools teachers required the support of administrators to adjust schedules so the program could be implemented.

"I enjoyed and appreciated the philosophy behind* Do The Math. *Struggling students need scaffolding, explicit instruction, and useful and fun strategies that enable them to learn. The strategies and games, such as 'Circles and Stars,' 'Where the Lines Cross,' and 'Pathways,' were engaging for both teachers and students."

—School-based math coach, Upper West Side

*Response to Intervention (RtI) is the practice of providing high-quality instruction and intervention matched to student needs, monitoring progress frequently to make decisions about changes in instruction or goals, and applying student response data to implement educational decisions.

Research Question 4: What effect does using* Do The Math *have on teachers' math knowledge and instructional practices?

A qualitative analysis of the teacher interview data showed that teachers improved their own knowledge of multiplication and learned new instructional strategies for teaching it to struggling students. After they received the Math Solutions training and taught *Do The Math*, several teachers said they deepened and expanded their own knowledge of the underlying concepts of multiplication. Many expressed that teaching the program also helped them make the connections between math concepts and procedures. Several also noted that they greatly valued learning new strategies to teach struggling students.

One teacher in particular said that teaching the program raised her self-esteem. She explained that in the past, she has tried to help students memorize their facts, and when they weren't able to, she felt as though she was failing. With *Do The Math*, she learned many different strategies that worked for her students. Other teachers also reported that by teaching the program, they gained a deeper understanding about struggling students' misconceptions.

In addition, teachers reported finding the lessons easy to teach and the program easy to use. They felt that the content was structured in a manageable and comprehensible way, ensuring that they could grasp the math concepts before teaching them. While Scholastic offered professional support throughout the implementation period, few questions arose and when they did, they were easily resolved.

"It* [Do The Math] *was instrumental support for my teaching. I also learned a lot about multiplication myself. I am not a math person. It was fun learning, alongside the students, the many relationships between numbers through the lens of multiplication. I also realized how [the lack of] English language proficiency can limit an enhanced number sense."

—ESL teacher, Brooklyn

Implementation Challenges

Researchers noted two challenges associated with the implementation of *Do The Math*. As with many schools across the country, when it comes to implementing an intervention program, challenges revolve around issues common to supporting struggling students, such as lack of time for intervention and high rates of absenteeism.

Time for Intervention

While overall all six schools were able to create effective models of use and implement the program with fidelity, several teachers expressed feeling challenged by having to teach the program on a consistent basis (30 minutes a day for at least four days a week). Even though extended day before and after school programs ensure that a 37.5-minute time period is designated for teaching *Do The Math*, teachers reported that there were a number of days when the extended day program was cancelled or replaced by another event.

Challenges also exist with the pull-out model. In one case, a teacher resisted having her students pulled out of the classroom. This challenge is not atypical when it comes to pulling students out of the classroom to receive intervention; classroom teachers worry that those students who are pulled out will miss valuable content and that they will be treated differently by their peers. These concerns are exacerbated by the fact that the students who are being pulled out for *Do The Math* are often the same ones who are being pulled out to receive intervention in other subject areas, and consequently already contending with these issues.

Absenteeism

Unfortunately, a large proportion of students who are identified as at-risk or who struggle academically are those who are also absent frequently. In particular, high rates of absenteeism present a chronic problem within the special education schools. Teachers therefore felt challenged when it came to implementing the program with fidelity. In the case of the school where they implemented *Do The Math* within the extended day before school program, teachers grappled with the erratic attendance of some students, making it challenging to keep all of the students on the same page. Teachers notified parents about the importance of their child attending everyday, and eventually dismissed those students who were not attending the program regularly.

"The challenges were the same ones we find with all math instruction–time, teacher preparation, teacher understanding, carefully listening to students–but having a program that is so specific really helps."

—District-level math coach

Conclusion

This *Do The Math* research study reveals positive results for students who struggle with elementary math and for the teachers who work with them. The four-month study showed that diverse populations of students in Grades 3 through 6 made statistically significant gains on the program's End-of-Module Assessment. They also acquired the key math vocabulary presented in the program. In addition, it showed that students' confidence in themselves as math learners improved from the time when they began the program until they finished it.

The study also revealed that *Do The Math* could be implemented effectively within various intervention models, including before and after school, pull-out, and self-contained special education classrooms, and employed as a Tier 2 or 3 intervention within a Response to Intervention (RtI) framework. It found that teachers who held different positions and embodied a wide range of experience and expertise could implement the program successfully. Moreover, through teaching the program, teachers said that they gained a deeper and more thorough understanding of multiplication and learned new strategies to teach it.

The results are promising for schools, teachers, and students searching for a research-based intervention program that supports struggling students to become proficient in elementary mathematics.

References

Cawley, J., Parmar, R., Yan, W. F., & Miller, J. (1996). Arithmetic computation performance of students with learning disabilities: Implications for curriculum. *Learning Disabilities: Research and Practice, 13*(2), 68–74.

Lee, J., Grigg, W., & Donahue, P. (2007). *The Nation's Report Card: Reading 2007*. Washington, DC: National Center for Education Statistics, Institute for Education Sciences, U.S. Department of Education.

National Council of Teachers of Mathematics. *Principles and Standards For School Mathematics* (2000). Reston, VA. http:/www.nctm.org

National Mathematics Advisory Panel (2008). *Foundations for Success: The Final Report of the National Mathematics Advisory Panel*. Washington, DC: U.S. Department of Education.

Appendix: School Implementation Portraits

The following school portraits offer more detailed information about each of the six school sites involved in the study:

- The school context, including demographic data;
- A description of the implementation scenario (e.g., before or after school, pull-out, or self-contained special education classroom); and
- Teachers' perceptions of the program's impact.

Each school selected the implementation model that best aligned with the structure already in place. The requirement was that participating students receive the recommended schedule of thirty 30-minute lessons either four or five days a week.

General Education Schools

Upper West Side Elementary School

Located on the Upper West Side in Manhattan, this school enrolls students in Kindergarten through Grade 5, and serves students who represent a wide array of ethnicities, cultures, and home languages.

Implementation:

The school's math coach and two fifth grade teachers taught *Do The Math* to three separate groups of students after school. The math coach taught six third grade students using Multiplication A. The two fifth grade teachers taught the program to a total of 14 students (one teacher taught 10 students using Multiplication B and her partner taught four students using Multiplication A).

The three groups received *Do The Math* instruction for 30 minutes a day, four days a week. After teachers taught the first module, they moved on to teaching the next module (either Multiplication B or C). On several days, Extended Day was either cancelled or replaced by a special event or assembly.

Impact:

Teachers at the school were impressed with the structure of the program. They appreciated how the content was gradually released so that struggling students could comprehend, practice, and master math concepts. The math coach claimed that he gained a deeper understanding of what struggling students need through teaching the program.

School Portrait–Upper West Side

Total # of students enrolled	844
Teacher-student ratio	16:1
Students in free and reduced lunch	68%
Hispanic	47%
African American	31%
Caucasian	15%
Asian	6%
Native American	<1%

Washington Heights Elementary School

Located in Washington Heights, a neighborhood in Manhattan where the population is predominantly Hispanic, this school serves students in pre-K through Grade 5. Many students come from homes where Spanish is the first language. To serve students, the school offers dual-language classes, which are conducted in Spanish and English.

Implementation:

The AIS coordinator worked with two AIS math teachers to select 23 students in fourth and fifth grade who were struggling with math. They reviewed students' results on the state math test and on some of the periodic assessments administered by teachers. They then divided students into four small groups of approximately six students each. Students from the two different grade levels were combined within each small group. Three out of the four groups began in Multiplication A and the remaining group in Multiplication B. During first period, the AIS coordinator taught the group that started in Multiplication B, and the AIS math teachers each taught a group in Multiplication A. One of the AIS math teachers also taught Module A to a small group of students during the final period of the school day.

The AIS coordinator and teachers pulled students out of their classrooms to receive *Do The Math* for the prescribed 30 minutes a day, five days a week. All three teachers completed the thirty lessons in the first module they taught and went on to teach the following module (either Multiplication B or C). Before they started the program, scheduling proved a challenge as many of the students who were identified to receive the program were already being pulled out to receive additional support in either literacy or English. One classroom teacher was uncooperative because she did not want students pulled out of her class. The AIS coordinator remained sensitive to this issue.

Impact:

Overall, students who participated in *Do The Math* at this school made the greatest mean gains on the End-of-Module Assessment. Interestingly, it was also the only school where teachers pulled out small groups of six or fewer students in fourth and fifth grade to provide instruction. The teachers who taught the program felt that mixing students from different grade levels was beneficial. According to one, "Everyone is doing the same thing. It's great to see kids from different grades working together." A few, who usually struggle within their own classrooms because they are performing at a lower level than their peers, were able to feel successful and ultimately more confident.

School Portrait–Washington Heights

Total # of students enrolled	821
Teacher-student ratio	13:1
Students in free and reduced lunch	92%
Hispanic	90%
African American	3%
Caucasian	2%
Asian	2%
Other	3%

"It gave them an in-depth understanding of multiplication. Additionally, it gave them a way of thinking about numbers in a more systematic fashion that they could utilize with other types of math challenges."

—Math Intervention Specialist

School Portrait–Brooklyn

Total # of students enrolled	1181
Teacher-student ratio	15:1
Students in free and reduced lunch	79%
Hispanic	31%
African American	4%
Caucasian	21%
Asian/Pacific Islander	44%

Brooklyn Elementary School

Located in Brooklyn, this neighborhood school enrolls students in pre-K through Grade 5. The surrounding neighborhood is ethnically diverse; the majority of students speak a language other than English at home. To support the large population of English language learners, administrators hired several full-time English as a Second Language (ESL) teachers who support regular classroom teachers by working with students right in their classrooms.

Implementation:

To select students to participate in the program, the school's AIS math teacher and ESL teacher identified fourth and fifth grade students who were most in need of additional support in math. To do so, they reviewed students' state test results. Once the group was established, they taught *Do The Math* within the Extended Day 37.5-minute period that is held everyday before school. The two teachers advised parents that their child had been selected to participate in the program, so parents and students would know to arrive 40 minutes before the school day began.

The AIS math teacher and the ESL teacher co-taught *Do The Math* every morning for 30 minutes a day, five days a week. Students completed the lessons in both Multiplication A and B (only the results for Multiplication A were analyzed). The first challenge the teachers experienced in terms of implementation was locating an available space where they could teach the class. Once they secured the library, the next challenge was how to deal with the erratic attendance of some students. After a few weeks, teachers decided that students who were not attending regularly would no longer be allowed to participate. A total of 11 students remained in the program through its completion.

Impact:

The teachers who co-taught *Do The Math* most appreciated how the program revealed students' misconceptions about multiplication, lack of number sense, and struggles with underlying math concepts. Both teachers felt that they gained a deeper understanding of what struggling students need, as well as math strategies they can use. According to the teachers, the program had a positive impact on the majority of student participants. One teacher described the positive changes she witnessed in one student in particular: "He resisted in the beginning of *Do The Math* by showing up late and having sporadic attendance. Recently at the end of the program, he came up to me to show me the results of his latest math test. He did very well and said he realized he's not afraid of numbers anymore." This same student's mother wrote a note to the school's assistant principal asking that he continue to receive *Do The Math* instruction.

Special Education Schools

Queens Special Education School

Even though the school is located in the southern part of Queens near the Brooklyn border, most students are bused in from other parts of New York City. The school enrolls students in pre-K through Grade 11 and some students who have been designated as "ungraded." Students in the elementary grades participated in the program.

Implementation:

Do The Math was implemented in two third, fourth, and fifth grade combined self-contained classrooms everyday for 30 minutes at the end of students' lunch period and during the beginning of the following period. The district math coach helped teachers to carve out time within their daily schedules, as the math block is reserved for teaching the district-selected core math program. Teachers continued to teach the core math program mandated by the district and used *Do The Math* to provide additional instruction.

The two participating classrooms have a 6:1 student teacher ratio, but the needs of the students in each classroom span a broad range. Teachers therefore found it challenging to keep all of the students on the same page; some students wanted to move faster, and others needed more help. Furthermore, the school wrestles with high rates of absenteeism, making it additionally hard for teachers to keep all of the students together.

Impact:

Nonetheless, the two teachers who taught *Do The Math* valued the fact that some of the students in their classrooms, who typically struggle to work independently, could complete the tasks and assignments within the program by themselves. One of the teachers observed, "Students are able to participate in all aspects of the program. They are receptive on all levels." Additionally, teachers found that the students made connections among math concepts that they had never made before.

School Portrait–Queens Special Education

Total # of students enrolled	310
Teacher-student ratio	6:1
Students in free and reduced lunch	70%
Hispanic	37%
African American	41%
Caucasian	13%
Asian/Pacific Islander	9%

"The kids learned that multiplication is repeated addition. They are making the connection between addition and multiplication. The students brought up the Commutative Property. They made the connection themselves."

—Special Education teacher, Grades 3, 4, and 5

School Portrait–Bronx Special Education #1

Total # of students enrolled	334
Teacher student ratio	5:1
Students in free and reduced lunch	95%
Hispanic	53%
African American	42%
Caucasian	2%
American Indian	2%
Asian	1%

Bronx Special Education School #1

This school is located in the South Bronx. Many students who attend come from the surrounding neighborhood, but a large number are bused in as well. The school enrolls students in Kindergarten through Grade 8 and some who are designated as "ungraded." Administrators and coaches decided to implement *Do The Math* in classrooms and with students in sixth, seventh, and eighth grade.

Implementation:

The school's math coach worked with the principal to select two classrooms where they believed that the teachers and students involved would benefit from using and participating in *Do The Math*. Both of the teachers who were chosen teach sixth, seventh, and eighth grade combined self-contained classes.

Teachers selected students who needed the most support in math and were not being pulled out of the classroom to receive other services at the time when they could teach the program. The math coach also pulled out students from other classrooms who were experiencing serious difficulties with multiplication in order to provide them with the opportunity to participate in the study.

Impact:

Teachers appreciated the multiple strategies that students learned in *Do The Math*. The teachers reported that students loved the games and were completely engaged when playing them. Furthermore, teachers claimed that students used the strategies they learned, such as *Circles and Stars*, to solve problems they encountered outside of the program. One teacher shared that she even witnessed one student using it when working to solve a multiplication problem on the state math test.

Bronx Special Education School #2

This school is also located in the South Bronx. It is a middle school that serves students who struggle to function within District 75 because they require specialized support. The school enrolls some of the most severely emotionally disabled students in the New York City public school system.

Implementation:

The AIS math teacher taught *Do The Math* in two sixth, seventh, and eighth grade combined self-contained classrooms for 30 minutes a day. While scheduling proved relatively simple due to the existence of a period designated specifically for AIS math, dealing with behavioral issues and student absenteeism proved to be a significant challenge in terms of implementing the program with fidelity. Nonetheless, 15 students were able to receive the program on a consistent basis and achieve success.

Impact:

Across the two classes that received *Do The Math*, students' abilities and behavior ranged significantly. For several students, it is a challenge to simply remain in their seats for a concentrated period of time. Researchers observed that though the majority of the students were not only engaged during *Do The Math* lessons, but were also able to make connections between the math concepts and the mathematical procedure, as well as work independently in their workbooks. According to the teachers, students also felt ownership over their workbooks.

"Some of the kids said that the program was too easy, but I observed those same kids using some strategies they learned in the program when they took the test (the state math test)."

—Special Education teacher, Grades 6, 7, and 8

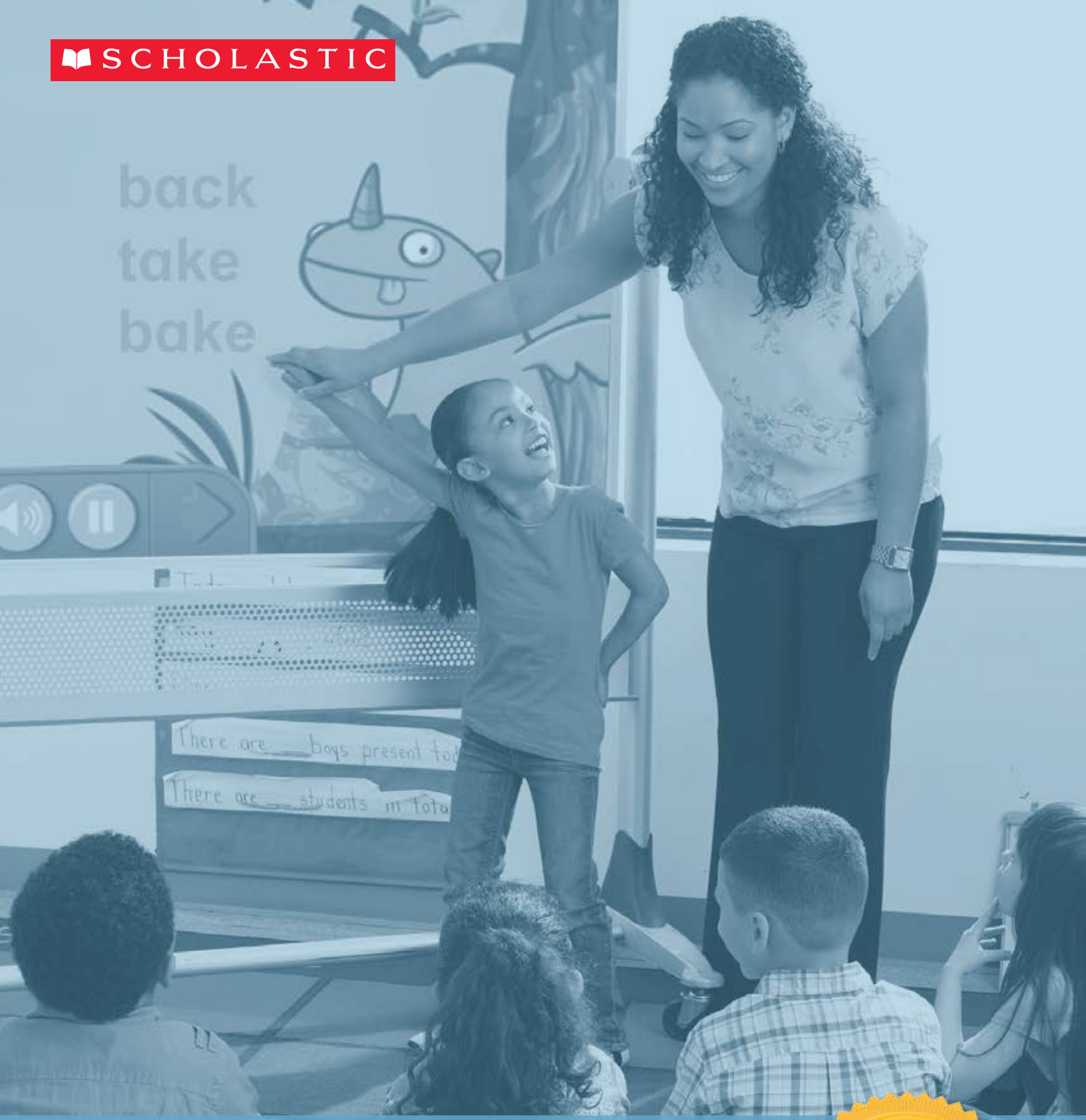
"The greatest impact it had was it, for the most part, caught students up while keeping others engaged."

—District-level math coach

Acknowledgments

The Scholastic Research and Validation Department would like to thank the New York City Department of Education without whose support this study would not have been possible. We would like to extend special thanks to NYC DOE staff members Linda Curtis-Bey, Lisa Emond, Dorota Koczewska, Anne Sommers, and Michael Sinnreich. Independent consultants Juliette Cricket Heinze, Minda Aguhob, and Katie Ruddy also made significant contributions to the development and implementation of the study.

SCHOLASTIC



iRead

Research Foundation Paper

Scholastic Research AND Results

Table of Contents

Introduction 2

The Promise of Instructional Technology 2
Introduction to *iRead* 3
About This Report 3

Explicit and Systematic Foundational Literacy Instruction 5

Explicit and Systematic Instruction 6
Phonemic and Phonological Awareness 7
The Alphabet 9
Phonics 10
Sight Words 12
Syllabication 13
Morphology & Syntax 14
Fluency 15
Spelling 17
A Coherent and Systematic Approach 18

Personalized, Differentiated Reading Instruction 21

Personalized, Differentiated Reading Instruction 22
Screening for Individualized Interventions 24
Engagement with Appropriate Text 25
Classroom Management Practices for Differentiated Instruction 26
Technology for Adaptive, Personalized Instruction 27

Multisensory, Multimedia Instruction 31

Multisensory Instruction in Reading 32
Multimedia Technology 33

Formative Assessment and Progress Monitoring 37

Formative Assessment for Early Literacy 37
Progress Monitoring and Oral Fluency Assessment for Early Literacy 39

Supporting Positive Student Behavior 43

Classroom Management Practices that Support Positive Student Behavior 43
Use of PBIS 44

Family Engagement 47

Parental Involvement in Education 47
Family-Teacher Relationships and Engagement 48
At-Home Reading Activities 49

References 50

Introduction

High-quality reading instruction in the primary grades represents one of America's most critical educational needs for the 21st century. This is especially true of effective differentiated instruction that meets the unique needs of students, especially those that are typically underserved. Statistical analyses predict that unless things change in US education, 30% of the students that entered kindergarten in 2012 won't graduate from high school on time in 2025—in large part, due to problems with reading (Edelman & Engler, 2012; Washington & Cárdenas-Hagan, 2012). In 2009, two-thirds of 4th graders scored below proficient on the NAEP reading test, and almost half of low-income students scored below basic on this test (Annie E. Casey Foundation, 2010). Based on their research, the Annie E. Casey Foundation (2010) concluded:

> The bottom line is that if we don't get dramatically more children on track as proficient readers, the United States will lose a growing and essential proportion of its human capital to poverty, and the price will be paid not only by individual children and families, but by the entire country (p. 7).

Clearly, it is time to try something different.

Traditionally in American education, efforts to address reading problems have focused on remediation: identifying readers who are performing below expectations and providing extra instruction and resources to bring them up to where they need to be. More recent efforts have focused on early prevention: providing effective early instruction for every student in order to close the reading achievement gap before it begins. For example, in 2012, nineteen states, and the District of Columbia, required annual reading assessment of all students in kindergarten through third grade. In addition, the majority of those states, also required that remediation or intervention be provided for those students identified as struggling (Rose, 2012). These new laws align with state Race to the Top plans to close achievement gaps, improve overall academic achievement, and increase college attendance.

An extensive body of research and expert opinion confirms the importance of explicit and systematic instruction in foundational literacy skills in helping children learn to read—that is, instruction that involves deliberate training in the foundational skills that students need to progress from decoding what they read to understanding what it means.

The value of the foundational literacy skills is evidenced by their inclusion in the *Common Core State Standards for English Language Arts*, as well as in other rigorous state standards. Yet, as the Common Core recognizes that the purpose of these foundational skills is to support students in learning how to read and comprehend both literary and informational texts across the curriculum, it also clarifies that the foundational skills "are not an end in and of themselves" (National Governors Association Center for Best Practices, Council of Chief State School Officers [NGA, CCSSO] (2010), p. 15). They should be integrated with opportunities to read meaningful connected text as part of a coherent instructional approach (Adams, 1990; Dehaene, 2009; Moats, 2012; Strickland, 2011).

Scholastic's new program, *iRead* for Grades K–2, reflects this body of research by integrating advancements in technology with sound instructional practice to more effectively and efficiently help every student learn how to read, so that they can *learn from* what they read. In this way students will gain a strong foothold on the path to achieving educational and career success and attaining personal fulfillment.

The Promise of Instructional Technology

Technology holds the promise of improving foundational reading instruction in a variety of ways. Students' needs for individualized instruction are addressed through embedded formative assessment and adaptive technology (Cunningham & Rose, 2012; Strickland, 2011)—including intensive practice for struggling readers on the skills they have yet to master (Hasselbring, 2012). Coordinated visual and audio presentation of sounds, letters, and words and instant, tailored multimedia response to student choices help develop decoding skills and build critical connections between decoding and understanding words in context (Adams, 1990; Dehaene, 2009; NRC, 1998; NRP, 2000). Student motivation and engagement are boosted by appropriate levels of challenge and innovative design features that draw on important findings from cognitive science and game design research (Dockterman, 2012; Gee, 2005; Hasselbring & Mayer, 2012; NRC, 2000).

iRead turns the promise of technology into reality through individualized, adaptive, and engaging instruction that can help all students, even the most challenged ones, learn how to read so that they can read to learn.

Introduction to *iRead*

iRead is a digital foundational reading program designed to close the achievement gap before it begins by placing all K–2 students on a path to success in Grades 3–12 and beyond.

The *iRead* student software provides explicit, systematic instruction and individualized, ongoing practice in the foundational literacy skills of phonological awareness, alphabet knowledge, phonics, decoding, word recognition, morphology and syntax, fluency, and spelling. The systematic instruction delivered by the software targets the areas of the foundational skills that students are struggling with and provides individualized practice in these areas until students attain mastery of each skill. Students are given the opportunity to put the skills to use to create meaning as they read and comprehend literary and informational texts.

Built from the ground up to support the Common Core, *iRead's* scope and sequence moves as a continuous set of topics from kindergarten to second grade, allowing for differentiated placement, adaptive instruction, and ongoing practice for children who are below, on, and above grade level.

iRead Offers

1. Technology that complements what teachers do best
2. A personalized learning progression for every student
3. Embedded assessment that ensures children are taught to mastery
4. The best thinking from cognitive science and gaming theory
5. An engaging, supportive online environment for children and their families

In addition to the student software, *iRead* provides a comprehensive system of support for educators—equipping them with the resources they need to maximize their effectiveness in the classroom. The program comes with everything teachers need to teach foundational reading—including Scholastic Central, a digital environment that provides actionable data and reports, strategic grouping tools, and point-of-use instructional resources. From Scholastic Central, teachers can access three years of foundational reading content and over 200 lessons for whole- and small-group instruction, anytime and anywhere that there is an Internet connection.

For over 90 years, Scholastic's mission has been to ensure that all children have access to literacy and high quality literature. *iRead* is the next step in fulfilling this mission.

About This Report

This report explains how *iRead* draws on the best research in early literacy instruction to give students in Grades K–2 the foundation they need to become successful readers and learners. It describes the research evidence favoring explicit and systematic instruction in the foundational literacy skills, and it explains how *iRead's* design reflects this research. It also describes how *iRead* matches the best available research and expert opinion related to personalized learning, multisensory instruction using multimedia technology, and formative assessment and progress monitoring, as well as how *iRead* supports positive student behavior and encourages family engagement. In sum, this review shows how *iRead* takes advantage of technology to support teachers in providing the best possible instruction for beginning readers of all abilities.

iRead provides a systematic sequence of explicit, recursive instruction with mastery-based interactive practice in the alphabet, phonological awareness in the context of alphabet activities, phonics, spelling, high-frequency/high-utility sight words, syllabication combined with morphology, spelling, and fluency—aligned with the Foundational Skills of the *Common Core State Standards for English Language Arts & Literacy*.

Explicit and Systematic Foundational Literacy Instruction

Research has shown that explicit and systematic early literacy instruction—in which phonemic awareness, the alphabet, phonics, sight words, syllabication, morphology and syntax, fluency, and spelling are taught in the context of meaningful text—results in improved reading abilities for beginning readers.

The Common Core State Standards (CCSS) for English Language Arts & Literacy call for all students in Grades K–2 to develop basic print concepts, phonological awareness skills, phonics and word recognition skills, and the ability to read on-level texts "with sufficient accuracy and fluency to support comprehension" (NGA, CCSSO, 2010, p. 15).[1] The CCSS stress that

> **These foundational skills are not an end in and of themselves; rather, they are necessary and important components of an effective, comprehensive reading program designed to develop proficient readers with the capacity to comprehend texts across a range of types and disciplines. (p. 15)**

Literacy experts strongly recommend that beginning readers receive explicit and systematic instruction in foundational skills, including phonemic awareness, alphabet, phonics, the sight words, syllabication, morphology, fluency, and spelling elements—and that these skills be combined with frequent engagement with level-appropriate text (Adams, 1990; National Early Literacy Panel [NELP], 2008; National Reading Panel [NRP], 2000; National Research Council [NRC], 1998).

[1]This goal is not exclusive to the CCSS and is also recognized in other rigorous standards of states not adopting the CCSS.

Explicit and Systematic Instruction

The National Reading Panel [NRP] (2000) uses the term "explicit instruction" to mean deliberate "training" in a skill or subskill of reading. Archer and Hughes (2011) characterize explicit instruction as "a series of supports or scaffolds, whereby students are guided through the learning process with clear statements about the purpose and rationale for learning the new skill, clear explanations and demonstrations of the instructional target, and supported practice with feedback until independent mastery has been achieved" (p. 1).

The NRP (2000) uses "systematic" to mean instruction that proceeds over time according to a strategic sequence of activities that ensures exposure to critical subskills in a logical order. A systematic approach to reading provides carefully sequenced constructed lessons to facilitate the incremental progression of children's learning, and enable straightforward assessment and diagnosis on the part of their teachers. For example, systematic phonemic awareness training might progress "from initial sounds to final sounds and then to medial sounds" after students practice manipulating letters to make, break, and build new words that have similar spellings and pronunciations (p. 2-39). Children then can add, delete, and substitute letters in their manipulations to make and read new, changed words. Later the manipulation task can progress to a writing task.

Research Evidence and Expert Opinion

Explicit and systematic approaches to early literacy instruction have been found to be more effective than instruction that relies on indirect means of acquiring decoding skills. Summary findings from research of the past two decades (e.g., NELP, 2008; NRP, 2000; NRC, 1998) support Adams's (1990) contention that "approaches in which systematic code instruction is included alongside meaning emphasis, language instruction, and connected reading . . . result in superior reading achievement overall" (p. 49).

As Torgesen (2002) points out, two of the most authoritative and comprehensive reading research summaries—the National Reading Panel report (NRP, 2000) and *Preventing Reading Difficulties in Young Children* (NRC, 1998)—both find convincing and substantial evidence that explicit instruction in "phonemic awareness and phonemic decoding skills, fluency in word recognition and text processing, reading comprehension strategies, oral language vocabulary, spelling, and writing skills" has been shown to be "consistently more effective than instruction that does not contain these components" (Torgesen, 2002, pp. 13–14). Furthermore, explicit instruction in these skills has been shown to be of particular value to students who struggle with reading (Birsch, 2011; Cunningham, 1990; Torgesen, 2002).

Phonemic awareness and letter knowledge have been found in correlational studies to be the two best school-entry predictors of how well children will learn to read during their first two years of school. In addition, experimental studies that have evaluated the effectiveness of phonemic awareness instruction have found positive results indicating its effectiveness in facilitating reading acquisition. Phonemic awareness training is helped greatly by explicit instruction in how the system works (NRP, 2000).

While explicit instruction in foundational reading skills has been conclusively shown to enhance the chance of early literacy success, proponents stress that such instruction is a means, not an end (for example, see Adams, 1990; CCSS Initiative, [NGA, CCSSO], 2010; NRP, 2000). The ultimate goal of literacy instruction is enabling students to move from decoding text to comprehending it.

RECOMMENDATION

In order to develop the ability of young learners to derive meaning from text (the end goal of reading instruction), provide explicit, systematic instruction in foundational reading skills coupled with ample opportunities to read and make meaning of level-appropriate text. This is especially critical for at-risk students, who show pronounced benefits from an explicit and systematic approach.

iRead*'s Approach*

iRead provides a systematic sequence of explicit, recursive instruction with mastery-based interactive practice. Brief videos (30 seconds to one minute in length on average) use direct instruction to introduce new skills and concepts, often including the use of songs. Following the videos, engaging, interactive, game-like activities offer students ample opportunities to practice the new skills and apply them to reading. Practice continues, with guided practice activities that offer instructive collective feedback, until students have mastered the skills. All instructional activities are aligned with the Foundational Skills of the *Common Core State Standards for English Language Arts & Literacy*, as well as those of other rigorous state standards.

Phonemic and phonological awareness, as well as phonics, are highlighted in the context of activities in *iRead*'s Alphabet and Code strands. For example, students identify the primary sound for each letter of the alphabet, isolate and pronounce initial sounds in spoken words, and master the dominant sound-spelling correspondences for consonants and short vowels. Spelling, high-frequency/high-utility sight words, syllabication combined with morphology (word study), spelling, and fluency are highlighted in activities in *iRead*'s strands Word Play and Sight Words. Within all of these activities, students have the opportunity to use the foundational skills they are learning to make meaning. For example, as children decode words, they immediately see an image and hear and/or read a sentence to anchor its meaning. This reinforces the practice of immediately connecting the decoding of words with the meaning of those words. Additionally, students read connected text daily and apply the skills learned to short passages. In the Success activities, students apply the skills to literary stories and informational materials that increase in complexity according to the students' progress through the software.

In the *iRead* program, reading is its own reward. Success is celebrated with the opportunity to read more challenging, age-appropriate texts. Throughout, foundational skill instruction is directed toward meaning, and is always linked to the reading of connected text. Beginning in Unit 4 (following units on letters and letter sounds), students practice reading connected text of gradually increasing length, and have regular opportunities to apply their skills to reading eBooks. For further skills practice in reading connected text, teachers can download titles from *iRead*'s library of printable books and resources.

Phonemic and Phonological Awareness

Phonemic awareness, according to National Research Council (1998) reading experts, refers to the fact "that every spoken word can be conceived as a sequence of phonemes. Because phonemes are the units of sound that are represented by the letters of an alphabet, an awareness of phonemes is key to understanding the logic of the alphabetic principle and thus to learning of phonics and spelling. Phonological awareness is a more inclusive term than phonemic awareness and refers to the general ability to attend to the sounds of language as distinct from its meaning" (NRC, 1998, p. 52).

Brady (2012) provides a helpful distinction in noting that phonological awareness can be seen as having two levels: phonological sensitivity, which is denoted by a "conscious awareness of larger, more salient sound structures within words, including syllables and sub-syllabic elements (onsets and rimes), and phoneme awareness [i.e., phonemic awareness], which refers to "explicit awareness" of the individual phonemes that comprise spoken words in English (p. 20).

Research Evidence and Expert Opinion

Research consistently demonstrates that "learning to read can be facilitated by providing explicit instruction that directs children's attention to the phonological structure of words, indicating that phonological awareness plays a causal role in learning to read…" (NRC, 1998, p. 56). Furthermore, explicit training in phonological awareness shows stronger effects than more indirect instructional approaches (NRP, 2000, p. 2-33).

Children typically acquire phonological sensitivity prior to phonemic awareness. While sensitivity to the sounds of language, in general, comes naturally to most young children, Adams (1990) notes that easy acquisition is not the case when it comes to phonemes. Phonemic awareness "is not spontaneously acquired, [but] can be successfully taught" through explicit training (p. 329).

Its importance is underscored by the finding that, among kindergartners, phonemic awareness "is one of the strongest predictors of subsequent reading achievement" (Brady, 2012, p. 19). When early reading instruction is methodically and systematically combined with phonemic instruction, "the success rates are dramatic" (Adams, 1990, p. 329). The effect on reading success is even stronger when phonological and phonemic awareness instruction is combined with activities that promote knowledge of letter names and letter sounds (Brady 2012; NELP, 2008). As Cunningham (1990) explains, "explicit instruction in how segmentation and blending are involved in the reading process helps children to transfer and apply component skills such as phonemic awareness to the activity of reading" (p. 441).

Research further suggests that *reciprocal causation* exists between learning to read and phonological awareness. In other words, there is evidence that growth in both areas proceeds in parallel (Adams, 1990; NRC, 1998).

Reading researchers have suggested that certain levels of phonological awareness, as measured by different tasks or by different levels of linguistic complexity, come before learning to read. Alternatively, more advanced levels of phonological awareness result from learning to read (Stahl & Murray, 2006).

RECOMMENDATION

To promote early literacy, provide explicit and systematic instruction that directs children's attention to the sounds of language (phonology) and corresponding units of sound (phonemes), and combine this instruction with activities that promote letter knowledge. In tandem, provide opportunities for children to engage in emergent and beginning reading.

iRead*'s Approach*

iRead's scope and sequence offers a carefully scaffolded and systematic instructional approach to early literacy (Grades K–2), built on technology that affords differentiated and adaptive instruction to meet the individual needs of children at all readiness levels. This instructional sequence moves students seamlessly from introduction of the letter names and then letter sounds, to instruction on basic blending and segmenting of phonemes, through introduction and practice with the highest utility spellings of the 44 sounds of English.

Note: *As early learners vary in their progress from no experience with the alphabetic principle toward reading fluency and comprehension, grade-level distinctions are not as meaningful as each child's phase of development. iRead's scope and sequence is consistent with Ehri's (1995) four phases of reading development, which are characterized by students' progressively deeper understanding of the alphabetic system: (1) pre-alphabetic, (2) partial alphabetic, (3) full alphabetic, and (4) consolidated alphabetic.*

iRead Level A begins instruction at the partial alphabetic level, where students are first introduced to the alphabet (Units 1 and 2) and letter sounds (Unit 3). In Unit 3 on letter sounds, students engage in activities that tie sounds in words to letters in order to reinforce the key concept that letters represent words via the words' sounds. Students are guided to identify the dominant sound of each consonant and the short sound of each vowel. Alongside alphabet study in this early phase, *iRead* focuses on helping children acquire phonological awareness through activities that help children identify sounds in words. Throughout the first three units, students proceed through activities such as Rhyme Recognition, Syllable Identification and Counting, and Syllable Blending at their own pace, based on ongoing performance data.

Then, in Unit 4, *iRead* moves quickly to provide a strategically scaffolded sequence of lessons in letter-sound blending and segmenting. At strategic points in the instructional sequence, students engage in auditory phonological awareness exercises involving phoneme isolation. However, phonemic awareness is most often taught and practiced in the context of written words presented as text—that is, in combination with phonics instruction.

To ensure the children's attention to every phoneme, students are introduced to blending experiences that systematically highlight minimal contrasts in CVC (consonant-vowel-consonant) words. These contrasts are introduced in a sound developmental progression from initial sounds (e.g., *fin, win*), to final sounds (e.g., *fin, fit*), then medial sounds, (e.g., *fin, fun*) designed to promote flexibility and agility in decoding as evidenced in the research (Brady, 2012). Students thus learn the essential concept that in decoding, every letter matters.

While minimal contrasts among words are used to introduce and anchor phonic elements, *iRead* activities gradually present a mix of words with target and review patterns, so that students will necessarily see a range of patterns. By the time they get to the Reading Center at the end of each topic, students are given the opportunity to read connected text that, by its very nature, presents a range of patterns, which in turn reinforces and expands decoding agility.

Throughout the sequence, in addition to activities focused on developing and systematically reviewing skills, *iRead* intersperses activities that guide students to exercise and transfer skills to new words and texts.

The *iRead* Software also helps teachers identify students requiring additional support, and offers a bank of strategies for one-to-one and small group, evidence-based interventions to aid young learners in acquiring the phonological skills needed to achieve early literacy.

The Alphabet

The alphabetic principle refers to the concept that letters represent the sounds of a language. Some alphabetic languages (e.g., Spanish, Italian, Turkish) possess almost perfect one-to-one correspondences between sounds and letters. English, another alphabetic language, does not have these strong, consistent correspondences. "This lack of transparency," notes the National Reading Panel (2000), "makes it harder for beginners to figure out the system without help" (p. 2-32).

Research Evidence and Expert Opinion

Knowledge of the alphabet is an important first step in reading success. Research shows that the "best predictor" of reading success at the end of first grade was the ability to recognize and name upper- and lowercase letters at the start of the year (Adams, 1990, p. 43). That knowledge is both a precursor to as well as facilitator of phonemic awareness (Rosenberg, 2006). Indeed, mastering the alphabetic principle "depends equally on knowledge of letters and on explicit awareness of phonemes because it depends integrally on the association between them" (Adams, 1990, p. 304).

Letter Identification

Beyond knowledge of the letter names of the alphabet, children must be able to name them fluently and accurately (rapid letter naming) in order to automatically see words as wholes. Children who are not able to do this have to devote so much effort to deciphering each letter that they leave little space in working memory for processing and remembering the words. Recognizing letters automatically makes it easier for children to recognize the patterns of letters, and the ability to do this is a key to reading words (Nevills & Wolfe, 2009).

RECOMMENDATION

To give children an advantage in learning to read, develop knowledge of letter names and provide practice in rapid letter naming. Help students gain an understanding that letters represent the sounds in words by introducing letter-sound relationships.

iRead*'s Approach*

iRead introduces the letter names and sounds and then quickly moves to application of the sounds to phonological awareness instruction. Units 1 and 2 guide students to master the upper- and lowercase alphabet, respectively. Practice is provided so that students can learn to fluently and accurately name the letters. Letters are taught in alphabetical order so students can build on their prior knowledge and situate letters in their traditional order. By introducing uppercase letters first, *iRead* exposes children to the entire alphabet in half the time, while reducing cognitive load and simplifying discrimination tasks.

In Unit 3, *iRead* then moves to connect letters to sounds through phonological awareness instruction. Students are introduced to letter-sounds using assonance activities such as clicking on images of words starting with the same letter (*ball, boy, bat*), students begin to make the essential linkage between letter, sounds, and meaningful language.

Throughout alphabet instruction, vowels are highlighted as special letters in program graphics, modeling, and animations. Students also receive practice reciting the vowels through the singing of a vowel song.

The program also draws on the writing-reading connection to encourage acquisition of letter-recognition skills. *iRead* models the formation of letter strokes throughout these units, with links to paper-and-pencil practice in writing letters.

Phonics

According to National Research Council reading experts, "Phonics refers to instructional practices that emphasize how spellings are related to speech sounds in systematic ways" (NRC, 1998, p. 52).

Research Evidence and Expert Opinion

More than 20 years of research provide overwhelming evidence of the value of phonics in early reading instruction (Adams, 1990; NELP, 2008; NRC, 1998; NRP, 2000). Further, systematic and explicit instructional approaches to phonics—that is, those that "use a planned, sequential introduction of a set of phonic elements along with teaching and practice of those elements" and feature "the identification of a full array of letter-sound correspondences" have been shown to be more effective in promoting early literacy than non-systematic approaches (NRP, p. 2-89). These findings provide clear evidence that "systematic phonics instruction makes a bigger contribution to children's growth in reading than alternative programs providing unsystematic or no phonics instruction" (NRP, p. 2-92).

But as the National Reading Panel (2000) itself cautions, phonics should never be taught as an end in itself. Phonics instruction is a tool that has proven efficacy in teaching reading—but reading comprehension is the end goal. Greater success in reading occurs, for both low-readiness and better-prepared students, when systematic code instruction is coupled with the reading of meaningful connected text (Adams, 1990).

RECOMMENDATIONS

Beginning readers at all levels of preparedness benefit from instruction in phonics. However, to be of greatest value, phonics instruction should be taught in conjunction with related reading activities and the reading of informative and engaging texts, within the context of a comprehensive English Language Arts program.

iRead*'s Approach*

iRead provides a careful sequence of explicit phonics instruction designed to build automaticity in the full array of high-utility spelling patterns for the English phonemes, including introduction of and practice with all phonic elements. *iRead* phonics instruction is implemented as part of a comprehensive English Language Arts program.

Starting in Unit 4 towards the end of Level A, children begin to develop agility in reading any single-syllable word with regular short vowel spellings. Phonic elements are introduced in a sequenced developmental progression starting with –vc rimes that focus attention on contrasting initial consonants, then cv- patterns that focus attention on contrasting final consonants, and finally patterns in which initial and final sounds are held constant and vowel sounds vary (e.g., *hat, hit*) to focus attention to the vowel in each word. In *iRead* Levels B and C, students move on to more challenging single and multisyllable patterns.

iRead teaches spellings of the sounds of English with a focus on sounding out words, paying attention to every letter, and connecting words to meaning. Direct instruction videos and carefully designed activities enable students to identify spelling patterns, while also prompting students' metacognitive understanding about how words and language function.

In Levels A and B of the *iRead* program, Word Center activities promote students' ability to decode new words with agility. For example, the Word Changer activity guides young readers to identify changes in initial, final, and medial letters to blend new words, and then identify their corresponding images to reinforce meaning. In the Mix and Match activity, to build proficiency in matching aural words to their spellings, students read a list of words, then match spoken words to their spellings. Decoding tips are provided to help them correct their errors. In Show What You Know, students build their accuracy and automaticity through selecting the corresponding word from an array of choices. *iRead* offers students immediate corrective feedback and many opportunities to practice. Show What You Know Fast provides several timed "speed rounds" to further enhance automaticity. Throughout these exercises, young learners get the message that every letter matters.

Show What You Know Fast

The everyday sequence of *iRead* activities complements comprehensive English Language Arts programs. The activities present reading of connected texts that are carefully constructed to map to letter-sound representations introduced through direct instruction and/or interactive exercises. For the most part, students are not asked to decode words with spelling patterns they have not been taught to decode or to read high-frequency sight words to which they have not been explicitly introduced.[2] Decodable texts gradually increase in length and complexity, moving from a sentence to multiple paragraphs. Through this scaffolded approach, learners receive an appropriate amount of support and challenge, and thus have a greater chance of success in their earliest attempts at reading. This pattern of accomplishment, in turn, promotes positive feelings about reading, thus inducing a virtuous cycle of further reading and continued success (Adams, 1990).

Sight Words

The term "sight words," in the context of early reading development, refers to the "high-frequency, irregularly spelled words students are taught to read as unanalyzed wholes" (NRP, 2000, p. 2-102).

Research Evidence and Expert Opinion

The importance of mastering sight words is made clear by the fact that only 14 of the 150 most frequently used words in English follow sound-symbol generalizations that early readers are likely to have encountered (Adams, 1990). Indeed, some of the most common words in English, such as *does*, *to*, *were*, *there*, *one*, are irregular by any standard. Yet, because of their frequency, students must master such high-frequency words before they can begin to read connected redundant text.

The 25 most common words in English represent about a third of all printed material as such sight words are the glue that holds text together (Fry & Kress, 2006). The ability to fluently comprehend text—the goal of all reading instruction—depends on reading these and other sight words with automaticity.

Mastering sight words is especially critical for students entering school with low reading-readiness and those who struggle with reading. Torgesen (2002) explains that these children "encounter many more words in grade-level text that they cannot read 'by sight' than do average readers" (p. 10). Sight words present a challenge for English language learners (ELLs), as well. Approaches that enable children to manipulate words through categorization, word association, or semantic analysis have been shown to be effective with both native speakers and ELLs (Carlo et al., 2004; Marzano & Pickering, 2005; Nagy, 1997).

Expert opinion further suggests that appropriate usage of these words must be emphasized in instruction, and that the highest frequency words be mastered before decodable text is introduced. Before decoding is fully mastered, in order to engage with English text, students must learn to recognize high-frequency words automatically (Adams, 1990). Adams (1990; 2001; 2009) advises that in order to avoid confusion in early learners, early sight word instruction should be discrete from regular phonics instruction.

RECOMMENDATION

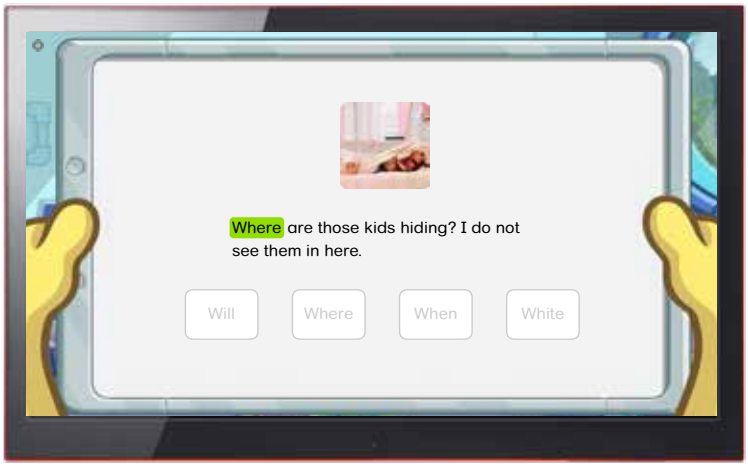
Teach early recognition and understanding of essential sight words in context to promote reading fluency, and compartmentalize instruction to avoid mutual interference from phonics lessons.

iRead*'s Approach*

Because words are better understood in relation with other similar words, *iRead*'s Sight Words strand presents high-utility, high-frequency, non-decodable sight words in select groups (e.g., prepositions, verbs, pronouns), thus aiding young learners in recognizing and making connections among these words.

2. This approach is consistent with evidence that reading success is enhanced by exposure to texts "with a high proportion of decodable, familiar words (complimented by high frequency words)" (Brady, 2012, p. 21).

Through exercises that reinforce the semantics, syntax, and usage of these words, students learn their function and meaning, which is especially important for ELLs and other students who may lack a firm understanding of how these words function in written and spoken English. For example, in the Cloze sentence activity Super Sentence Skills, children are asked to complete a sentence by selecting the correct sight word, guiding them to think about and use their understanding of the meaning and function of the words. Particular emphasis is placed on contextualizing prepositions, such as *with* and *of*, as comprehension of these words is best developed in the context of surrounding text.



Word Watch

And because words are best learned in rich semantic contexts (Adams, 1990), vocabulary is explicitly introduced and reviewed. Students learn sight words in context sentences that demonstrate their meaning and function, and then they practice using them to complete sentences. To further ensure a deep understanding of word meaning, the software provides multiple encounters with vocabulary across different texts.

To determine which high-frequency words to include, *iRead*'s development team carefully reviewed the following authoritative word list sources:

1,000 Instant Words (Fry, 2004)

The American Heritage Word Frequency Book (Carroll, Davies, & Richman, 1971)

Basic Elementary Reading Vocabularies (Harris & Jacobson, 1972)

Beginning to Read (Adams, 1990)

Common Core State Standards (NGA, CCSSO, 2010)

Dolch Basic Sight Vocabulary (Buckingham & Dolch, 1936)

The Educator's Word Frequency Guide (Zeno, Ivens, Millard, & Duvvuri, 1995)

Hiebert's Word Zones™ (Hiebert, 2005)

Houston Independent School District 2010–2011 High Frequency Word List, Grade 2 (Hunter, 2010)

To be selected, a word had to appear on two or more of the above lists, and be confirmed by *The Educator's Word Frequency Guide* (Zeno et al., 1995) and the 2010 *Common Core State Standards*, yielding a final list of 147 unique high-utility sight words. Mastering these words greatly increases a student's chance of reading success.

Syllabication

The ability to identify and divide syllables in written words equips students with strategies for identifying unfamiliar multisyllabic words.

Research Evidence and Expert Opinion

Research shows that reading success is linked to the ability of young learners "to detect syllables in speech or to segment syllables from speech" (Adams, 1990, p. 300). Syllables are larger units of spoken language than phonemes, and are thus easier for beginners to hear and manipulate (NRP, 2000). Therefore:

> syllabic awareness constitutes an essential link between [the] seemingly easy-to-acquire ability underlying our sensitivity to sound similarity and rhyme and that hard-to-acquire capacity to recognize individual phonemes (Adams, 1990, pp. 302–303).

Adams (1990) further observes, ". . . skillful readers' ability to read long words depends on their ability to break the words into syllables" (p. 25).

From a reading fluency perspective, as students progress in their reading from the partial-alphabetic phase of development through to the consolidated phase, they use their knowledge of recurring letter patterns to consolidate letters into larger units, which in turn, facilitates their learning of words as sight words beyond the basic, high-frequency, non-decodable set (Ehri, 1995). Thus, this ability—to break words into syllables—is critical to skillful reading of long words, and to the acquisition of increasingly complex words as sight words (Adams, 1990; Ehri, 1995; NRP 2000).

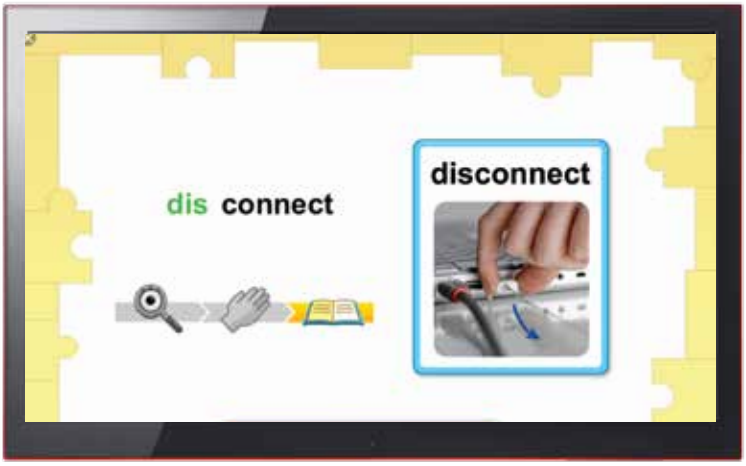
RECOMMENDATION

Being able to break words into syllables allows beginning readers to more easily read new and longer words, thus improving their reading fluency. Providing instruction that aids young readers' ability to use syllabication strategies to unlock unfamiliar words promotes successful reading.

iRead*'s Approach*

iRead provides explicit instruction in syllable identification and segmentation. Starting with Level B, at the alphabetic phase, instruction begins to guide students towards reading chunk-by-chunk as opposed to sound-by-sound.

In *iRead*'s strategic syllable awareness exercises such as Word Solver, students analyze multisyllabic words by "spotting the vowels" in order to determine the number of syllables, and then break the word into its syllables to make it easier to read. Later, in Level C, students explore six syllable types and learn to consciously activate syllabication strategies and to change strategies if the first attempt doesn't work.



Word Splitting

Morphology & Syntax

Morphology refers to the underlying meaning structure of words (Bowers & Cooke, 2012). In the context of foundational literacy instruction, morphological awareness refers to the ability to understand the function and meaning of word bases and affixes (e.g., inflectional endings, prefixes, suffixes), and how they can be combined to form words.

Syntax involves an understanding of "the ways words are strung together to communicate meaning" (Reutzel & Cooter, 2012, p. 35).

Research Evidence and Expert Opinion

Because English words are represented both as units of sound (phonemes) and as units of meaning (morphemes), it is logical to conclude that literacy instruction needs to address both (Read, 2008). Learning

about morphology helps children understand words regardless of their first language or level of reading preparedness. Morphological awareness has been shown to contribute to vocabulary growth, and enables readers to understand as many as three words for every known base word (Nagy, Berninger, & Abbott, 2006). In addition, Adams (1990) recommends that instruction should build awareness of syntax because readers must understand how syntactical units within sentences are organized, in order to comprehend text of increasing complexity.

Read (2008) summarizes the multiple benefits of morphological awareness, "noting that" it has been shown to have a positive effect on students' word identification, spelling, vocabulary, and reading comprehension" (p. 46). Furthermore, at-risk students and other struggling readers have been shown to benefit from direct instruction in morphemic analysis (Read, 2008).

Traditionally, morphology has been considered an advanced topic, but increasingly research and expert opinion recommend that it be addressed early in literacy instruction (Adams, 1990; Bowers & Cooke, 2012; Carlisle, 2004; Read, 2008). The importance of early exposure to morphology is underscored by research showing that morphological awareness accounts for "around 4% or 5% of variance in decoding abilities" (Read, 2008, p. 37).

RECOMMENDATION

As English words represent both units of sound and meaning, provide morphological awareness instruction in addition to phonemic awareness instruction. Similarly, since increasingly complex English sentences are comprised of syntactical units that convey essential meaning, provide instructional support for developing children's awareness of syntax.

iRead*'s Approach*

iRead instruction focuses on building student understanding of the meaning and function of word parts, including inflectional endings, prefixes, and suffixes. Students are afforded opportunities to apply, integrate, and extend their learning of meaningful word parts in the context of reading texts with controlled vocabulary.

Morphological awareness is carefully built into the entire *iRead* sequence to facilitate early success in reading connected text. At the partial alphabetic phases (*iRead* Level A), children learn that the ending *–s* can mean more than one of something. By the time they have progressed to consolidated reading levels (*iRead* Level C), students are able to identify, manipulate, and understand the meaning of high-utility affixes such as *re-*, *pre*, *-ful*, *-less*, and *–able*.

In Level C, to help students unlock meaning, *iRead* direct instruction videos (A Message from Mrs. Wordy) provide guidance that models and explains word affixes. *iRead*'s Word Play strand presents high-utility affixes and demonstrates how morphemes work. To build young readers' abilities to read, manipulate, and understand the function of affixes, Word Changer activities provide opportunities to view changes in affixes, blend new words, and identify the corresponding image. Word Solver exercises help children "look–split–read" complex words by first looking for word parts they already know, then splitting the base from its affix, then reading each part to make meaning of the word.

iRead models and reinforces the syntax of written English, through activities that begin with simple sentences and that progressively involve longer and more syntactically complex sentences. Exposing children to this complexity continuum ensures that they are engaged in reading and thinking about text that follows the syntactic conventions of written language, which is so different from spoken language. In addition, many of the words introduced in the *iRead* Sight Words strand are signals of syntactic units (e.g., prepositions) and practice exercises reinforce the form, function, and meaning of these words. In sum, *iRead* helps students build a vocabulary for reading and writing.

Fluency

Fluency refers to the ability to read letters, sounds, words, sentences and passages, both orally and silently, with speed and accuracy (NELP, 2008; Vaughn & Linan-Thompson, 2004).

Research Evidence and Expert Opinion

Fluency in reading rests on foundational skills that are built and reinforced through effective phonics instruction. Adams (1990) notes:

> [R]esearch indicates that the most critical factor beneath fluent word reading is the ability to recognize letters, spelling patterns, and whole words effortlessly, automatically, and visually. The central goal of all reading instruction—comprehension—depends critically on this ability. (p. 54)

Thus, it is important for early literacy instruction to include fluency practice within the context of building foundational skills building. As The National Reading Panel (2000) cautions:

> phonics programs that emphasize decoding exclusively and ignore the other processes involved in learning to read [including reading fluency and automaticity] will not succeed in making every child a skilled reader. (p. 2-117)

Beyond developing decoding skills to automaticity, fluency is best developed, the research shows, by providing students with ample practice opportunities for oral reading, supported by explicit instruction from teachers, as well as other forms of feedback from fellow students and families (Adams, 1990; NRP, 2000; Vaughn & Linan-Thompson, 2004). Furthermore, explicit and systematic fluency instruction that includes monitoring of student progress has shown stronger effects than more implicit approaches (NRP, 2000; Vaughn & Linan-Thompson, 2004). Vaughn & Linan-Thompson (2004), based on their review of the research, suggest the following explicit means of teaching fluency:

- Model Reading: a model reader (often the teacher) reads the text, then the student reads it.
- Choral Reading: the teacher previews a passage, then the teacher reads aloud, with students joining in. The teacher's voice fades to allow the children to proceed without a modeled reader.
- Recorded Reading: students follow a text being read by a recorded reader.
- Reader's Theater: students rehearse a text repeatedly, then perform it.
- Partner Reading: students, often paired in differing reading levels, read and reread passages of text to each other.

In these and other fluency activities, care should be taken to appropriately match the texts to each student's individual reading level (Vaughn & Linan-Thompson, 2004). Typically, texts that children can read orally with 95% accuracy are likely to produce the best results.

RECOMMENDATION

Research and expert opinion indicate that effective word and letter recognition skills are essential to fluency in reading. Providing frequent opportunities for accountable silent and oral guided reading of texts, appropriately leveled to each learner, promotes the development of fluency.

iRead*'s Approach*

iRead helps students gain fluency through technology-based explicit practice in phonics-based activities that promote automaticity in word decoding and daily connected text activities. In addition to the online activities, *iRead* provides students with frequent opportunities to read level-appropriate text (e.g., Success eBooks),

carefully scaffolded to increase in length and complexity as reading levels progress, as well as guidance for teachers in promoting fluency through offline small-group instruction. While promoting the development of foundational literacy skills, *iRead* activities also require students to make meaning of text.

In addition, students are able to record their oral reading attempts and save them in their digital portfolio for subsequent teacher review. An oral reading rubric helps teachers evaluate the recordings to identify student growth and any areas needing further development. Offline fluency strategies aim at multiple reading opportunities, including:

- Cloze Reading
- Choral Reading
- Repeated Reading
- Partner Reading
- Reader's Theater

Students are also taught ways to strengthen their emerging fluency via Fix-Up Strategies that focus on self-correcting and re-reading techniques.

Spelling

The *Common Core State Standards* call for students to "demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing" as defined in grade-appropriate stages of mastery. Furthermore, while spelling is in itself a core literacy skill, developing an awareness of its patterns (orthography) is important to early reading success.

Research Evidence and Expert Opinion

Phonics instructional approaches in which word families are carefully grouped to highlight letter-sound contrasts have been shown to be effective in helping students grasp orthographic patterns (Adams, 1990; Henry, 2010). Instruction that systematically organizes and exploits minimal contrasts helps focus children's attention and hastens development of their orthographical/phonological abilities (Adams, 1990).

The evidence for focused and explicit spelling instruction as a major component of the reading program is strong. Adams (1990) concludes that "learning about spelling . . . enhances reading proficiency" because it reinforces knowledge of common letter sequences, spelling-sound relationships, and (possibly) word parts (p. 404).

Finally, it is worth noting that while an understanding of spelling patterns aids reading success, children's awareness of phonics also promotes their spelling skills. The National Reading Panel concludes "that systematic phonics instruction produces gains in . . . spelling not only in the early grades (kindergarten and 1st grades) but also in the later grades (2nd through 6th grades) and among children having difficulty learning to read" (NRP, 2000, p. 2-122).

RECOMMENDATION

As children learn to decode words through phonemic/phonological awareness and phonics instruction, they develop awareness of letter-sound relationships and orthographic patterns that improve their ability to encode words, or produce spellings of them. In turn, explicit instruction in how to spell words correctly when writing improves students' ability to decode them when reading.

iRead*'s Approach*

iRead teaches the highest-utility spellings of English phonemes with a focus on sounding out words, paying attention to every letter, and connecting words to meaning. Direct instruction videos and carefully designed activities enable students to identify and manipulate letters to form words, while also prompting students' metacognitive understanding about how words and language function.

In Levels A and B of the *iRead* program, Word Center activities promote students' ability to manipulate letters and patterns to build new words. For example, the Word Building activity guides young readers to identify letters to complete words and to change initial, final, and medial letters to make new words. As they identify letters to complete words, students must apply segmentation skills to identify the phonemes needed, and they must apply knowledge of sound-spellings to identify the correct letters to use. For example, in completing the word s_f_ (safe), they hear the word spoken and identify its vowel sound. Then they must identify the correct spelling for that vowel sound (VC*e*).

As they change initial, final, and medial letters to make new words, students build agility with manipulating spelling patterns. *iRead* offers students immediate corrective feedback and many opportunities to practice, always relating each word to its meaning.

Level C brings an increased focus on accountable spelling, and at this level, children encounter the *Spelling Center*. This Center presents a suite of activities that use assessment, spelling tutorials, and repeated practice to move children to spelling mastery.

Spelling Warm-Up is an assessment that asks students to spell words from dictation, and uses results to create a customized set of study words for each student. Next comes Spelling Work-Out, which provides spelling tips and guided practice for each study word with immediate corrective feedback and error correction specific to their spelling errors. Finally, the Spelling Bee activity provides repeated practice with study words, review words, and new/transfer words to build accuracy and fluency in encoding.

iRead's *Professional Guide* offers advice to teachers on integrating spelling with other elements of reading and writing instruction, as students move from the partial and full alphabetic phases of reading to the full-alphabetic phase and consolidated reading phase. *iRead* online lessons and activities systematically guide students in manipulating letters and phonemes to encode entire words.

A Coherent and Systematic Approach

Foundational skills are critical to early literacy development, but as a means, not an end. The purpose of phonics instruction is to promote the ability to read with ease, accuracy, and meaning.

Research Evidence and Expert Opinion

Consensus research findings strongly support the effectiveness of phonics instruction, while also emphasizing its larger goal of reading fluency and comprehension. As the National Reading Panel (2000) states, "systematic phonics instruction should be integrated with other reading instruction (p. 2-97). In other words, students must come to understand the larger purpose behind learning letter-sound relationships. Furthermore, their emerging skills must be continuously applied to meaningful reading and writing activities (NRP, 2000, p. 2-96).

First, the research literature suggests (as noted earlier), that the design of effective phonological/phonics instruction should be carefully scaffolded, with each element mapped to a scientifically based understanding of how reading skills progress. Further, those elements must be thoughtfully intertwined to provide the appropriate levels of support and challenge to young learners. As Adams (1990) observes, "[T]he parts of the reading system must grow together. They must grow to one another and from one another" (p. 6).

Second, skills don't exist in a vacuum. They must be applied to a meaningful activity, in this case, the reading of connected, level-appropriate text. Brady (2012), while endorsing the importance of research-based methods of code instruction, advocates connecting that instruction to the reading of connected text. Furthermore, Brady (2012) concludes that engagement with "texts with a high proportion of decodable, familiar words (complemented by high frequency words) enhance beginners' reading acquisition" (Brady, p. 21).

Moats (2012) underscores the importance of a systematic and coherent approach to literacy instruction, noting that currently about one-third (34%) of students score below basic on 4th grade NAEP tests, while up to 70% to 80% of low-income students are at risk for reading failure. To combat these alarming statistics, she calls for regular classroom instruction that "includes systematic instruction in phoneme awareness, phonics (with spelling), passage reading fluency, vocabulary, and comprehension—strands that ideally complement and support one another. Most importantly, students must spend time reading—not simply being read to—from text of the appropriate level of difficulty" (Moats, 2012, p. 16).

Coherence in reading instruction rests not on an either/or argument, but an integrative one. Coherency means that teaching children to read and write words in isolation serves to promote their spelling and word recognition skills. And, it means teaching children to read words in meaningful contexts so that they can develop understanding of words' usage and meaning. Throughout, as children see and say words, it is essential that they be guided to think about the words' meaning. Adams (2011) grounds the case for coherence, in neuroscience, noting, "The brain does not grow block by block from bottom up. It grows through its own efforts to communicate and find coherence within itself" (p. 19).

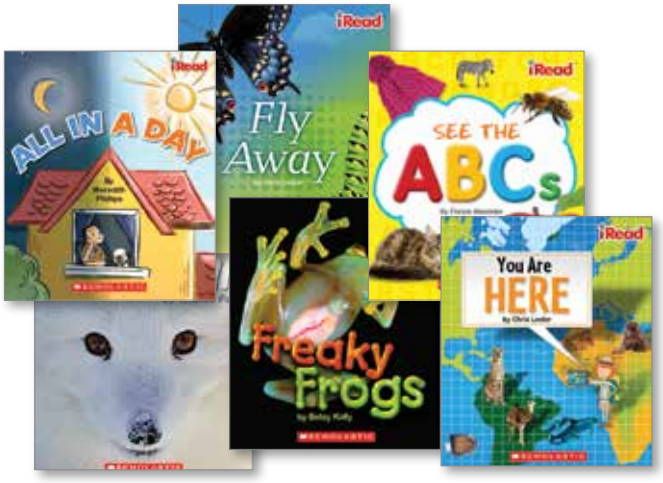
RECOMMENDATION

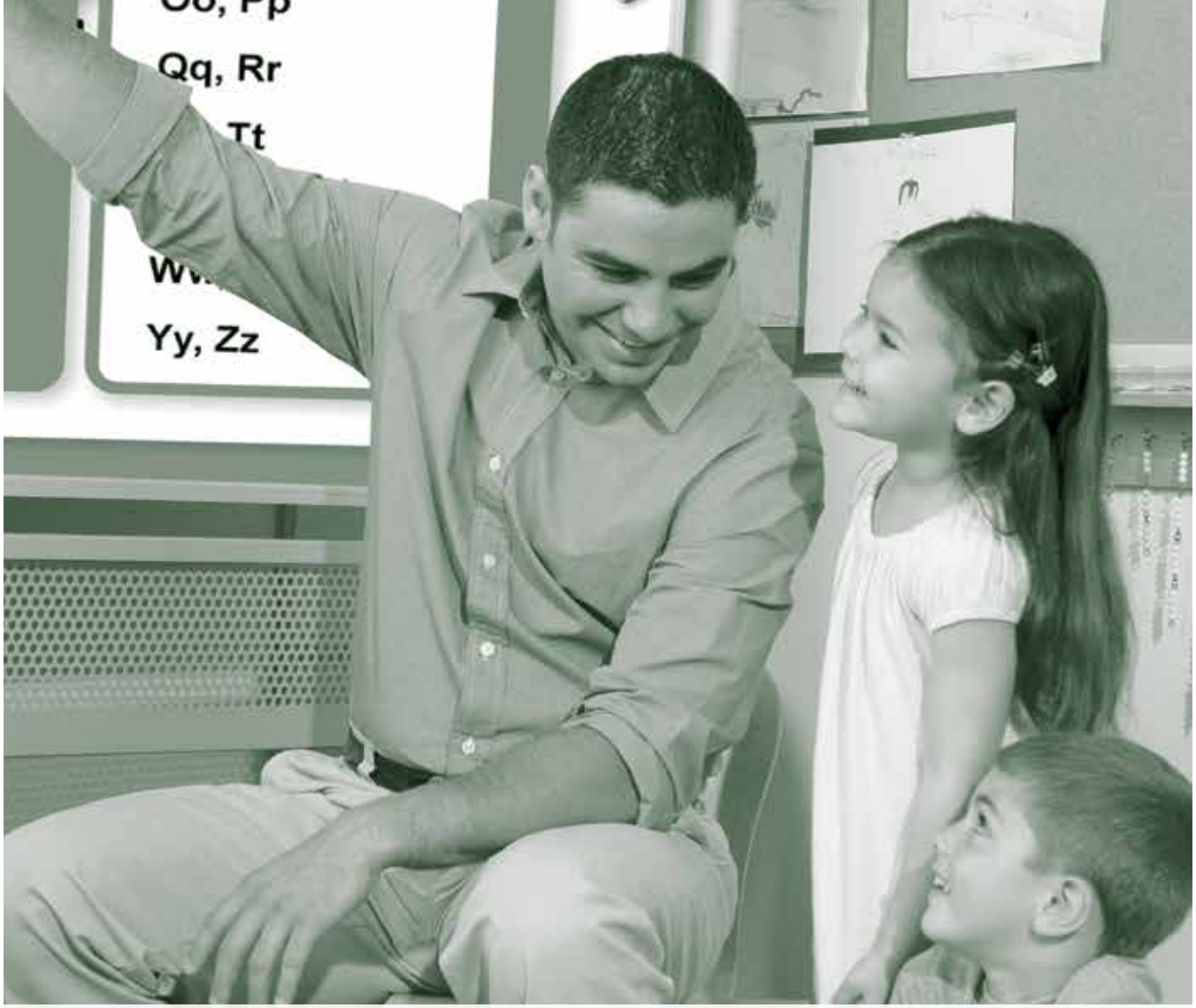
Guide beginning readers to master the foundational literacy skills detailed above via a systematic and coherent plan of instruction that includes ample opportunities to engage with appropriately leveled text, so that students can integrate these skills seamlessly and automatically to achieve fluent comprehension.

iRead*'s Approach*

iRead components work together as a coherent and orchestrated whole. All lessons in *iRead*'s component skills strands are carefully designed to build on and reinforce each other, while all practice activities are anchored in meaningful text.

Each series of *iRead* lessons culminates with an eBook Success activity in which students apply their newly acquired phonological/phonics skills to reading and rereading of high-interest texts featuring controlled vocabulary. Students engage in two "reads" of each *iRead* eBook. The focus of the first read is to build fluency and knowledge. Students listen to a model fluent reading and follow along with highlighted text. They also may opt to turn off the audio to Read by Myself. The focus of the second read is to build comprehension and vocabulary. During this rereading, students are encouraged to read on their own and explore key vocabulary words, or power words (based on the work of Andrew Biemiller [2009]). Friendly definitions are provided for these select, high-utility words (words used across domains and in multiple contexts). If language supports have been turned on, Spanish-speaking students hear Spanish definitions in addition to those in English. After the two readings have been completed, all students demonstrate vocabulary acquisition by matching words with their definitions. Students demonstrate comprehension by identifying the correct detail that supports a key idea of the text.





Personalized instructional approaches enhance the effectiveness of teaching and learning for all students and can help ensure that students in classrooms of mixed readiness levels all have access to the same high-quality educational opportunities.

The *iRead* program adapts to the individual needs of every student, providing systematic review, individual feedback, and multiple opportunities to test for mastery. At the beginning of the school year, *iRead*'s Screener evaluates each student's reading abilities, and then places the student in the appropriate unit of instruction.

Personalized, Differentiated Reading Instruction

In this section, the terms personalized instruction and differentiated instruction are used synonymously to refer to the research-informed perspective that learning is enhanced when instruction accommodates the variances in learning needs among individual children (Sousa & Tomlinson, 2011).

Recent statistics reveal the increasing diversity of US public education students:

- There has been a 150% increase since 1990 in the number of English language learners (ELLs) in US public schools (Goldenberg, 2010).
- It is projected that 20% of the US public school population will be Hispanic by 2050 (Cárdenas-Hagan, 2010).
- 13% of public school children receive federally supported special education services (US Department of Education, National Center for Education Statistics [USDOE, NCES], 2011).
- Over 21 million children receive Title I services, aimed at students from low-income families (USDOE, NCES, 2011).

Students have further opportunities to strengthen and apply their skills in daily *iRead* tasks that build from letter formation to spelling activities to writing tasks centered on Success eBooks.

Students from backgrounds such as these often face academic challenges and are overrepresented among struggling early readers (NRC, 1998). For example, according to 2005 National Assessment of Educational Progress (NAEP) data, approximately three-fourths of US English language learners scored "below basic level in reading when compared to non-Hispanic whites" (Cárdenas-Hagan, 2010, para. 3,). Additional challenge is presented when these demographic factors overlap. For instance, according to the US Department of Education, of the children aged 5–9 who spoke a language other than English at home and reported speaking English with difficulty, 70% are classified with a poverty status of poor or near-poor (USDOE, NCES, 2011).

Personalized instructional approaches enhance the effectiveness of teaching and learning for all students and can help ensure that students in classrooms of mixed readiness levels all have access to the same high-quality educational opportunities. Differentiation promotes the effectiveness of the partners in the learning process: teachers are more successful when they systematically evaluate their students to better understand their differing learning needs and adapt instruction accordingly. In turn, students achieve at higher rates when learning environments are intentionally designed to maximize their individual cognitive development (Sousa & Tomlinson, 2011). Learning happens best when "time, space, materials, groupings, strategies, and other classroom elements" are systematically organized to "address students' multiple development trajectories" (Sousa & Tomlinson, pp. 46–47).

To increase their chances of becoming successful readers, all children, from those with advanced skills, to those who are academically challenged should receive foundation literacy instruction that targets their specific learning needs.

To meet the varying needs of students in mainstream classrooms, especially those who struggle with reading, technology can be a key to success. It can provide adaptive instruction based on ongoing assessment; repetitive practice tailored to each student's individual needs; and data analysis to inform subsequent personalized learning (Hasselbring, 2012).

Personalized, Differentiated Reading Instruction

By definition, differentiated instruction is a flexible and individual approach to instruction that gives students multiple options for taking in information and making sense of ideas. Personalized, differentiated instruction accommodates the variances in learning needs among individual children by tailoring instructional units to meet each student at his or her level.

Research Evidence and Expert Opinion

Accurate and fluid reading depends on the successful integration of a variety of skills, which children learn at varying rates and with differing degrees of ease. As the National Reading Panel (2000) points out, children in early grades "are known to vary greatly in the skills they bring to school. "[In a typical classroom]:

> There will be some children who already know most letter-sound correspondences, some children who can even decode words, and others who have little or no letter knowledge (NRP, 2000, p. 2-96).

In particular, low-income, nonwhite, and English language learners are at risk of experiencing difficulties in reading (NRC, 1998).

Differentiated instruction can reduce readiness gaps that accompany at-risk children in the early grades (Sousa & Tomlinson, 2011). While research shows that virtually all beginning readers gain from phonological/phonics instruction, experts agree that the type and amount of such instruction should vary according to each child's personalized learning needs (NRP, 2000; Torgesen, 2002). Students at risk of reading difficulties have a need for greater instructional intensity than other students (Torgesen, 2002).

Implicit in the notion of differentiation is the idea of assessment—of evaluating individual readiness and progress levels so that instruction can be appropriately tailored to each child. As the NRP notes, phonics programs should "provide guidance in how to place students into flexible instructional groups and how to pace instruction" (NRP, 2000, p. 2-97).

Differentiation also provides the foundation on which more specific Response to Intervention (RtI) strategies can be structured (Institute for Education Sciences [IES], 2009). Frequent assessment and progress monitoring should be done to ensure that instruction continues to meet individualized student needs, but at all times, "the focus should be on providing students with solid instruction and enjoyable literacy experiences" (Vaughn & Linan-Thompson, 2004, p. 128).

RECOMMENDATION

Accurate and fluid reading depends on the successful integration of an array of skills, which children learn at varying rates and with differing degrees of ease. Thus, early literacy instruction should be flexible and differentiated to meet the unique and personalized learning needs of each child.

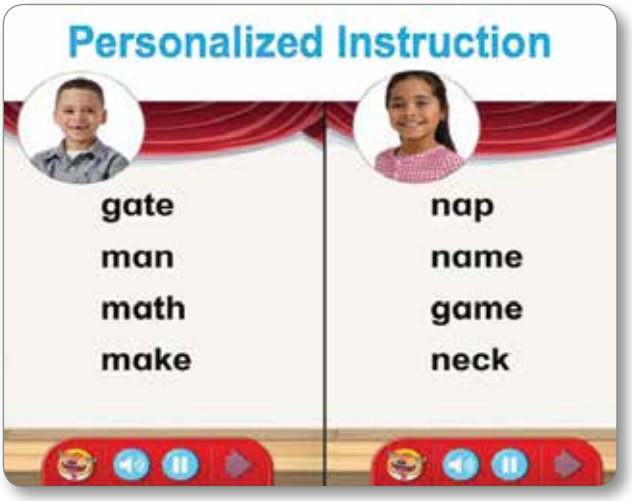
iRead*'s Approach*

iRead provides an array of tools that enable teachers to implement individualized instruction and differentiated small group instruction tailored to each student's foundational skill strengths and areas for development. Adaptive feedback to students and assessment information for teachers helps identify and bridge any readiness gaps that students may have.

The *iRead* program adapts to the individual needs of every student, providing systematic review, individual feedback, and multiple opportunities to test for mastery. At the beginning of the school year, *iRead*'s Screener feature evaluates each student's reading readiness and skills, and then places the student in the appropriate unit of instruction.

iRead differentiates instruction in three ways: in its pacing, in the amount of practice, and in instructional content. Students progress through *iRead* lessons at a pace that best suits their needs. FastTrack assessments at the beginning of each series of lessons identify students whose level of prior knowledge and proficiency permits them to move through the series more quickly. These students may skip guided practice activities that less-proficient students would need, and proceed directly to activities that involve encoding, vocabulary, and reading connected text. Less proficient students will engage in these same activities after receiving the guided practice they need.

iRead adapts the amount practice students receive as well. All lessons start with a set of sounds or words for study, with periodically embedded Show What You Know activities that function as gates for demonstrating mastery of a given skill. If students' responses indicate they are not yet at the mastery stage, they receive additional cycles of instruction and more opportunities to practice, as well as activities that mix both new and repeated content so that the lesson continues to be fresh and engaging.



Students also receive customized support for persistent areas of difficulty. For instance, if a beginning reader is having difficulty with a particular phoneme or sound-spelling in isolation, that sound-spelling will appear more frequently in subsequent lessons to provide further opportunities for guided practice. Throughout *iRead*, the corrective, adaptive feedback is tailored to individual student errors.

English language learners are supported too, as *iRead* builds on the language abilities that they already possess to promote comprehension, conceptual understanding, and contextual knowledge of information presented in the English language through photographs, animations, videos, and audio support. Vivid examples and images give Spanish-speaking students at various stages of English language acquisition access to Tier 1, 2, and 3 words, to ensure meaning and develop transfer of cultural knowledge. Spanish translations and/or cognates for all target words help Spanish speakers connect new words to known words in Spanish.

To support teachers, *iRead*'s *Professional Guide* offers advice from leading early literacy educator, for example:

- Ted Hasselbring on individual pacing and software supports for special education students
- Elsa Cárdenas-Hagan on children's language proficiency, language supports, and use of *iRead*'s Word Gallery for English language learners

Screening for Individualized Interventions

Students are involved in an initial assessment of skills in order to determine appropriate placement points and identify at-risk students. In this way, remedial and/or enrichment activities can be tailored to meet the needs of each individual student at his or her instructional level.

Research Evidence and Expert Opinion

Early identification and appropriate intervention strategies have been shown to be effective at helping struggling readers make progress (IES, 2009; Lyon & Chhabra, 2004; Shepherd & Marzola, 2011; Wagner, 2008). Delays in proper identification and intervention can have damaging consequences: "at least 70% of students who do not learn to read by age 9 will never catch up to their typically developing peers" (Shepherd & Marzola, 2011, p. 436). A longitudinal study reveals that 23% of students who were reading "below basic" by the end of third grade failed to graduate from high school by age 19, compared to only 4% of students identified as "proficient" by the end of third grade (Hernandez, 2012).

Thus, research and expert opinion strongly suggest that students be regularly evaluated in the classroom so that appropriate and timely interventions can be provided as soon as the need is recognized (IES, 2009; NRC, 1998; Sousa & Tomlinson, 2011). In its RtI Practice Guide, the Institute for Education Science (IES, 2009) specifically recommends that reading teachers [s]creen all students for potential reading problems at the beginning of the year and again in the middle of the year (p. 9).

Shepherd and Marzola (2011) further note that while the foundational literacy skills of

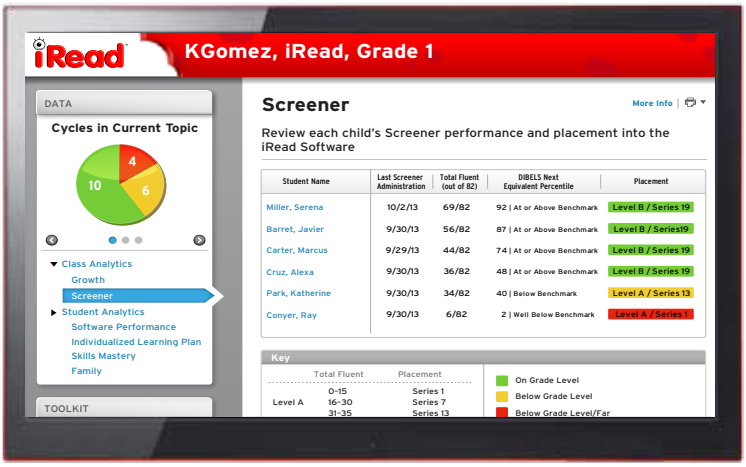
> phonemic awareness, phonics, fluency, vocabulary, and reading comprehension should all be addressed, assessing each area must be conducted in a manner that is appropriate to the grade level of the child. In addition, issues of cultural and linguistic differences in this population must be addressed (p. 437).

RECOMMENDATION

Provide a screening assessment for early identification of areas in which individual students need more support, as well as areas in which students exhibit mastery.

iRead*'s Approach*

iRead's Screener assessment, which has been correlated with the widely used, *Dynamic Indicators of Basic Early Literacy Skills (DIBELS Next)* assessment, determines appropriate placement within the instructional sequence based on individual performance data. The various placement starting points ensure that students with readiness issues begin with the instruction they truly need. Advanced readers in Grades 1 and 2 begin *iRead* lessons at a later starting point and are afforded ample opportunities to move more quickly through the instruction.



Screener Analytics

Engagement With Appropriate Text

Engagement with text is essential to successful reading. Beginning readers must be engaged in the material they are trying to read in order to learn. When children are challenged to just the right degree and feel themselves progressing and learning, they become deeply engaged in reading. It is critical to provide students with texts that are on the appropriate level in order for this to happen.

Research Evidence and Expert Opinion

Success at any skill, including reading, depends on practice. All beginning readers need frequent engagement with text that provides optimal levels of challenge and support, with student performance data informing the type and degree of independence of their reading activities (IES, 2009).

Ideally, instruction should provide texts that bracket each reader's optimal level of support and challenge, i.e., their zone of proximal development (Vygotsky, 1978). Yet, there is an obvious tension here. Since low-readiness readers read more slowly and have fewer choices of texts at an appropriate level, they get less practice reading. Yet more practice is exactly what they need to build awareness of sound-spelling patterns on which fluent reading depends.

The solution is to consistently and carefully design differentiated instruction that exposes children to texts and phonics lessons that support and build on one another (Adams, 1990). As the National Research Council (1998) advises, two types of instructional resources should be provided to early readers: (a) daily independent reading materials "selected to be of particular interest for the individual student, and beneath the individual student's frustration level, in order to consolidate the student's capacity for independent reading" and (b) supported reading texts "that are slightly more difficult in wording or in linguistic, rhetorical, or conceptual structure in order to promote advances in the student's capabilities" (p. 8).

RECOMMENDATION

Beginning readers should be provided with ample opportunities to read voluminously the types of texts that they find interesting and that are on their reading level. Texts that are on the appropriate level provide an individualized balance of support and challenge. Both qualitative and quantitative data should be collected about student behaviors during reading in order to inform decisions about the types of texts to which students should be exposed.

iRead*'s Approach*

After each series of software lessons, students read a high-interest Success eBook that employs controlled vocabulary to carefully scaffold the reading experience and reinforce specific phonemic/phonics skills young readers have just developed. eBooks provide increasingly complex text, along with correct pronunciation of every word and friendly definitional support for high-utility vocabulary words. Designed to be relevant to children of diverse backgrounds and interests, eBook themes include life and physical science, earth and space science, health, music, poetry, sayings and phrases, history, geography, and world cultures. Engaging photos and illustrations deepen children's interaction with the text.

Students also have access to a library of downloadable books, appropriately leveled on the basis of individual performance data. Students are able to collect and track the books they have read in their *iRead* backpack collections.

And in the *iRead* Family Portal, parents are provided reading lists of high-interest literacy and informative trade books, from which children can choose, based on their own interests. They can also download decodable books that are just right for their child's level.

Classroom Management Practices for Differentiated Instruction

Classroom management refers to everyday processes, practices, and procedures—including efficient data management techniques—that foster a "smooth-functioning, productive classroom learning environment" (Roskos & Neuman, 2010, p. 308). Effective personalized, differentiated instruction depends on a well-organized and positive classroom environment, reinforced by appropriate teacher procedures and accessible student data.

Research Evidence and Expert Opinion

While personalized, differentiated learning at its most granular level involves instruction tailored to the individual child, it also draws on the practical and social advantages of small-group learning. Recognizing that a differentiated classroom will have multiple learning activities occurring simultaneously, Sousa and Tomlinson (2011) recommend that teachers develop clear and consistent methods to maximize the use of learning time, ensure that students stay on task, and set expectations for student behavior.

At-risk students, in particular, benefit from effective classroom management strategies to ensure that learning time and resources are effectively employed, and that attention is focused on learning (Roskos & Neuman, 2010).

Differentiation also implies assessment, as teachers need to understand where students are in order to understand what they need. Thus, effective data management is another vital component of a differentiated classroom. In calling for differentiated instruction based on student assessment data, Institute for Education Science's *Practice Guide for Response to Intervention* (IES, 2009) notes the need for teachers to be able "to collect and interpret student data on reading efficiently and reliably" so that they can "develop data-driven decision rules for providing differentiated instruction to students at varied reading proficiency levels for part of the day" (p. 9).

RECOMMENDATION

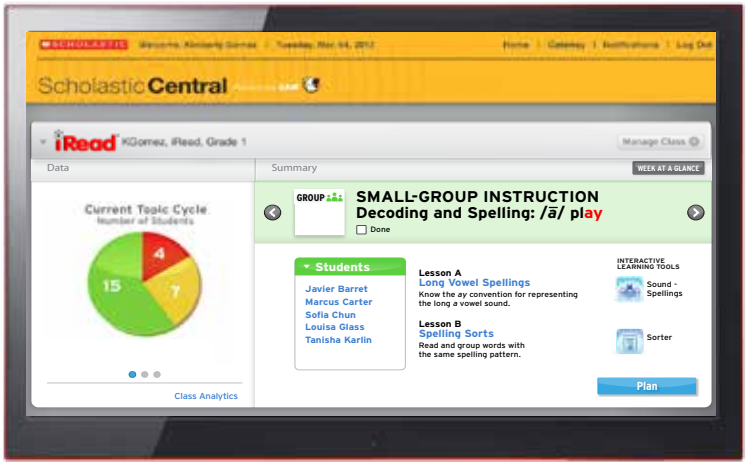
Implement specific classroom management practices, including efficient data management procedures, to support and foster a differentiated approach to early reading instruction.

iRead*'s Approach*

Scholastic Central is the online compendium of data tools and reports, planning tools, and instructional resources that support the *iRead* learning program. Over 200 lesson plans, hundreds of interactive, instructional activities, and full range of data-management tools support teachers in carrying out the informed planning and effective instructional decision-making so essential to student reading success.

From Scholastic Central, Scholastic's Learning Management System, teachers can access their data, planning tools, and instructional resources. The home page, with data snapshots, provides high-level views of the class's overall progress. Notifications, delivered via email, alert teachers of opportunities for intervention and celebration of success. For more in-depth information, teachers can drill down to specialized reports directly from Scholastic Central.

To support small-group instruction, Scholastic Central's Groupinator®, offers suggestions for flexible reading groups based on where students are in the program's scope and sequence. *iRead*'s online lessons expand on small-group instructional routines modeled in the *Professional Guide* and offer instructional routines aimed at specific learning targets—two weekly lessons for each of the five small-group options. Direct links from the Groupinator® provide handy access to select small-group Interactive Learning Tools—including *iRead* direct instruction videos, images, audio models, and activities—that are tailored to the appropriate skill level for each group. Integrated within the online lesson plans is guidance to teachers on use of the Interactive Learning Tools.



Scholastic Central

Technology for Adaptive, Personalized Instruction

"Teaching a group of students with . . . divergent needs [with respect to foundational reading skills] is almost impossible, even for the best instructors" (Hasselbring, 2012, para. 3). Technology can customize learning by providing adaptive instruction and repetitive practice tailored to each student's individual needs. More specifically, *iRead* makes use of Fluency and Automaticity through Systematic Teaching with Technology (FASTT), an adaptive software algorithm designed to maximize retention of new concepts by facilitating the transfer of new information from working memory to long-term memory.

Research Evidence and Expert Opinion

A learner's ability to retrieve relevant knowledge and information can vary from being "effortful" to "relatively effortless" to "automatic" (Cohen, Dunbar, & McClelland, 1990). Research shows that the mastery of a knowledge domain, such as reading, "depends on the ability to perform sub-processes unconsciously with speed and accuracy while consciously carrying out other higher-level cognitive tasks" (Bloom, 1986; Hasselbring, et al., 1988; LaBerge & Samuels, 1974). However, before gaining automaticity, beginning learners must exert substantial effort to retrieve the necessary information about a new skill from their short-term memory. This retrieval process creates a cognitive load that can inhibit their ability to engage in other learning processes at the same time (Adams, 1990).

Accordingly, beginning readers often struggle with the cognitive challenge of decoding text accurately and with fluency, while simultaneously attempting to comprehend what they are reading. This is why automaticity is so critical in reading, for only when students can decode words without having to devote much conscious effort to the task (automaticity) and apply the proper rhythm, intonation, and phrasing (fluency), can they sufficiently free up the cognitive powers necessary for comprehension (Freedman & Calfee, 1984; LaBerge & Samuels, 1974).

RECOMMENDATION

To support differentiated early reading instruction, use a technology-based adaptive system that teaches a systematic sequence of decoding skills to build automaticity.

iRead*'s Approach*

Scholastic has collaborated with education technology experts Ted Hasselbring and Laura Goin to adapt their Fluency and Automaticity through Systematic Teaching with Technology (FASTT) model to enable explicit, systematic instruction in foundational reading skills. The FASTT model facilitates the learning transfer from effortful practice attempts that rely on short-term memory to stable, automatic, learned elements in long-term memory, by introducing manageable sets of items, providing repeated exposures, spacing review, and shortening response time.

By providing intensive, accelerated instruction in phonological decoding skills, *iRead*'s implementation of FASTT enables young learners to transfer these new skills to long-term memory, so that the act of decoding becomes automatic, accurate, and quick. Research has shown the effectiveness of the FASTT model in multiple instructional contexts (Hasselbring, Goin, & Bransford, 1988; Scholastic Research and Validation, 2005; 2008; Slavin, Cheung, Groff, & Lake, 2008).

FASTT consists of the following sequence of instructional procedures:

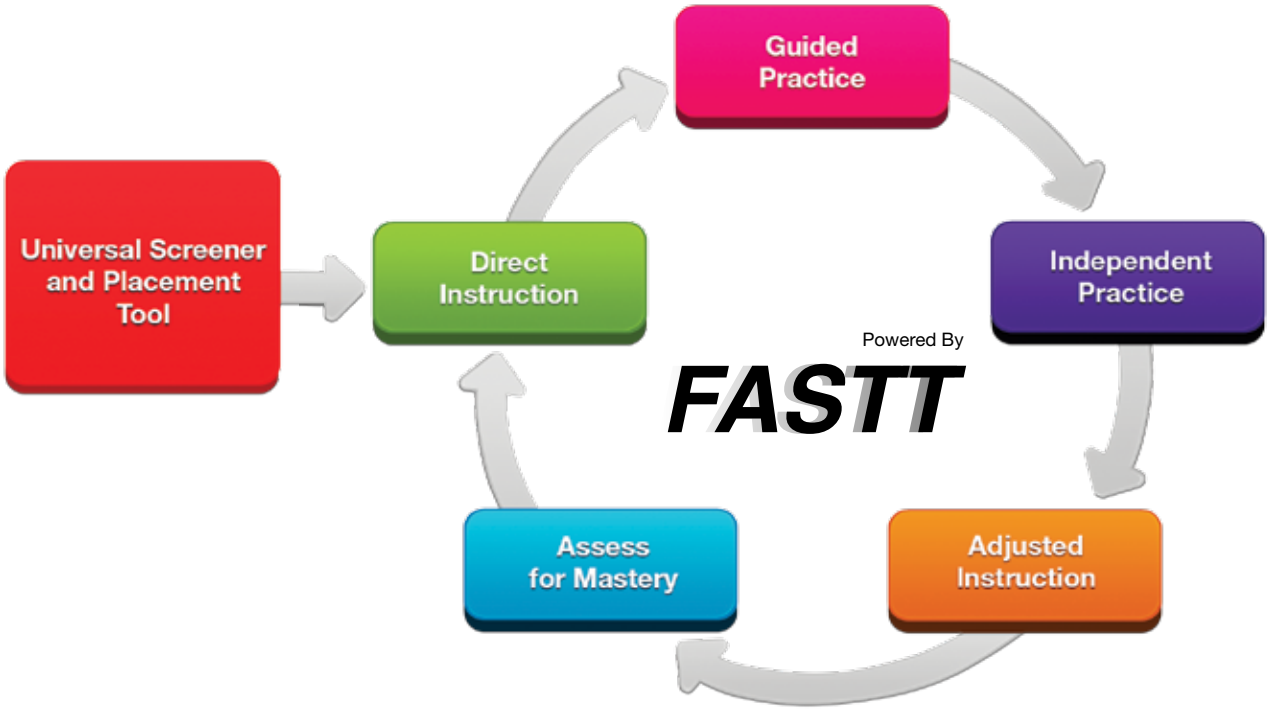
1. Assessment of the learner's current level of accuracy and response time (to individualize instruction)
2. Use of a small instruction set that is to be moved from "working memory" to long-term memory (Miller, 1956)
3. Use of an expanding recall presentation structure that gradually intersperses presentation of new skills based on continual measurement of the learner's ongoing performance
4. Use of a stringent and controlled response time and accuracy as measures of automaticity—to adjust instruction and practice accordingly

5. Use of audio and visual corrective feedback when errors occur before a new instructional stimulus is presented
6. Software that adapts practice based on the individual learner's accuracy and speed of response. The most recent items moved to long-term storage get the most practice.

The amount of time spent on each computerized lesson is based on individual student performance (accuracy and response time). Embedded assessments evaluate the skills needed for upcoming series of lessons, customized to each child's instructional path and focused on their unique areas of need. Students work on a discrete skill or skills group, engaging in activities that initially focus on accuracy, then turn to activities that build fluency/automaticity over time with those same skills.

As a general rule, *iRead* requires students to demonstrate accuracy before reducing response time to build fluency. Fluency in the *iRead* context refers to automaticity in recognizing words, sound-spellings and letters. In Units 1 and 2, the fluency focus is on automaticity in letter recognition. In Units 3 and 4, the goal is to build accurate letter-sound correspondence, decoding, and word recognition. Beginning in Unit 5, the focus is fluent letter-sound correspondence, decoding, and word recognition.

Software Instructional Design



iRead offers a multisensory approach to foundational literacy skills instruction through interactive Software activities that encompass sight, hearing, and touch; audiobooks; and teacher-led multimodal activities. The *iRead* multimedia Software helps young children develop essential sound-to-text and text-to-sound associations while also learning to comprehend the meaning of words in text.

iRead takes maximum advantage of technology's capabilities to develop foundational sound-to-text and text-to-sound associations with automaticity—providing visual support to draw students' attention to key aspects of the learning focus and encouraging students to respond interactively.

Multisensory, Multimedia Instruction

Experts in research and theory related to multisensory instruction conclude that methods that combine sight and hearing are effective in helping young children learn to read. Well-designed multimedia technology that delivers and integrates early literacy activities in various modes (auditory, textual, graphical, kinesthetic) can be effective in promoting reading success.

Multisensory language instruction refers to "teaching strategies to guide students in linking eye, ear, voice, and hand to bolster learning in the carefully sequenced teaching of language structure" (Birsh, 2011, p. 25). Multimedia is more generally defined by Richard E. Mayer, one of the leading researchers and theorists in the field, as "[p]resenting words (such as spoken text or printed text) and pictures (such as illustrations, photos, animation, or video) that are intended to promote learning" (Mayer, 2005, p. 15).

Thus, multimedia early literacy instruction can be seen as using digital media to provide multisensory approaches (i.e., combining text, sounds, images, and touch) to facilitate the acquisition of early literacy skills. In relation to literacy learning, Reinking (2005) notes, "multimedia refers to audio-visual capabilities that were previously unavailable to print-based learning" (p. 359).

Multisensory Instruction in Reading

In multisensory language instruction, many learning pathways in the brain are utilized in order to enhance memory and learning. The instruction is organized so that the material to be learned follows the logical order of the language, beginning with the easiest and most basic elements and progressing methodically to more difficult material. Phonemic and phonological awareness, sound-symbol association, syllabication, morphology, syntax, and semantics are taught.

Research Evidence and Expert Opinion

As part of her synthesis of the literacy research literature, Marilyn Adams (1990) observes that reading depends on letter recognition, but she goes on to note that successful readers must also possess knowledge about the spellings, meanings, and pronunciations of words, and must be prepared to consider the contexts within which they occur. This suggests that early literacy instruction should mirror the multisensory aspect of decoding and encoding text as it is written, spoken, and heard.

Neuroscience research points to additional benefits:

> Multisensory experiences with linguistic units such as single phonemes, letters, morphemes, words, and sentences may in fact activate more circuitry during language learning than unisensory experiences. . . . A more complete and explicit registration of linguistic information (phonological and other) is likely to occur in the learner's working memory when attention to linguistic detail is enhanced through multisensory involvement (Farrell & Sherman, 2011, pp. 39–40).

This more intense imprinting of phonological/phonemic patterns has particular benefits for at-risk and novice readers, who are lacking in phonological skills and may also have related challenges in short-term memory and rapid retrieval of verbal information (Farrell & Sherman, 2011).

Furthermore, the value of multisensory approaches to learning has long been recognized in special education circles. The Center for Applied Special Technology (CAST), a leading educational research center and the developer of the well-known Universal Design for Learning principles, notes that all learners differ in the ways they comprehend information (also see Rose & Meyer, 2002). CAST (2011) further notes that learning is enhanced when multiple forms of representation (e.g., audio, visual, kinesthetic) are employed because such methods enable learners to make connections within and across concepts. It's important to note that all learners, both those with sensory disabilities as well as their able-bodied peers, benefit from a multisensory approach to instruction.

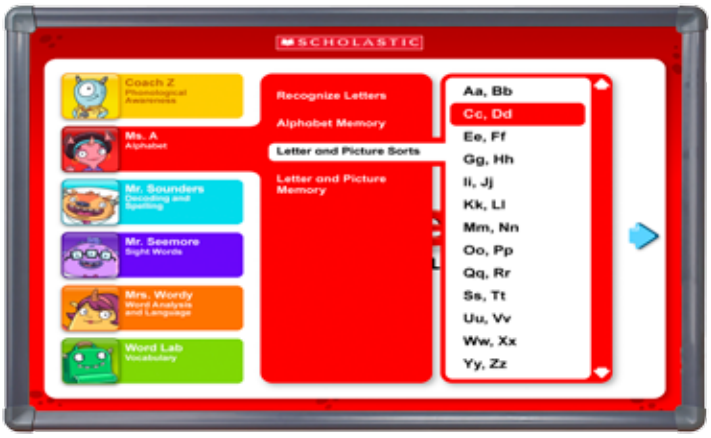
RECOMMENDATION

Provide multisensory experiences with linguistic units such as single phonemes, letters, morphemes, words, and sentences.

iRead*'s Approach*

iRead offers a multisensory approach to foundational literacy skills instruction through interactive Software activities that encompass sight, hearing, and touch; audiobooks; and teacher-led multisensory activities. The *iRead* multimedia Software helps young children develop essential sound-to-text and text-to-sound associations while also learning to comprehend the meaning of words in text.

Away from the computer, student engagement routines, such as Thumbs Up or Down and Pick and Point, help young learners reinforce skills by prompting them to engage in active physical responses such as pointing or gesturing. To build letter formation skills through kinesthetic reinforcement, for instance, as students learn each new letter at the alphabetic stage, the *iRead* program encourages them to trace the letter with their finger in the air on the screen, or by using the mouse. In other cases, children are prompted to generate a letter name or letter sounds orally after hearing or seeing a model.



Interactive Learning Tools

Throughout its decoding and word study units, *iRead* encourages students to orally generate phonemes and words to help establish the linkage between text and its corresponding sounds.

The *Professional Guide* also includes Learning Center ideas that promote foundational skills development through the use of games and manipulatives. Additionally, many of the downloadable resources available in Scholastic Central encourage interacting and manipulating letters, sounds, and words.

Multimedia Technology

Multimedia technology that delivers and integrates early literacy activities in various modes (auditory, textual, graphical), when properly designed, can be effective in promoting reading success. Gamification techniques that make reading tasks feel more like games, such as adding meaningful choice, increasing challenge, rewards, and adding narrative, engage students and motivates them to solve problems in order to learn.

Research Evidence and Expert Opinion

"The multimedia principle," as proposed by Richard Mayer (2005), suggests that instructional designs that combine words and images are more effective than those based on words alone. This principle is "well supported by findings from empirical research" (Fletcher & Tobias, 2005, p. 128). Extending Mayer's multimedia principle to early literacy, educational technology that helps young readers establish linkages among words, sounds, images, and meanings can be an effective tool in support of literacy development.

To date, the most extensive findings support the value of using digitized or synthesized speech as a means for helping young readers master basic reading skills. In surveying the research literature, Reinking (2005), observes:

> Using the capability of a computer to provide beginning readers assistance in the form of audio pronunciations of words and word parts under various conditions clearly seems to benefit decoding skills at least as much as adult-led activities using conventional printed materials (p. 367).

A comprehensive literature review conducted by Strangman and Dalton (2005), suggests that digital voice technology supports struggling readers by providing access to texts that might otherwise be unavailable to them, and by helping them learn to read with understanding. Korat (2010) found that a group of children who read eBooks with pronunciation features "exhibited significant progress in word meaning and word reading" compared to a control group (p. 24). In addition, research by Silverman and Hines (2009) found advantages for young English language learners receiving multimedia enhanced read-aloud instruction.

RECOMMENDATION

To help young readers establish linkages among words, sounds, images, and meanings, employ technology that integrates and promotes multisensory connections among language's written, aural, and oral forms. Include gamification techniques that engage children in the task of learning to read.

iRead*'s Approach*

iRead takes maximum advantage of technology's capabilities to develop foundational sound-to-text and text-to-sound associations with automaticity—providing visual support to draw students' attention to key aspects of the learning focus (e.g., presenting a moving line under a word to show that blending is occurring) and encouraging students to respond interactively.

iRead also incorporates images to ensure that students acquire the meaning of word parts and words they encounter. Thus, *iRead*'s lessons and exercises embody the multimedia principle, drawing on sounds, images, and text to promote reading with understanding. For example, in Feed the Beastie (Word Building), to build phonemic awareness through phoneme addition, subtraction, and manipulation; and to build segmentation skills through encoding, students move the letters to build words; and they manipulate words by changing letters to transform one word into another. Students receive immediate corrective (visual and auditory) feedback, specific their errors. The meaning of words is reinforced through images and context sentences throughout the activity.

Word Building

In addition to these multimedia interactive activities, *iRead* offers 51 controlled-vocabulary eBooks—an approximately even mix of fiction and nonfiction texts—that follow research-based guidelines to ensure that all interactions support and extend learning, rather than distract from it. Each eBook features word pronunciation and definitional support, both of which are under the control of the student.

"Power words" are featured throughout the eBook collection, including the high-utility academic vocabulary recommended in the *Common Core State Standards*. Definitions, also available in Spanish, are accessible at the click of a mouse. After each eBook reading, engaging activities help students reflect on reading and reinforce their new vocabulary skills and comprehension.

At the partial alphabetic and alphabetic stages, students listen to an eBook read aloud, with the option to vary the speed of the reading. On the second reading, students can choose to read the book aloud themselves or have it read to them. They can also record themselves reading the book out loud for later assessment by the teacher via a provided rubric.

iRead assesses students' performance as they engage in a systematic sequence of interactive activities. Providing students with immediate and corrective feedback in the course of those activities, *iRead* seamlessly combines instruction with assessment, and performance based data automatically adjusts into the student's individualized instructional path.

Formative Assessment and Progress Monitoring

Research has shown that formative assessment and progress monitoring that guides the course and nature of instruction helps students learn more effectively.

Formative assessment includes "all those activities undertaken by teachers, and/or by their students, which provide information to be used as feedback to modify the teaching and learning activities in which they are engaged" (Black & Wiliam, 1998a, pp. 7–8).

Progress monitoring is a specific type of formative assessment that tracks student progress over time, as specified in the Response to Intervention literature (Hasbrouck & Tindal, 2006; National Center on Response to Intervention [NCRtI], 2012).

Formative Assessment for Early Literacy

Formative assessment improves instruction by providing information on student needs, identifying instructional strategies that meet those needs, and allowing for a systematic look at children's early literacy skills.

Research Evidence and Expert Opinion

Based on a review of 250 research studies, Black and Wiliam (1998b) found that "strengthening the practice of formative assessment produce[d] significant and often substantial learning gains. . . . Typical effect sizes of the formative assessment experiments were between 0.4 and 0.7" (p. 40). The learning gains attributable to formative assessment are considerable, "amongst the largest ever reported for educational interventions" (Black & Wiliam, 1998a, p. 61). While formative assessment can benefit all students, it has been shown to produce especially good results with struggling students by highlighting troublesome areas and providing them with guidance as to what must be done to overcome them. For such learners, facilitating their metacognitive awareness, that is, helping them understand and strengthen their own learning dispositions and behaviors can be of particular value (Black & Wiliam, 2009). Black and Wiliam (2009) note that "students' willingness to maintain learning intentions and persist in the face of difficulty depends on their awareness of and access to volitional strategies (metacognitive knowledge to interpret strategy failure and knowledge of how to buckle down to work)" (p. 14).

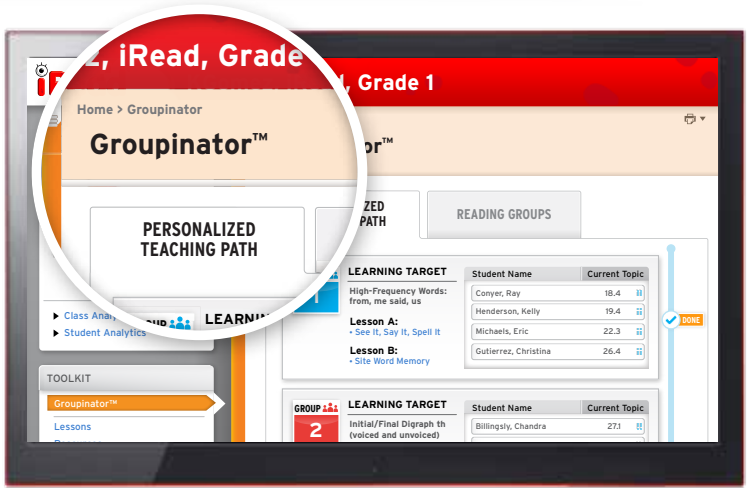
More specifically, research experts stress the value of formative assessment in literacy instruction. Roskos and Neuman (2010) note that "effective reading instruction revolves around flexible grouping practices" (pp. 310–311) and is thus dependent on accurate formative assessment to support such groupings and to enable instruction to be tailored to each group's abilities. Based on their review of the research on formative assessment, Shepherd and Marzola (2011) conclude that "teachers who incorporate formative assessment into lessons for achieving and struggling readers produce higher scores on reading achievement tests than teachers who do not use formative assessment" (p. 453).

RECOMMENDATION

Use in-lesson formative assessment to guide instructional pathways, offer appropriate, actionable feedback to students, and encourage the development of metacognitive strategies to promote early literacy success for students at all reading-readiness levels.

iRead*'s Approach*

Much of the literature on formative assessment refers to feedback as an important tool to guide the course of future instruction, and implicitly assumes that teachers have the time and ability to use that feedback to make appropriate instructional decisions. With *iRead*, though, the guesswork is taken out, as its FASTT software design (see previous section: Personalized, Differentiated Reading Instruction) seamlessly combines instruction with assessment. Because *iRead* tailors future instruction on the basis of past and present inputs, feedback is automatically incorporated into an individualized instructional path.



The Groupinator™

iRead assesses students' performance as they engage in its sequence of interactive exercises, and provides them with immediate and corrective feedback in the course of those activities. Scholastic Central offers additional formative assessments suitable for small-group or whole-classroom use. In addition, Scholastic Central includes the Groupinator®, a grouping tool that provides recommendations and supporting resources for small-group instruction based on formative assessment data.

Progress Monitoring and Oral Fluency Assessment for Early Literacy

Oral fluency assessment is a specific form of progress monitoring designed to track student growth in oral reading fluency. Oral fluency assessment, measures words correct per minute (WCPM), and research has shown that it is "an accurate and powerful indicator of overall reading competence, especially in its strong correlation with comprehension" (Hasbrouck & Tindal, 2006, p. 636).

Research Evidence and Expert Opinion

Research has long supported the notion of assessing reading progress frequently to spot and correct problems early on. By identifying struggling learners as well as the skills they are struggling with, progress monitoring provides guidance for developing more effective subsequent instruction for these students (Hasbrouck & Tindal, 2006).

Progress monitoring has gained momentum and support with the advent of the Response to Intervention (RtI) methodology that calls for multi-tiered support and intervention based on frequent measurements of student performance against expected benchmarks. Recent RtI practice guidelines specifically call for teachers to "screen all students for potential reading problems at the beginning of the year and again in the middle of the year, [and] regularly monitor the progress of students who are at elevated risk for developing reading disabilities"(Institute for Education Sciences [IES], 2009, p. 9). IES RtI guidelines further suggest that students who are not making sufficient progress with regular classroom instruction (Tier 2) should be monitored at least once a month, and that the resulting data be used to evaluate whether further intervention is required. For those students who continue to make insufficient progress (Tier 3), individualized, more intensive intervention strategies are recommended (IES, 2009)

RECOMMENDATION

Employ progress monitoring and oral fluency assessments to evaluate student progress and to guide instructional decisions.

iRead*'s Approach*

iRead offers a variety of tools and resources for measuring and tracking student progress over time, including reports of ongoing student performance, an oral fluency assessment, and other instruments focused on specific early literacy skill areas.

To support the effective use of the data resulting from its within-lesson formative assessments, *iRead* provides clear, actionable student performance analytics, readily accessible from Scholastic Central. Individual results can be downloaded for offline analysis or for emailing to parents, literacy coaches, and/or other intervention specialists.

- The Screener Analytic provides an overview of class's performance on the initial Screener, including the overall score for each student, and their placement point in the Software based on their performance on the initial Screener.

- The Growth Analytic provides an overview of the class's progress through the *iRead* scope and sequence. Each child's data is color coded (red, yellow, or green) to make it easy to identify where he/she is against grade-level benchmarks.
- The Student Software Performance report affords the deepest dive into individual student performance, enabling teachers to see patterns in their skills development. The report shows each student's initial program placement, how many cycles were required for mastery of each topic, how many minutes the student spent on each program session, the number of sessions completed each week, and the student's score on key activities in the topic. An overview helps teachers easily grasp individual student progress toward benchmarks in the scope and sequence.

Growth Analytics

- The Individualized Learning Plan enables reading teachers and intervention specialists to determine if/where a child needs re-teaching and more practice. It also offers recommendations for additional reading materials based on individual performance data.
- In addition, The Family Report provides an overview of each student's performance on the Software, including recent topics the student has engaged in, and skills mastered in iRead (as well as specific student sample words from these specific topics and skills). The report includes the total number of words the student has read, the names of recent eBooks the student has read in the Software, along with additional suggested downloadable eBooks the student can read at home. The Family Report links to the Family Portal, where parents can find additional resources to support their student's progress.

The *iRead* oral fluency assessment follows the research-based method of measuring words read aloud correctly per minute, using passages that were developed, nationally normed, and validated by an independent educational research and development organization. This assessment is administered in the middle and end of first grade, and at the beginning, middle, and end of second grade. For more informal oral fluency assessment, students are able to record themselves reading Success eBooks. Teachers can evaluate the recordings with a provided rubric.

Additional progress monitoring assessments include the following:

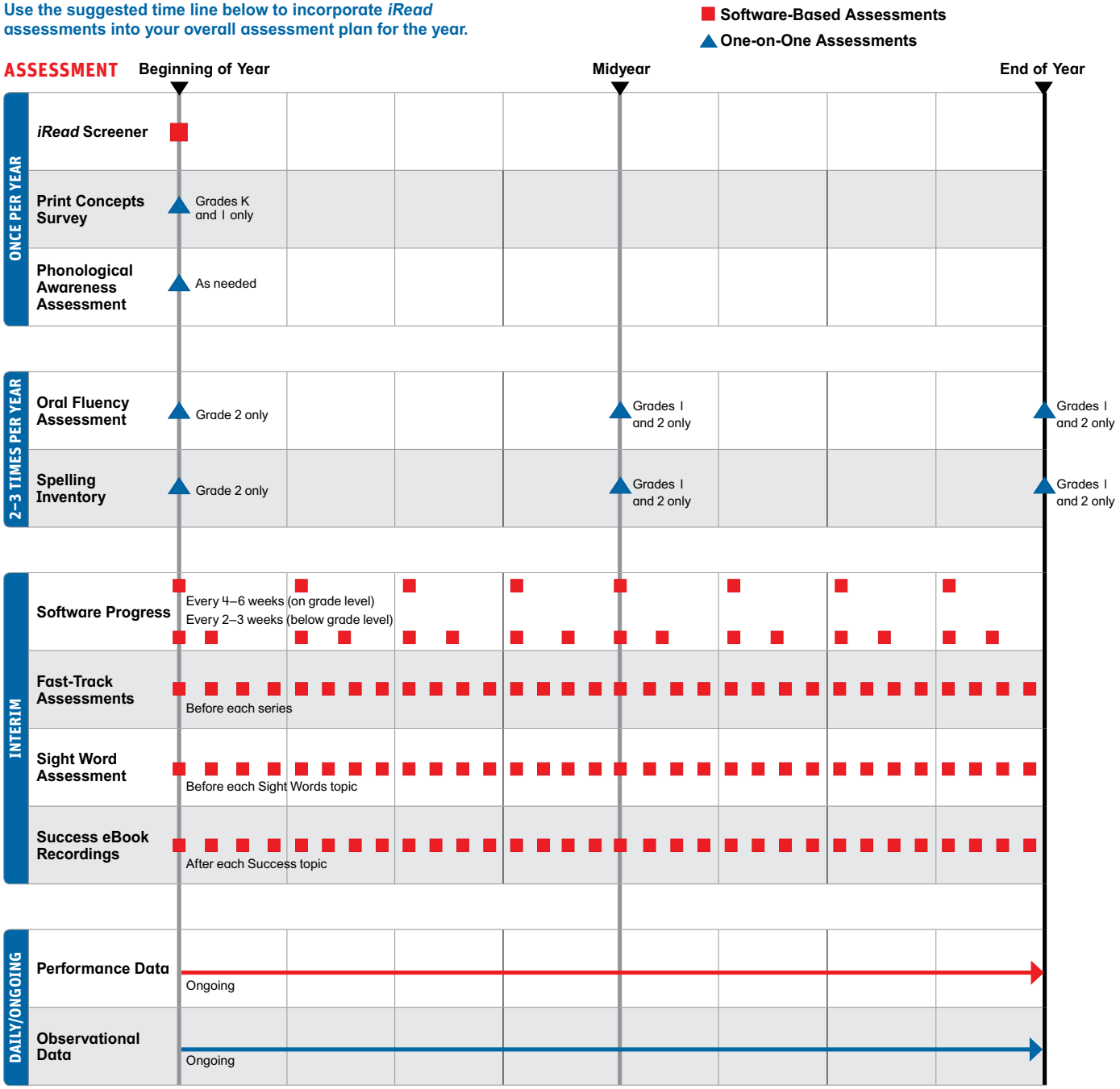
- phonological awareness: recommended as a one-on-one teacher-administered assessment for students who perform poorly on the Screener assessment, or who struggle with phonological awareness exercises in the *iRead* Software. This assessment evaluates all phonological skills cited in the Common Core State Standards and featured in *iRead*.
- *Print concepts*: a prompt-based survey administered one-on-one at the beginning of kindergarten and first grade, focusing on print concepts that are called for in the *Common Core State Standards*, and reinforced in the *iRead* program. For children who are struggling with print concepts, Scholastic Central, offers access to printable downloadable resources, and the *iRead Professional Guide* offers teachers instructional routines for using the Success eBooks to reinforce print concepts.
- *Spelling inventory*: a diagnostic given to the whole class at the middle and end of first grade, and again at the beginning, middle, and end of second grade. The assessment offers 30 words at each administration that span the scope and sequence for each grade level so that progress can be measured and problem areas readily identified across the class.
- *Reading interest*: given at the beginning of the school year to provide baseline data on each child's interest in reading, reading habits at home, family literacy activities, and more.

The *iRead Professional Guide* contains guidelines and resources to help teachers administer, analyze, and use these assessments effectively. Additionally, the *Professional Guide* offers expert advice on effective feedback from learning motivation specialist, David Rose.

Assessments and Data

iRead Assessment Time Line

Use the suggested time line below to incorporate *iRead* assessments into your overall assessment plan for the year.



With more than 250 online lesson plans, a high-level data-view home page, detailed analytics and alerts on student performance, as well as a grouping tool that supports small group instruction, *iRead's* Scholastic Central gives teachers the tools they need to understand the needs of each young reader—and to structure the classroom to best meet those needs.

iRead reframes a potentially frustrating subject as exciting and attainable. To encourage positive attitudes toward reading, and enhance students' metacognitive abilities, *iRead's* lively characters, personalized pacing, and interactive activities keep young minds engaged and on task.

Supporting Positive Student Behavior

Research and expert opinion support the benefits of strategies that promote positive student behaviors and attitudes related to instruction and learning.

Classroom Management Practices That Support Positive Student Behavior

Research shows that consistent teacher-led routines that lead to well-defined expectations for students help establish a positive climate for learning (Marzano, Marzano, & Pickering, 2003; Roskos & Neuman, 2012; Sousa & Tomlinson, 2011). And since behavior that distracts from learning is problematic for both the disruptive student and her/his peers, expert opinion suggests that effective disciplinary interventions are also a necessary component of a well-managed early literacy classroom (Roskos & Neuman, 2012).

Research Evidence and Expert Opinion

In an analysis of over 100 studies, though, the aspect of classroom management that showed the strongest effect on learning was the teacher-student relationship (Marzano et al., 2003; Sousa & Tomlinson, 2011).

One important characteristic of young students who exhibit positive academic behavior is self-regulation. Self-regulation in children is the ability to delay gratification and control impulses long enough to consider possible consequences of actions and more appropriate alternative actions. According to Bodrova and Leong (2005), "It is the capacity to control one's impulses both to stop doing something (even if one wants to continue doing it) and to start doing something (even if one doesn't want to do it)" (p. 32). One of their suggestions for "promoting self-regulation in the early childhood classroom" is to provide all students with practice in following rules and multistep directions (p. 33).

RECOMMENDATION

Implement specific classroom management practices, routines, and transitions that help develop positive teacher-student and peer relationships and support early reading success.

iRead*'s Approach*

Student behavior in the *iRead* context is framed as a set of skills that, like any other, needs to be taught, practiced, reinforced, and monitored. *iRead* provides an array of features to support teachers in their roles as effective classroom managers and as supportive and caring guides on the reading journey. The on-computer lessons provide ample practice following rules and directions in the context of a supportive learning environment.

The *iRead Professional Guide* provides a wealth of advice and resources to help teachers create a highly effective and engaging learning environment conducive to early literacy success. Classroom management topics encompass individual, small-group, and whole-class instruction, and include organizing the classroom and materials, establishing routines and procedures, managing transitions, and scheduling reading time/software sessions. Also featured are a variety of practical techniques for creating an engaging and high-functioning classroom, in which all children have opportunities to respond, such as Thumbs Up or Down (for monitoring student understanding), Think-Pair-Share (to promote collaboration and understanding), and Write and Reveal to promote independent thinking and response.

With more than 200 online lesson plans, a high-level data-view home page, detailed analytics and alerts on student performance, as well as a grouping tool that supports small-group instruction, *iRead*'s Scholastic Central gives teachers the tools they need to understand the needs of each young reader—and to structure the classroom to best meet those needs. In addition, Learning Center ideas enable teachers to extend the positive learning climate to off-computer activities. An Expectations matrix in the *Professional Guide*, developed by student behavior expert, Allison Bruhn, outlines clear behavioral expectations ("Be Respectful, Be Responsible, Do Your Best") and gives examples of what each looks like in different school settings.

Use of PBIS

Positive Behavior Intervention and Supports (PBIS), is a multi-tier system of intervention that, like RtI, establishes "universal supports found successful in the past (e.g., setting expectations) plus…secondary/targeted interventions… [and] tertiary/intensive interventions for…students for whom primary [i.e., universal]…supports are not working" (Roskos & Neuman, 2010, p.309).

Research Evidence and Expert Opinion

As noted above, positive student behavior is a set of skills that must be practiced and reinforced. Students, especially those new to the school environment, cannot be expected to have full mastery of these skills without clear and consistent guidance from their teacher. But what sort of support is most effective? PBIS is a promising new model.

PBIS is founded on the concept of differential susceptibility, which posits that some children are more sensitive to both positive and negative environments, and thus require different levels and/or types of behavioral reinforcement. Roskos and Neuman (2010) noted that PBIS is showing evidence of success in early literacy research. Experts recommend that PBIS be implemented school-wide to support positive behaviors throughout the school building and school day (Carter, Lane, Crnobori, Bruhn, & Oakes, 2011; Roskos & Neuman, 2010).

RECOMMENDATION

If the district or school supports it, manage the classroom in the context of a PBIS model.

iRead*'s Approach*

While *iRead* is not a comprehensive PBIS solution, it can be an effective supporting component in schools where PBIS has been adopted.

iRead's FASTT model and the corrective feedback built into it enable students to engage more deeply in their learning and become more self-reliant in their approach to reading. Scholastic Central and *Professional Guide* offer information, tools, and materials to help teachers create a positive and productive learning climate. Specific guidelines are given for building a classroom culture that draws on many varied language experiences and supports academic achievement and social-emotional growth. Also featured are strategies for creating a literacy-rich classroom that supports vocabulary development, with special emphasis on the academic vocabulary necessary to access content in mathematics, science and health, social studies, and the arts.

To encourage positive attitudes toward reading, and enhance students' metacognitive abilities, *iRead*'s lively characters, personalized pacing, and interactive exercises keep young minds engaged and on task. Each child selects an on-screen reading buddy, who serves as a personal avatar throughout *iRead* activities. Animated reading buddy characters model enthusiasm, persistence, curiosity, and a love of reading. Online instruction takes place in an inherently playful, curious, imaginative place that children want to come back to each and every day to learn and play. The program builds on the class's real-world knowledge to enable students to easily navigate the virtual world.

iRead includes features that encourage students to put forth positive effort and track their own success at meeting expectations. *iRead*'s digital archive for students, My Backpack, enables young learners to create a personal collection of sounds, words, texts and rewards. As a record of individual progress and rewards, it provides students with tangible evidence of their growth and perseverance as readers. By charting progress in this way, students are taking early and important steps in developing their own agency as learners.

In addition, *iRead* issues a variety of badges to celebrate students' achievements throughout their *iRead* experience. Badges are awarded for major milestone achievements (e.g., learning the primary sounds of the alphabet) and for smaller achievements along the way, including academic accomplishments (e.g., reading 100 words) and demonstrations of persistence (e.g., a Nerves of Steel badge for completing a second cycle on a topic that was challenging the first time). *iRead* is designed to award each child 30–40 badges per level. Students also have periodic opportunities to earn new accessories and features for their *iRead* Reading Buddy.

Student Dashboard

Of paramount importance perhaps, *iRead* promotes positive learning dispositions, by celebrating student achievement with the chance to read more—thus, helping children see reading as its own reward.

iRead is a partner to families and caregivers, at every step of their child's reading journey. When students are enrolled in *iRead*, each family receives an invitation to the Family Portal. The portal offers access to a wealth of family print and video resources, including printable children's eBooks, downloadable decodable books, an overview of the program, a walk-through of the child's experience, and informative guides on key educational topics such as phonics instruction and reading levels.

Family Engagement

Parental Involvement in Education

Experts recommend family engagement as a strategy to improve reading performance and interest among beginning readers.

Research Evidence and Expert Opinion

Expert opinion consistently recommends efforts to engage families in student learning, noting that such programs and interventions "are linked to higher student achievement" (Henderson & Mapp, 2002, p. 25).

Research shows that students are eager for their families to be knowledgeable and active supporters of their education, and are more likely to be successful in school if they see their parents playing this vital role (Epstein, 2010).

In her empirical study of inner-city parent involvement (n = 2,317), Epstein (2010) reports:

> **Parents in all the schools in this sample are emphatic about wanting the school and teachers to advise them about how to help their children at home at each grade level. Parents believe that the schools need to strengthen practices such as giving parents specific information on their children's major academic subjects and what their children are expected to learn each year (Epstein, 2010, p. 196).**

RECOMMENDATION

Engage families in their child's learning by providing them with information about curriculum expectations and their children's academic performance, and offer guidance about how to help their children at home.

iRead*'s Approach*

iRead is a partner to families and caregivers at every step of their child's reading journey. When students are enrolled in *iRead*, each family receives an invitation to the Family Portal, structured around an A, B, C model where A stands for Access to resources, B for Books, and C for Community.

The portal offers access to a wealth of family print and video resources, including an overview of the program, a walk-through of the child's experience, and informative guides on key educational topics such as phonics instruction and reading levels. To further support families as partners in their child's reading success, 51 downloadable, printable eBooks and additional printable books are available, as well as book lists for supplementary reading suggestions, aligned to *iRead* topics and skills.

All online assessment reports are downloadable so that teachers can email individual results to each child's parents. The *Professional Guide* offers advice on how to communicate student performance assessment data with parents.

Family-Teacher Relationships and Engagement

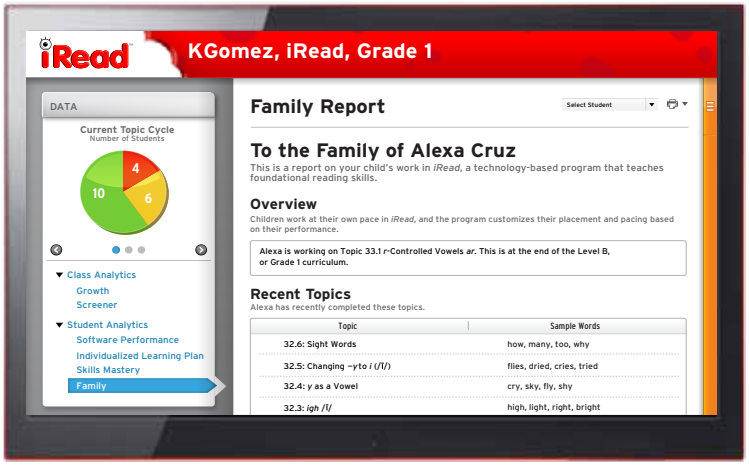
Parent-teacher engagement is more than just seeking families as partners, it also asks teachers to form effective and trusting relationships with families.

Research Evidence and Expert Opinion

Research shows that "early elementary students gain more in achievement when they and their families experience supportive relationships with teachers" a correlation that has been found for achievement in general as well as specifically for reading achievement (Hughes & Kwok, 2007, pp. 45–46). Developing productive relationships between their teachers and families seems of particular importance for students who are at risk of academic failure (Hughes & Kwok, 2007; Hunter, 2012).

Accordingly, based on her own empirical research, Epstein (2010) offers the following suggestions for teachers to foster partnerships with families:

- Provide an active program of learning activities to be done at home.
- Build parent confidence by providing workshops for parents on how to help with reading.
- Support parents with organizing home learning activities so that they feel more confident in helping their beginning readers.
- Develop procedures for parents to contact teachers when they have questions about at-home learning activities.



Family Report

RECOMMENDATION

Develop positive, effective, and productive family-teacher partnerships.

iRead*'s Approach*

The *iRead Professional Guide*'s Family Engagement section begins with tips for engaging families as partners in each child's learning, authored by Phyllis Hunter, a leading family engagement specialist and a member of Scholastic Family and Community Engagement (FACE) national advisory board. Teachers receive support for building an *iRead* community by providing program information, communicating student progress, and celebrating student success. The Family Engagement section of the *Professional Guide* also provides teachers with strategies for communicating ways that families can support learning at home.

At-Home Reading Activities

Reading success depends on practice. Even with all the hours in the school day, additional time is needed to build fluent comprehension skills, thus the importance of at-home reading.

Research Evidence and Expert Opinion

A consensus of the early literacy research supports the value of programs that provide at-home support to beginning readers and their families, finding "statistically significant and moderate to large effects on children's oral language skills and general cognitive abilities" (NELP, 2008, p. ix).

Marilyn Adams (1990) stresses the value of family reading. She notes, "[T]he most important activity for building the knowledge and skills eventually required for reading is . . . reading aloud to children," thereby "engaging them regularly and interactively in the enjoyment and exploration of print" (pp. 86, 411). According to the most recent Scholastic Kids & Family Reading Report on children and family reading experience, 65% of parents read aloud to their children ages 6–8 at least once a week, but the remainder do not (Harrison Group, 2013). Expert opinion strongly recommends that teachers encourage out-of-school reading through at-home reading assignments, supplementary reading lists, and parent education (Adams, 1990; Epstein, 2010; NRC, 1998).

RECOMMENDATION

Family members can support the reading skills of young children by reading aloud to their children. Teachers should provide support to parents for at-home reading activities.

iRead*'s Approach*

As mentioned above, *iRead*'s *Professional Guide* offers constructive advice on supporting literacy learning at home from family engagement expert Phyllis Hunter.

In addition, downloadable eBooks, printable readers, and supplemental book lists provide reading materials and suggestions for families to use at home. These resources may be of particular value to low-income students whose homes may be lacking in rich print resources.

References

Adams, M. J. (1990). *Beginning to read: Thinking and learning about print*. Urbana-Champaign: Center for the Study of Reading, University of Illinois at Urbana-Champaign.

Adams, M. J. (2001). Alphabetic anxiety and explicit, systematic phonics instruction: A cognitive science perspective. In S. B. Neuman & D. K. Dickinson (Eds.), *Handbook of early literacy research* (pp. 66–80). New York: Guilford Press.

Adams, M. J. (2009). Decodable text: Why, when, how? In E. H. Hiebert & M. Sailors (Eds.), *Finding the right texts* (pp. 23–46). New York: Guilford Press.

Adams, M. J. (2010). Advancing our students' language and literacy: The challenge of complex texts. *American Educator*, *34*(4), 3–11, 53. Retrieved January 17, 2013, from https://69.18.221.209/pdfs/americaneducator/winter1011/Adams.pdf

Adams, M. J. (2011). The relation between alphabetic basics, word recognition, and reading. In S. J. Samuels & A. E. Farstrup (Eds.), *What research has to say about reading instruction* (4th ed., pp. 4–24). Newark, DE: International Reading Association.

Annie E. Casey Foundation (2010). *Early warning! Why reading by the end of third grade matters: A KIDS COUNT Special Report for the Annie E. Casey Foundation*. Baltimore, MD. Retrieved January 17, 2013, from http://www.aecf.org/~/media/Pubs/Initiatives/KIDS%20COUNT/123/2010KCSpecReport/AEC_report_color_highres.pdf

Archer, A. L., & Hughes, C. A. (2011). Explicit instruction: Effective and efficient teaching. In K. Harris & S. Graham (Eds.), *What works for special-needs learners* (6th ed., pp. 1–22). New York, NY: Guilford Press.

Biemiller, A. (2009). *Words worth teaching: Closing the vocabulary gap*. Columbus, OH: SRA/McGraw Hill.

Birsh, J. R. (Ed.) (2011). *Multisensory teaching of basic language skills* (3rd ed). Baltimore, MD: Brookes Publishing Co.

Black, P., & Wiliam, D. (1998a). Assessment and classroom learning. *Assessment in Education: Principals, Policy, & Practice*, 5(1), 7–71.

Black, P., & Wiliam, D. (1998b). Inside the black box: Raising standards through classroom assessment. *Phi Delta Kappan, 80*(2), 139–148.

Black, P., & Wiliam, D. (2009). Developing the theory of formative assessment. *Educational Assessment, Evaluation and Accountability, 21*(5), 5–31.

Bloom, B. (1986). Automaticity: The hands and feet of genius. *Educational Leadership*, *43*(5), 70–77.

Bodrova, E., & Leong, D. J. (2005). Self-regulation: A foundation for early learning. *Principal, 85*(1), 30–35. Retrieved January 18, 2013, from http://www.naesp.org/resources/2/Principal/2005/S-Op30.pdf

Bowers, P. N., & Cooke, G. (2012). Morphology and the Common Core: Building students understanding of the written word. *Perspectives on Language and Literacy, 38*(4), 31–35.

Brady, S. (2012). Taking foundational standards far enough. *Perspectives on Language and Literacy, 38*(4), 19–24.

Buckingham, B., & Dolch, E. (1936). *A combined word list*. Boston: Ginn & Co.

Cárdenas-Hagan, E. (2010). Response to intervention: Implications for Spanish-speaking English language learners. *Perspectives on Language and Literacy, 36*(2), 24–29. Retrieved January 18, 2013, from http://www.rtinetwork.org/learn/diversity/response-to-intervention-implications-for-spanish-speaking-english-language-learners

Carlisle, J. F. (2004). Morphological processes that influence learning to read. In C. A. Stone, E. R. Sillman, B. J. Ehren, & K. Apel (Eds.), *Handbook of language and literacy: Development & disorders* (pp. 318–339). New York: Guilford Press.

Carlo, M. S., August, D., McLaughlin, B., Snow, C. E., Dressler, C., Lippman, D. N., Lively, T. J., & White, C. E. (2004). Closing the gap: Addressing the vocabulary needs of English-language learners in bilingual and mainstream classrooms. *Reading Research Quarterly, 39*(2), 188–215.

Carroll, J., Davies, P., & Richman, B. (1971). *The American heritage word frequency book*. Boston, MA: Houghton Mifflin.

Carter, E.W., Lane, K. L., Crnobori, M. E., Bruhn, A. L., & Oakes, W. P. (2011). Self-determination interventions for students with or at risk for emotional and behavioral disorders: Mapping the knowledge base. *Behavioral Disorders, 36*, 100–116. Retrieved January 18, 2013, from http://www.ccbd.net/sites/default/files/bedi-36-02-100.pdf

Center for Applied Special Technology (2011). *Universal Design for Learning guidelines, version 2.0.* Wakefield, MA: Author. Retrieved December 1, 2012, from http://www.udlcenter.org/sites/udlcenter.org/files/UDL_Guidelines_Version_2.0_(Final)_3.doc

Cohen, J. D., Dunbar, K., & McClelland, J. L. (1990). On the control of automatic processes: A parallel distributed processing account of the Stroop effect. *Psychological Review, 97*, 32–361.

Cunningham, A. E. (1990). Explicit versus implicit instruction in phonemic awareness. *Journal of Experimental Child Psychology, 50*(3), 429–444.

Cunningham, A., & Rose, D. (2012). This is your brain on reading. *Education Week, 32*(15), 20–21.

Dehaene, S. (2009). *Reading in the brain: The science and evolution of a human invention*. New York: Viking.

Dockterman, D. (2012, March 5). *Games help kids learn through failure*. Retrieved January 31, 2013, from http://oomscholasticblog.com/2012/03/david-dockterman-games-help-kids-learn-through-failure.html

Edelman, M. W., & Engler, J. (2012). Meet the class of 2025. *Education Week*, 32(3), 16–17.

Ehri, L. C. (1995). Phases of development in learning to read words by sight. *Journal of Research in Reading. 18*(2), 116–125.

Epstein, J. L. (2010). *School, family, and community partnerships: Preparing educators and improving schools* (2nd ed.). Boulder, CO: Westview Press.

Farrell, M. L., & Sherman, G. F. (2011). Multisensory structured language education. In J. R. Birsh (Ed.), *Multisensory teaching of basic language skills* (3rd ed., pp. 25–48). Baltimore, MD: Brookes Publishing Company.

Fletcher, J. D., & Tobias, S. (2005). The multimedia principle. In R. E. Mayer (Ed.), *The Cambridge handbook of multimedia learning* (pp. 117–134). Cambridge: Cambridge University Press.

Freedman, S., & Calfee, R. (1984). Understanding and comprehending. *Written Communication, 1*(4), 459–490.

Fry, E. (2004). *1,000 instant words*. Westminster, CA: Teacher Created Resources.

Fry, E. B., & Kress, J. E. (2006). *The reading teacher's book of lists* (5th ed.). San Francisco, CA: Jossey-Bass.

Gee, J. (2005). Good video games and good learning. Phi *Kappa Phi Forum, 85*(2), 33–37.

Goldenberg, C. (2010). Reading instruction for English language learners. In M. Kamil, P. D. Pearson, E. Moje, & P. Afflerbach (Eds.), *Handbook of reading research* (Vol. IV, pp. 684–710). Newark, DE: International Reading Association.

Harris, A., & Jacobson, M. (1972). *Basic elementary reading vocabularies*. New York, NY: Macmillan.

Harrison Group (2013). *Kids and family reading report* (4th ed.). New York: Scholastic, Inc. Retrieved January 16, 2013, from http://mediaroom.scholastic.com/files/kfrr2013-wappendix.pdf

Hasbrouck, J., & Tindal, G.A. (2006). Oral reading fluency norms: A valuable assessment tool for reading teachers. *The Reading Teacher, 59*(7), 636–644.

Hasselbring, T. S., Goin, L. I., & Bransford, J. (1988). Developing math automaticity in learning: The role of computerized drill and practice. *Focus on Exceptional Children, 20*(6), 1–7.

Hasselbring, T. (2012). Five reasons readers need technology. *Educational Leadership, 69*(6). Retrieved January 31, 2013, from http://www.ascd.org/publications/educational-leadership/mar12/vol69/num06/Five-Reasons-Readers-Need-Technology.aspx

Hasselbring, T., & Mayer, M. (2012). Technology: The great equalizer. *Education Week, 32*(9), 14–15.

Henderson, A. & Mapp. K (2002). *A new wave of evidence: The impact of school, famliy, and community connections on student achievement*. Austin, TX: Southwest Education Development Laboratory.

Henry, M. K. (2010). *Unlocking literacy: Effective decoding and spelling instruction* (2nd ed.). Baltimore, MD: Brookes Publishing.

Hernandez, D.J. (2012). *Double jeopardy: How third-grade reading skills and poverty influence high school graduation*. Baltimore, MD: The Annie E. Casey Foundation. Retrieved January 20, 2012, from http://www.aecf.org/~/media/Pubs/Topics/Education/Other/DoubleJeopardyHowThirdGradeReadingSkillsandPovery/DoubleJeopardyReport030812forweb.pdf

Hiebert, E. H. (2005). In pursuit of an effective, efficient vocabulary curriculum for elementary students. In E. H. Hiebert & M. L. Kamil (Eds.), *Teaching and learning vocabulary: Bringing research to practice* (pp. 243–263). Mahwah, NJ: Erlbaum.

Hughes, J., & Kwok, O. (2007). Influence of student-teacher and parent-teacher relationships on lower achieving readers' engagement and achievement in the primary grades. *Journal of Educational Psychology, 99*(1), 39–51.

Hunter, P. (2010). *2010–2011 high frequency word list, grade 2*. Houston, TX: Houston Independent School District.

Hunter, P. C. (2012). *It's not complicated! What I know for sure about helping our students of color become successful readers*. New York, NY: Scholastic.

Institute for Education Sciences (February 2009). *Assisting students struggling with reading: Response to intervention and multi-tier intervention in the primary grades*. Washington, D.C.: U.S. Department of Education, Institute of Education Science, National Center for Education Evaluation and Regional Assistance. Retrieved November 19, 2012, from http://ies.ed.gov/ncee/wwc/pdf/practice_guides/rti_reading_pg_021809.pdf

Korat, O. (2010). Reading electronic books as a support for vocabulary, story comprehension and word reading in kindergarten and first grade. *Computers & Education, 55*(1), 24–31.

LaBerge, D., & Samuels, S. J. (1974). Toward a theory of automatic information processing in reading. *Cognitive Psychology, 6*(2), 293–322.

Lyon, G. R., & Chhabra, V. (2004). The science of reading research: What research says about reading. *Educational Leadership, 61*(6), 12–17.

Marzano, R. J., Marzano, J. S., & Pickering, D. J. (2003). *Classroom management that works: Research-based strategies for every teacher*. Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano, R. J., & Pickering, D. J. (2005). *Building academic vocabulary: Teacher's manual*. Alexandria, VA: Association for Supervision and Curriculum Development.

Mayer, R. E. (Ed.). (2005). *The Cambridge handbook of multimedia learning*. Cambridge: Cambridge University Press.

Miller, G. A. (1956). The magical number seven, plus or minus two: Some limits on our capacity for processing information. *Psychological Review, 63*, 81–97.

Moats, L. (2012). Reconciling the Common Core State Standards with reading research. *Perspectives on Language and Literacy, 38*(4), 15–18.

Nagy, W. (1997). On the role of context in first- and second-language vocabulary learning. In N. N. Schmitt & M. McCarthy (Eds.), *Vocabulary: description, acquisition and pedagogy* (pp. 64–83). Cambridge: Cambridge University Press.

Nagy, W., Berninger, V. W., & Abbott, R. D. (2006). Contributions of morphology beyond phonology to literacy outcomes of upper elementary and middle school students. *Journal of Educational Psychology, 98*, 134–147.

National Center on Response to Intervention (NCRtI). (2012). *RtI implementer series: Module 2: Progress monitoring training manual*. Retrieved October 13, 2012 from http://www.rti4success.org/pdf/ImplementerSeries_ProgressMonitoringManual.pdf

National Early Literacy Panel (NELP) (2008). *Developing early literacy: Report of the National Early Literacy Panel*. Washington, D. C.: National Institute for Literacy, National Center for Family Literacy.

National Governors Association Center for Best Practices, Council of Chief State School Officers (NGA, CCSSO) (2010). *Common Core State Standards for English language arts and literacy in history/social studies, science, and technical subjects*. Washington, D.C.: National Governors Association Center for Best Practices, Council of Chief State School Officers. Retrieved November 16, 2013, from http://www.corestandards.org/ELA-Literacy

National Reading Panel (NRP). (2000). *Report of the National Reading Panel: Reports of the subgroups*. Washington, D. C.: National Institutes of Health.

National Research Council (NRC). (1998). *Preventing reading difficulties in young children*. C. E. Snow, M. S. Burns, & P. Griffin (Eds.). Washington DC: National Academies Press.

National Research Council (NRC). (2000). *How people learn: Brain, mind, experience, and school* (expanded ed.). Committee on Developments in the Science of Learning and Committee on Learning Research and Educational Practice. J. D. Bransford, A. Brown, & R. R. Cocking (Eds.). Commission on Behavioral and Social Sciences and Education. Washington, D.C.: National Academy Press.

Nevills, P., & Wolfe, P. (2009). *Building the reading brain, PreK–3*. Thousand Oaks, CA: Corwin Press.

Read, D. K. (2008). A synthesis of morphology interventions and effects on reading outcomes for students in grades K–12. *Learning Disabilities Research & Practice, 23*(1), 36–49.

Reinking, D. (2005). Multimedia learning in reading. In R. E. Mayer (Ed.), *The Cambridge handbook of multimedia learning* (pp. 355–374). Cambridge: Cambridge University Press.

Rose, D. H., & Meyer, A. (2002). *Teaching every student in the digital age: Universal design for learning*. Alexandria, VA: Association for Supervisors of Curriculum Development. Retrieved January 18, 2013, from http://www.ascd.org/publications/books/101042.aspx

Rose, S. (2012, August). *Third grade reading policies*. Education Commission of the States (ECS). Denver, CO. Retrieved March 28, 2013, from http://www.ecs.org/clearinghouse/01/03/47/10347.pdf

Rosenberg, M. (2006). *Sound and letter time: Building phonemic awareness and alphabet recognition through purposeful play*. New York: Scholastic Research Foundation.

Roskos, K., & Neuman, S. (2010). Classroom management for achieving readers. *The Reading Teacher, 65*(5), 308–312.

Reutzel, D. R., & Cooter, R. B. (Eds.) (2012). *Teaching children to read: The teacher makes the difference* (6th ed). Boston: Pearson.

Scholastic Research and Validation (2005). *Research foundation & evidence of effectiveness for FASTT Math*™. New York, NY: Scholastic Inc.

Scholastic Research and Validation (2008). *Preliminary evidence of effectiveness: System 44*. New York, NY: Scholastic Inc.

Shepherd, M. J., & Marzola, E. S. (2011). Assessment. In J. R. Birsh (Ed.), *Multisensory teaching of basic language skills* (3rd ed., pp. 427–458). Baltimore, MD: Brookes Publishing Company.

Silverman, R., & Hines, S. (2009). The effects of multimedia-enhanced instruction on the vocabulary of English-language learners and non-English language learners in pre-kindergarten through second grade. *Journal of Educational Psychology*, 101(2), 305–314.

Slavin, R. E., Cheung, A., Groff, C., & Lake, C. (2008). Effective reading programs for middle and high schools: A best evidence synthesis. *Reading Research Quarterly, 4*(3), 290–322.

Sousa, D. A., & Tomlinson, C. A. (2011). *Differentiation and the brain: How neuroscience supports the learner-friendly classroom*. Bloomington, IN: Solution Tree Press.

Stahl, S. A., & Murray, B. A. (2006). Defining phonological awareness and its relationship to early reading. In K. Stahl, & M. C. McKenna, (Eds.), *Reading research at work: Foundations of effective practice* (pp. 92–113). New York, NY: Guilford Press.

Strangman, N., & Dalton, B. (2005). Using technology to support struggling readers: A review of the research. In D. Edyburn, K. Higgins, & R. Boone (Eds.), *Handbook of special education technology research and practice* (pp. 545–570). Whitefish Bay, WI: Knowledge by Design.

Strickland, D. (2011). *Teaching phonics today: Word study strategies through the grades* (2nd ed.). Newark, DE: International Reading Association.

Torgesen, J. K. (2002). The prevention of reading difficulties. *Journal of School Psychology, 40*(1), 7–26.

Vaughn, S., & Linan-Thompson, S. (2004). *Research-based methods for reading instruction: Grades K–3*. Alexandria, VA: Association for Supervision and Curriculum Development.

Vygotsky, L. (1978). *Mind and Society* (pp. 79–91). Cambridge, MA: Harvard University Press.

Wagner, R. K. (2008). *Learning to read: The importance of assessing phonological decoding skills and sight word knowledge*. New York: Scholastic, Inc.

Washington, J., & Cárdenas-Hagan, E. (2012). Turning challenges into strengths. *Education Week*, 32(13), 20–21.

U.S. Department of Education, National Center for Education Statistics (2012). *Digest of Education Statistics, 2011*.

Zeno, S. M., Ivens, S. H., Millard, R. T., & Duvvuri, R. (1995). *The educator's word frequency guide*. Brewster, NY: Touchstone Applied Science.

Scope and Sequence

Transforming Literacy Instruction

Mc Graw Hill School Education Group

WRIGHT GROUP LEAD21™

Scope and Sequence Overview

Reading
- Print Awareness
- Phonological and Phonemic Awareness
- Decoding: Phonics
- Decoding: Structural Analysis

Fluency

Vocabulary and Concepts
- Use Vocabulary Strategies
- Build Vocabulary
- Word Recognition
- Word Structure

Comprehension
- Comprehension Strategies
- Comprehension Skills
- Critical Thinking

Literary Analysis, Response, and Appreciation
- Recognize Genres
- Identify and Analyze Literary Elements
- Identify Literary Devices
- Respond to Literature
- Appreciate Literature
- Cultural Awareness

Spelling

Handwriting/Penmanship

Writing
- Writing Strategies
- Traits of Writing
- Types of Writing
- Writing Habits

Language Conventions
- Grammar in Speaking and Writing
- Usage in Speaking and Writing
- Mechanics in Writing

Listening/Speaking
- Listening Skills and Strategies
- Speaking Skills and Strategies

Viewing/Media

Inquiry, Research, and Study Skills
- Study Skills
- Inquiry and Research

1-800-648-2970

READING	K	1	2	3	4	5
Print Awareness						
Understand that print represents spoken language and carries meaning	●	●	●			
Track print from left to right and top to bottom; sweep back left for next line	●	●				
Hold print materials in the correct orientation	●					
Identify front and back covers, title page, contents, page numbers, name of author and illustrator	●	●	●			
Identify letters in words, words, spaces between words, sentences	●	●	●			
Match oral to printed words	●	●	●			
Know uppercase and lowercase letters of the alphabet	●	●				
Know the order of the alphabet and alphabetize words	●	●	●			
Understand how readers use capitalization and punctuation to get meaning from text	●	●				
Use illustrations to reinforce printed text	●	●				
Recognize some environmental print, such as signs and labels	●	●				
Phonological and Phonemic Awareness						
Identify and produce rhymes	●	●	●	●		
Track/count sounds in a syllable, syllables in a word, and words in a sentence	●	●				
Identify, segment and blend syllables in spoken words	●	●				
Identify, segment and blend onsets and rimes in spoken words	●	●				
Track and represent the number, order, sameness or difference of isolated phonemes	●	●				
Identify and match initial, medial, and final phonemes in spoken words	●	●	●			
Identify and isolate initial, medial, and final sounds in spoken words	●	●				
Blend phonemes to make new words	●	●				
Decoding: Phonics						
Use the alphabetic principle (words are composed of sounds that are represented by letters)	●	●	●			
Use letter-sound relationships to decode	●	●	●	●		
Blend sounds into recognizable words	●	●				
Use strategies to decode, including knowledge of:						
Consonants, consonant blends, consonant digraphs	●	●	●			
Short, long, r-controlled vowels; vowel digraphs; diphthongs; common vowel patterns	●	●	●	●	●	
Phonograms	●	●	●	●		
Decoding: Structural Analysis						
Use word structure to decode words:						
Base words and inflected endings		●	●	●	●	●
Contractions and compounds		●	●	●	●	●
Prefixes and suffixes		●	●	●	●	●
Greek and Latin roots		●	●		●	●
Use syllable rules and patterns to decode		●	●	●	●	●

WRIGHT GROUP LEAD 2.1™

FLUENCY	K	1	2	3	4	5
Read aloud with accuracy, appropriate volume, phrasing, expression, and rate	●	●	●	●	●	●
Use text clues, such as punctuation and key words, to read aloud fluently	●	●	●	●	●	●
Practice reading fluently in different ways, such as choral reading, partner/paired reading, reader's theater, and tape-assisted reading	●	●	●	●	●	●
Read aloud regular and irregular words automatically	●	●	●	●	●	●
VOCABULARY AND CONCEPTS	**K**	**1**	**2**	**3**	**4**	**5**
Learn vocabulary through direct instruction	●	●	●	●	●	●
Learn/build vocabulary by listening to selections read aloud, reading independently through discussion, using resources and references, and by drawing on concrete experiences		●	●	●	●	●
Use Vocabulary Strategies:						
Prior knowledge	●	●	●	●	●	●
Picture clues	●	●	●			
Context clues	●	●	●	●	●	●
Structure clues	●	●	●	●	●	●
Homophones		●	●	●	●	●
Homographs (Multiple meanings)		●	●	●	●	●
Synonyms		●	●	●	●	●
Antonyms		●	●	●	●	●
Analogies			●	●	●	●
Descriptive language	●	●	●	●	●	●
Simile		●	●	●	●	●
Metaphor		●	●	●	●	●
Idioms			●	●	●	●
Build Vocabulary						
Classify words	●	●	●	●	●	●
Comparatives/superlatives	●	●	●	●	●	●
Word relationships or shades of meaning (dog/mammal/animal, etc.)	●	●	●	●	●	●
Denotation and connotation				●	●	●
Latin & Greek roots		●	●		●	●
Words from other languages				●	●	●
Word Recognition						
High-frequency words	●	●	●	●	●	
Academic language: Words for numbers, shapes, colors, directions	●	●				
Academic language: Words of time, order, position	●	●	●	●	●	●
Academic language: Content-area words	●	●	●	●	●	●

Word Structure						
Root words		●	●	●	●	●
Prefixes		●	●	●	●	●
Suffixes		●	●	●	●	●
Compounds		●	●	●	●	●
Contractions		●	●	●	●	●
COMPREHENSION	**K**	**1**	**2**	**3**	**4**	**5**
Comprehension Strategies						
Make predictions	●	●	●	●	●	●
Determine important information	●	●	●	●	●	●
Summarize	●	●	●	●	●	●
Make (and support) inferences	●	●	●	●	●	●
Visualize (use text to make mental images)	●	●	●	●	●	●
Ask and answer questions	●	●	●	●	●	●
Monitor comprehension (self-question, use fix-up strategies: reread, read on, ask questions, adjust reading rate, summarize, ask for help)	●	●	●	●	●	●
Make connections	●	●	●	●	●	●
Comprehension Skills						
Preview text (included in every lesson)	●	●	●	●	●	●
Activate prior knowledge (included in every lesson)	●	●	●	●	●	●
Set purposes (included in every lesson)	●	●	●	●	●	●
Determine author's purpose		●	●	●	●	●
Persuasive techniques			●	●	●	●
Distinguish fact and opinion	●	●	●	●	●	●
Draw conclusions	●	●	●	●	●	●
Categorize and classify	●	●	●	●	●	●
Compare and contrast	●	●	●	●	●	●
Recall and retell	●	●	●	●	●	●
Identify details and facts	●	●	●			
Generalize				●	●	●
Identify cause-effect	●	●	●	●	●	●
Identify main ideas and details	●	●	●	●	●	●
Identify text structure:						
sequential	●	●	●	●	●	●
description/definition	●	●	●	●	●	●
compare/contrast	●	●	●	●	●	●
problem/solution	●	●	●	●	●	●

Comprehension Skills (continued)						
Paraphrase				●	●	●
Sequence events	●	●	●	●	●	●
Identify steps in a process	●	●	●	●	●	●
Use graphic organizers to organize and/or represent text information (story maps, graphs, charts, to understand text structure)	●	●	●	●	●	●
Use text features	●	●	●	●	●	●
Critical Thinking						
Analyze	●	●	●	●	●	●
Evaluate and discuss ideas and texts	●	●	●	●	●	●
Make judgments about ideas and texts	●	●	●	●	●	●
Make connections: Text-to-self	●	●	●	●	●	●
Make connections: Text-to-text	●	●	●	●	●	●
Make connections: Text-to-world	●	●	●	●	●	●
Synthesize				●	●	●
LITERARY ANALYSIS, RESPONSE, AND APPRECIATION	**K**	**1**	**2**	**3**	**4**	**5**
Recognize Genres						
Distinguish fiction from nonfiction	●	●	●	●	●	●
Distinguish fantasy from realistic text	●	●	●	●	●	●
Identify characteristics of fiction genres:						
Drama	●	●	●	●	●	●
Fantasy	●	●	●	●	●	●
Traditional literature (fables, folktales, fairy tales, legends)	●	●	●	●	●	●
Realistic fiction	●	●	●	●	●	●
Historical fiction				●	●	●
Science fiction				●	●	●
Identify characteristics of nonfiction genres:						
Autobiography			●	●	●	●
Biography			●	●	●	●
Expository/informative		●	●	●	●	●
Descriptive				●	●	●
Functional writing (directions)	●	●	●	●	●	●
Letters				●	●	●
Magazines and newspapers	●	●	●	●	●	●
Identify characteristics of poetry and song	●	●	●	●	●	●

Identify and Analyze Literary Elements						
Character:						
Recognize traits, actions, motives, and conflicts	●	●	●	●	●	●
Analyze characters' relationships			●	●	●	●
Determine how and why characters change				●	●	●
Setting:						
Describe elements of setting	●	●	●	●	●	●
Explain the importance of setting to a story's meaning		●	●	●	●	●
Plot:						
Beginning, middle, end	●	●	●	●		
Problem and solution		●	●	●	●	●
Conflict and resolution		●	●	●	●	●
Theme or author's message			●	●	●	●
Identify Literary Devices						
Point of view		●	●	●	●	●
Dialogue				●	●	●
Exaggeration				●	●	●
Flashback and foreshadowing						●
Figurative language (See *Vocabulary and Concepts*)	●	●	●	●	●	●
Imagery				●	●	●
Analogies			●	●	●	●
Symbolism						●
Mood/tone				●	●	●
Sound devices (rhythm, rhyme, repetition, alliteration, onomatopoeia)	●	●	●	●	●	●
Respond to Literature (See also *Critical Thinking*)						
Participate actively (react, speculate, join in, read along) when predictable and patterned selections are read aloud	●	●	●	●	●	●
Interpret text ideas and respond through art, discussion, writing, drama, and research	●	●	●	●	●	●
Ask and answer questions about text	●	●	●	●	●	●
Generate alternate endings to plots	●	●	●	●	●	●
Use evidence to support observations, opinions, and interpretations	●	●	●	●	●	●
Evaluate and critique author's writing: style, ideas, accuracy, logic			●	●	●	●
Appreciate Literature						
Read widely across different genres	●	●	●	●	●	●
Self-select literature for independent reading	●	●	●	●	●	●
Read regularly	●	●	●	●	●	●
Read silently for extended periods of time	●	●	●	●	●	●

Appreciate Literature (continued)						
Become an expert on topic	●	●	●			
Develop personal preferences for reading	●	●	●	●	●	●
Cultural Awareness						
Compare language and oral traditions of different regions and cultures			●	●	●	●
Compare and connect experiences across different cultures		●	●	●	●	●
Recognize that universal themes cross cultures			●	●	●	●
SPELLING	**K**	**1**	**2**	**3**	**4**	**5**
Use spelling approximations and some conventional spelling	●	●	●	●	●	●
Spell independently by using alphabetic principle, pre-phonetic knowledge, and knowledge of letter names	●	●	●			
Recognize that words have a correct spelling	●	●	●	●	●	●
Use strategies to spell words:						
Spelling patterns	●	●	●	●		
Sound-letter knowledge (phonetically regular words)	●	●	●	●		
Word structure:						
Base words and affixes		●	●	●	●	●
Greek and Latin roots					●	●
Syllable patterns		●	●	●	●	●
Contractions		●	●	●	●	●
Compounds		●	●	●	●	●
Resources, such as word lists, dictionary, thesaurus		●	●	●	●	●
Spell high-frequency irregular words		●	●	●	●	●
Spell frequently misspelled words, such as homophones and homonyms		●	●	●	●	●
HANDWRITING/PENMANSHIP	**K**	**1**	**2**	**3**	**4**	**5**
Gain control of penmanship, including pencil grip, paper position, stroke, and posture	●	●				
Write left-to-right and top-to-bottom	●	●				
Write legibly controlling spacing (letter, word, sentence), slant, letter size, and formatting (indentation, margins)	●	●	●			
Write uppercase and lowercase letters and numbers	●	●	●			
WRITING	**K**	**1**	**2**	**3**	**4**	**5**
Draw or use letters and phonetically spelled words to write about experiences, stories, people, places, events, etc.	●	●	●			
Writing Strategies						
Use the writing process:						
Prewrite strategies	●	●	●	●	●	●
Draft single and multi-paragraph texts	●	●	●	●	●	●
Revise for clarity, progression, and support of ideas	●	●	●	●	●	●
Edit/proofread (spelling, grammar, usage, mechanics)	●	●	●	●	●	●
Publish	●	●	●	●	●	●

Evaluate own writing and the writing of others	●	●	●	●	●	●
Analyze published writing for use as models	●	●	●	●	●	●
Use technology to compose texts	●	●	●	●	●	●
Participate in collaborative writing	●	●	●	●	●	●
Traits of Writing						
Focus and ideas:						
Focus on a central idea or storyline		●	●	●	●	●
Use sensory details and concrete examples		●	●	●	●	●
Organization/paragraphs:						
Organize ideas in a logical sequence with a beginning, middle, and end		●	●	●	●	●
Use graphic organizers to group ideas		●	●	●	●	●
Support ideas with details or examples		●	●	●	●	●
Write coherent paragraphs with topic sentences and supporting sentences		●	●	●	●	●
Write a multi-paragraph composition with introductory and concluding paragraphs				●	●	●
Use transitions to connect story events or to relate ideas (sentences and paragraphs)			●	●	●	●
Use literary devices (suspense, dialogue, figurative language, etc.)				●	●	●
Voice:						
Develop an identifiable voice in personal writing		●	●	●	●	●
Match voice to type and purpose of writing and audience				●	●	●
Word choice:						
Use appropriate, clear, and precise language		●	●	●	●	●
Use descriptive language	●	●	●	●	●	●
Use figurative language			●	●	●	●
Sentences:						
Write topic sentences, descriptive sentences, concluding sentences		●	●	●	●	●
Improve sentences (elaborate subjects, combine related sentences)			●	●	●	●
Vary types of sentences when writing	●	●	●	●	●	●
Use correct word order	●	●	●	●	●	●
Conventions:						
Use correct spelling, grammar, usage, and mechanics	●	●	●	●	●	●
Correct sentence fragments and run-ons		●	●	●	●	●
Types of Writing						
Narrative (including journals, stories, autobiographies, personal narratives)	●	●	●	●	●	●
Expository (including directions, essays, explanations, news stories, research reports)	●	●	●	●	●	●
Descriptive (including captions, labels, lists, poems)	●	●	●	●	●	●
Persuasive (including letters to the editor, opinions, editorials, ads, essays)	●	●	●	●	●	●

Writing Habits						
Write daily	●	●	●	●	●	●
Write for a variety of purposes and audiences	●	●	●	●	●	●
Reviews own written work to monitor growth as a writer	●	●	●	●	●	●
LANGUAGE CONVENTIONS	**K**	**1**	**2**	**3**	**4**	**5**
Grammar in Speaking and Writing						
Parts of Speech:						
Nouns	●	●	●	●	●	●
Pronouns		●	●	●	●	●
Verbs and verb tenses	●	●	●	●	●	●
Adjectives	●	●	●	●	●	●
Adverbs			●	●	●	●
Prepositions and Conjunctions					●	●
Sentences:						
Types of sentences	●	●	●	●	●	●
Structure of sentences (parts of sentences; sentence variety)	●	●	●	●	●	●
Identify fragments and run-on sentences		●	●	●	●	●
Usage in Speaking and Writing						
Speak and write in complete sentences	●	●	●	●	●	●
Use correct subject-verb agreement in speaking and writing		●	●	●	●	●
Use correct pronoun agreement/referents in speaking and writing	●	●	●	●	●	●
Mechanics in Writing						
Capitalization:						
First word in a sentence	●	●	●	●	●	●
Own name	●	●				
Days, months, holidays		●	●	●		
Cities and states		●	●	●	●	●
Punctuation:						
End punctuation	●	●	●	●	●	●
Abbreviations		●	●	●	●	●
Commas			●	●	●	●
Quotation marks			●	●	●	●
Semi-colons, colons		●	●	●	●	●
Dashes, ellipses, brackets, hyphens, parenthesis					●	●
Apostrophes		●	●	●	●	●

LISTENING/SPEAKING	K	1	2	3	4	5
Listening Skills and Strategies						
Listen attentively to different types of oral communication, including conversation and text read aloud	●	●	●	●	●	●
Listen for a purpose:						
For enjoyment	●	●	●	●	●	●
To build vocabulary and concepts	●	●	●	●	●	●
To participate in discussions and conversations	●	●	●	●	●	●
To connect experiences and ideas with those of others	●	●	●	●	●	●
To get information	●	●	●	●	●	●
To solve problems and answer questions	●	●	●	●	●	●
To follow directions	●	●	●	●	●	●
To identify musical elements of oral literary language	●	●	●	●		
Self-monitor comprehension while listening	●	●				
Listen critically, for example, to identify main ideas and supporting details, separate fact from opinion, identify persuasive techniques, make inferences, draw conclusions, determine author's purpose	●	●	●	●	●	●
Speaking Skills and Strategies						
Speak clearly and fluently using appropriate volume, rate, pitch, phrasing, expression, and projection	●	●	●	●	●	●
Use complete sentences and English language conventions while speaking	●	●	●	●	●	●
Stay on topic and organize ideas when speaking		●	●	●	●	●
Use language appropriate to the audience, purpose, setting, and situation	●	●	●	●	●	●
Use gestures, facial expressions, and nonverbal communication to enhance meaning	●	●	●	●	●	●
Speak for a purpose:						
To share experiences, ideas, and information	●	●	●	●	●	●
To summarize and explain	●	●	●	●	●	●
To participate in discussions and conversations	●	●	●	●	●	●
To ask and answer questions	●	●	●	●	●	●
To give precise directions	●	●	●	●	●	●
To give dramatic interpretations (rhymes, poems, songs, stories)	●	●	●	●	●	●
To give presentations and oral reports (narrative, descriptive, informational)	●	●	●	●	●	●
VIEWING/MEDIA	**K**	**1**	**2**	**3**	**4**	**5**
Interpret and evaluate artistic images	●	●	●	●	●	●
Interpret informational visuals (charts, graphs, maps, etc.)	●	●	●	●	●	●
Identify and respond to various print and nonprint media formats	●	●	●	●	●	●
Identify the main ideas and supporting details in a nonprint media message	●	●	●	●	●	
Compare and contrast print, visual, and electronic media formats		●	●	●	●	●
Recognize the purpose, bias, and persuasive techniques in media	●	●	●	●	●	●

WRIGHT GROUP LEAD 2.1™

VIEWING/MEDIA (continued)	K	1	2	3	4	5
Select, organize, and/or produce images to complement or extend oral or written text	●	●	●	●	●	●
Use technology to produce media (class newspaper, video reports, etc.)		●	●	●	●	●
INQUIRY, RESEARCH, AND STUDY SKILLS	**K**	**1**	**2**	**3**	**4**	**5**
Study Skills						
Follow directions	●	●	●	●	●	●
Take notes, paraphrase, summarize			●	●	●	●
Use graphic sources:						
Charts and tables	●	●	●	●	●	●
Maps		●	●	●	●	●
Graphs	●	●	●	●	●	●
Time lines				●	●	●
Diagrams		●	●	●	●	●
Illustrations, photos, captions, labels	●	●	●	●	●	●
Use graphic organizers	●	●	●	●	●	●
Practice test-taking strategies				●	●	●
Inquiry and Research						
Choose and narrow a topic	●	●	●	●	●	●
Formulate questions to guide research	●	●	●	●	●	●
Locate and collect information	●	●	●	●	●	●
Choose reference sources appropriate to the research purpose				●	●	●
Recognize and use the parts of a book to locate information (contents, chapter titles, guide words, indices)		●	●	●	●	●
Use alphabetical order	●	●	●	●	●	●
Understand the structure, organization, and purpose of reference materials:						
Atlas		●	●	●	●	●
Almanac				●	●	●
Card catalog				●	●	●
Encyclopedia			●	●	●	●
Dictionary/glossary		●	●	●	●	●
Thesaurus			●	●	●	●
Technology		●	●	●	●	●
Use a variety of reference sources (including electronic texts, experts, and print resources) to locate information	●	●	●	●	●	●
Compile notes/outline/organize information	●	●	●	●	●	●
Quote, paraphrase, and cite sources properly		●	●	●	●	●
Draw conclusions based on gathered information	●	●	●	●	●	●
Evaluate own research and raise new questions			●	●	●	●
Produce research products in effective formats	●	●	●	●	●	●

RD 10 W 7279.

SUCCESS STORY

Game-Changer in Greenville, South Carolina

ABOUT THE SCHOOL

Name

Powdersville Elementary School

Location

Greenville, South Carolina

Enrollment

500

A Common Problem

In 2012, Teresa Garrett, a fifth grade teacher of 15 years at Powdersville Elementary, encountered a familiar problem - the school was struggling to meet the Common Core State Standards in elementary mathematics with the curriculum they were using.

As the newest of nine elementary schools in Anderson School District One, Garrett's school, Powdersville Elementary, currently serves more than 500 children in grades three through five.

Having been named a National Blue Ribbon School in 2010 and being consistently honored for closing achievement gaps year after year, Powdersville Elementary, led by Garrett's efforts sought to invest in a new elementary program built to the standards.

89%	6%	3%	2%
CAUCASIAN	AFRICAN AMERICAN	HISPANIC	AMERICAN INDIAN, INDIAN, ASIAN, MULTIRACIAL

ENROLLMENT

McGraw-Hill My Math

Powdersville is in its first year using *McGraw-Hill My Math* and the school is now using the program in all three elementary grades within the building.

Built specifically to meet the requirements of the Common Core State Standards, *McGraw-Hill My Math* focuses on the Common Core's three components of rigor (Conceptual Understanding, Procedural Skill and Fluency, and Application), which are woven throughout the program in equal intensity, allowing students to progress toward a higher level of achievement.

Garrett says she appreciates the *McGraw-Hill My Math* approach because it "seems to have the right combination of parent involvement, technology and ease of use. I love that you can tear stuff out and I don't have to make copies."

The Tech Factor

Since technology is always top-of-mind for teachers like Garrett, she praised the digital engagement of *My Math*.

"*McGraw-Hill My Math* features are games and video introductions that are short, to-the-point and modern enough to keep students' attention", she says. Garrett also likes having access to the e-book online, since every student next year will be equipped with an iPad.

"The fact that they will be able to access the book on the iPad is very important to us," Garrett says. While there is usually a learning curve when teachers begin using new curricula, Garrett says McGraw Hill Education's professional development, including online videos depicting instructors teaching the lessons, was invaluable in helping Powdersville educators get up to speed.

"The videos are great, not just for teachers, but they can help with parents to engage with their child's lessons," Garrett notes.

Differentiated Instruction and ELL Support within *My Math*

While students range in math ability, *McGraw-Hill My Math* provides teachers the ability to differentiate instruction. Garrett says this is especially important in reaching English Language Learners (ELLs), noting that Anderson School District One serves students from 27 different countries. "The vocabulary cards are a tremendous help for the ELL students to understand the lessons," Garrett says. "I love how it has room on the page to work a problem, take notes, etc. It's great because they don't have to flip back and forth."

Struggling learners also find *McGraw-Hill My Math* easier to use than some previous curricula, Garrett says, citing one of her students as a prime example. "I had several students in a learning-challenged group," she says. "These students have special needs in reading, and for them to remember the order of operations is sometimes difficult. *My Math* includes a *Foldable*® (tool) to help students remember the order of operations. My students were taking notes on their Foldables and suddenly, a girl shouted out 'Oh, my gosh! Can I use this on my test?'

The tool made sense to her because the Foldable helped her to visualize the steps. This is just one story out of many in which *McGraw-Hill My Math* has gotten my students excited about learning math."

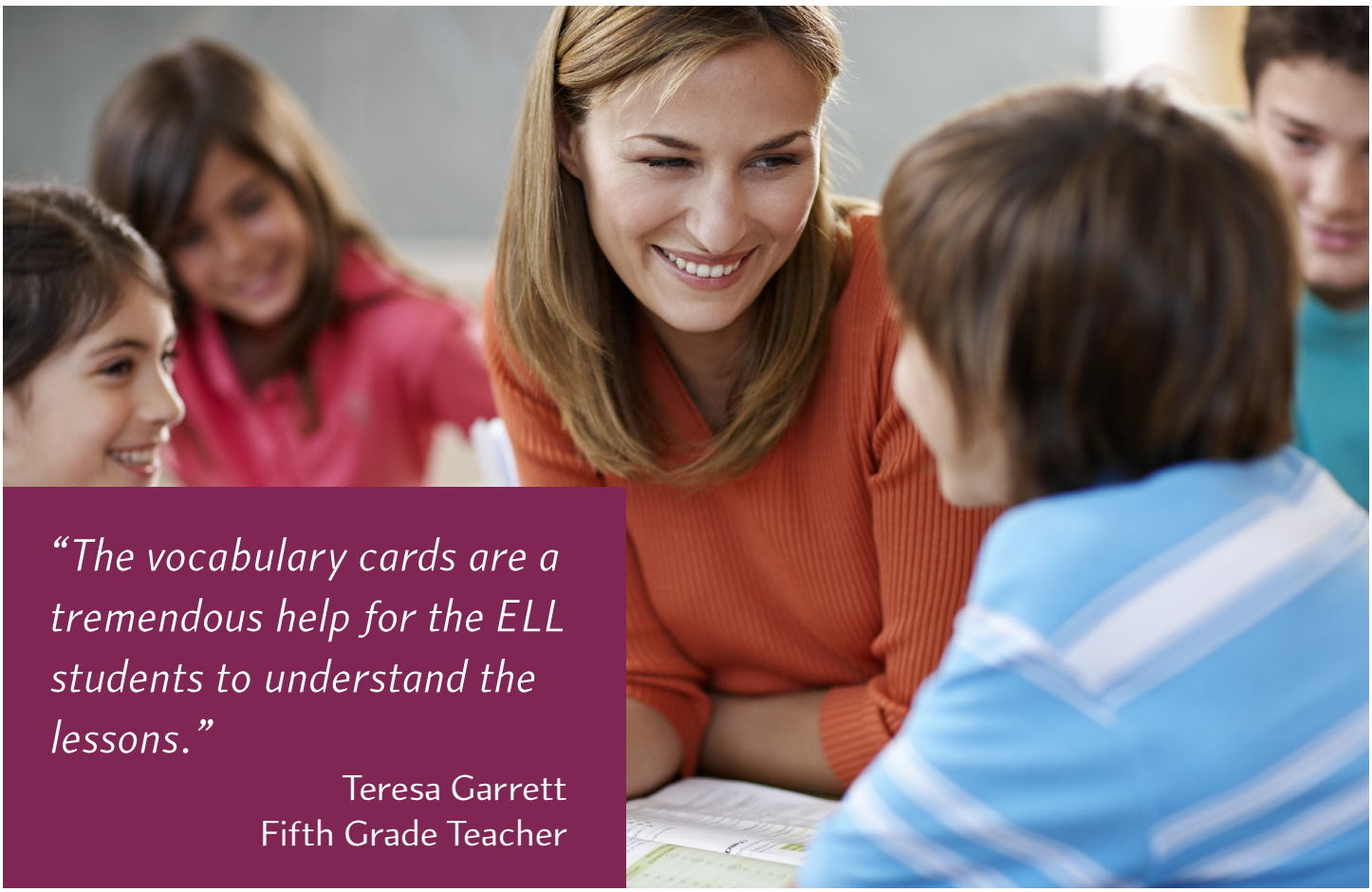
About Vocabulary Cards

Vocabulary cards are available in Spanish as well as English, and can help build mathematical language for all students, not just ELL learners. Additional support for ELL students includes Emerging, Expanding, and Bridging differentiation within all lessons using sentence frames, oral communication, group work, background knowledge and other language strategies.

McGraw-Hill My Math: Game Changer for CCSSM

In the end, *McGraw-Hill My Math* has been a game changer, Garrett says. It is user-friendly for the teacher; provides school-to-home-support for parents; engages students with foldables, manipulatives, games, and video; provides teachers with video instruction examples; andprovides support for ELL students. Garrett also re-emphasizes the importance of *My Math's* perfect alignment with the Common Core.

"We went from something that the teachers didn't understand to something that everybodyunderstands," she says. "It is like a breath of fresh air. It is so aligned to the Common Core State Standards; it covers everything and we understand it. The alignment made it feel familiar, even though it was new."



"The vocabulary cards are a tremendous help for the ELL students to understand the lessons."

Teresa Garrett
Fifth Grade Teacher

Mc Graw Hill Education

To learn more about *McGraw-Hill My Math*, visit **mheonline.com/mhmymath**

McGraw-Hill My Math

MA14 M 03361

SUCCESS STORY

Enhances Results & DI in Janesville, Wisconsin

ABOUT THE SCHOOL

Name

School District of Janesville

Location

Janesville, Wisconsin

Enrollment

10,400

First Impression and Evidence

In Fall 2013, Janesville School District administered the Wisconsin Knowledge and Concepts Examination and the Wisconsin Alternative Assessment for Students with Disabilities. As the 10th largest school district in Wisconsin serving more than 10,000 children in 19 schools, Janesville returned a proficient or advanced score for almost 60 percent of its elementary students who took the exam. This resulted in the district cumulatively scoring 7 percentage points above the state average in math.

As the first hard evidence Janesville's adoption of *McGraw-Hill My Math* was working, Amy Sheridan, Janesville's district math coordinator, is quick to point out the signs of success there from day one.

"When we looked at *McGraw-Hill My Math*, it looked liked it would meet all of our needs," said Sheridan.

McGraw-Hill My Math

Differentiated Instruction and ELL Support within *My Math*

Since *McGraw-Hill My Math* is built around the Common Core and focuses on the standards of mathematical practice, Janesville students – at all learning levels - are provided with multiple experiences to build conceptual understanding, reasoning, and real-world, problem-solving skills.

"The number 1 reason why we moved to *McGraw-Hill My Math* was because it affords differentiation," Sheridan said.

Sheridan remarks how, using *McGraw-Hill My Math*, makes it easier for Janesville teachers to assign students appropriate problems based on their individual levels of proficiency and build the conceptual understanding needed to apply their knowledge to real-world applications.

Differentiation has also become integral in Janesville in teaching English Language Learners (ELL). With the district seeing a growth in the ELL population, especially Spanish-speakers, *McGraw-Hill My Math* has become a staple resource for teachers with ELL students.

Sheridan recalls hearing from the ELL teachers that they "are absolutely loving the Spanish language resources."

Flexible and Invaluable Support

ELL teachers are not the only ones who benefit from the added resources of McGraw-Hill My Math; Sheridan notes that all the teachers have found the flexibility and integration of professional support invaluable.

"McGraw-Hill Education's professional development has been amazing," she says. "You make a phone call and the McGraw-Hill Education trainer is ready and available to support our teachers. McGraw-Hill Education provides us with what we need, whether it's one-on-one help, group training, online video tutorials or instruction in the computer lab."

When asked which *McGraw-Hill My Math* features have been best for the classroom, Sheridan highlights the effectiveness of the built-in Mathematical Practices. "Having these integrated into the content standards allows students to translate concepts into application and allows teachers to save time in building lesson plans," stated Sheridan.

Sharing a story from a veteran kindergarten teacher who has been in the classroom for 30 years, Sheridan recalled how the teacher praised *McGraw-Hill My Math* saying, "I have never had a group of students really understand the math and the concepts behind MAP (Measures of Academic Progress) as well as the students using this program."

Sheridan also underscores the effectiveness in engaging students while challenging them. She says features like the SMART board, vocabulary cards, games, videos and Foldables® gain students' attention. Students tell her "It's colorful. It's fun. Math is fun again!"

The 3 Components of Rigor in *McGraw-Hill My Math*

1. Conceptual Understanding
2. Procedural Skill and Fluency
3. Application

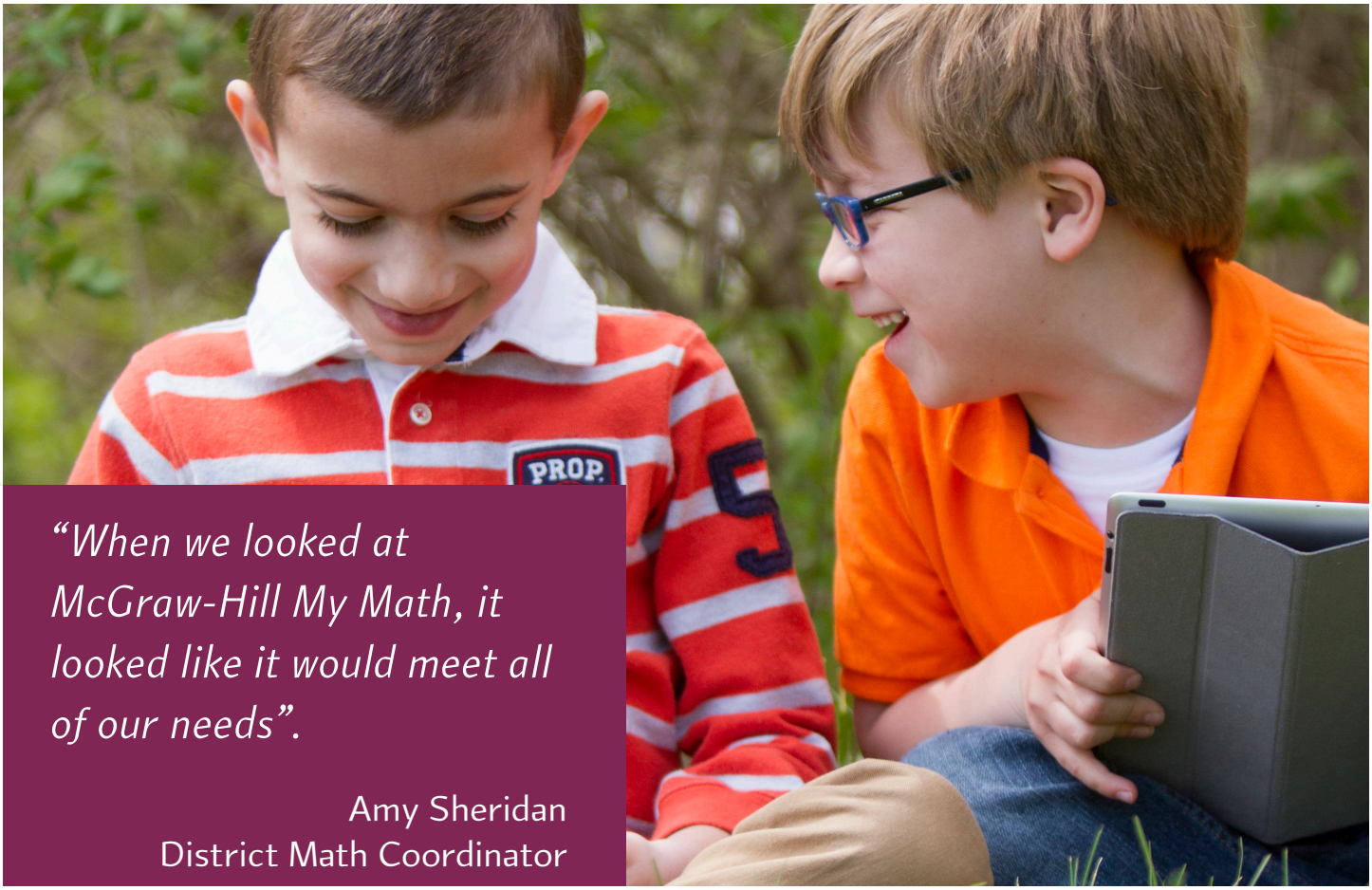
Woven throughout the program in equal intensity, the components of rigor allow students to progress toward a higher level of achievement.

Unbeatable Resource

Confident in their partnership with McGraw-Hill Education and hopeful for the future, Sheridan compliments *McGraw-Hill My Math* saying, "The program is continuously being updated and evolving. We value this in any curriculum we adopt. The amount of technology is great, and the fact that we have a resource that continues to grow with us is unbeatable."

For the School District of Janesville, *McGraw-Hill My Math* has proven to be just the curriculum it needed to align with the rigor outlined in the Common Core, differentiate instruction for all learners, and engage all students – which is paramount.

As the senior Janesville teacher puts it to Sheridan, "If we can get them engaged and understanding math at an early age like we are with McGraw-Hill My Math, they will be in good shape for lifelong learning."



"When we looked at McGraw-Hill My Math, it looked like it would meet all of our needs".

Amy Sheridan
District Math Coordinator

Mc Graw Hill Education

To learn more about *McGraw-Hill My Math*, visit **mheonline.com/mhmymath**

McGraw-Hill My Math

MA14 M 03860

SUCCESS STORY

Rigor Plays Major Role in Minot Public Schools' Success

About the District

Name

Minot
Public Schools

Location

Minot,
North Dakota

Enrollment

7,500

Minot Public Schools

Prior to the adoption of McGraw-Hill My Math, less than 75% of Minot Public School students met the state's standards for adequate yearly progress in math.

Now, in its second year using McGraw-Hill My Math, positive results are showing for Minot.

Students who scored at the advanced or higher levels on the North Dakota math assessment increased their scores dramatically between 2011-12, the year before the adoption of McGraw-Hill My Math, and the 2013-14 school year.

Renae Rudolph, the math curriculum director for Minot, credits these gains, to what she calls "the greatest strength of McGraw-Hill My Math"- the rigor.

7%
Increase in Grade 3 scores after McGraw-Hill My Math Implementation

5%
Increase in Grade 4 scores after McGraw-Hill My Math Implementation

6%
Increase in Grade 5 scores after McGraw-Hill My Math Implementation

MINOT, ND STATE MATH ASSESSMENT SCORES

McGraw-Hill My Math

After reviewing *McGraw-Hill My Math*

Reviewing four series in depth for content aligning with the Common Core State Standards and the Standards for Mathematical Practice, Minot adopted *McGraw-Hill My Math* at the end of its last curriculum cycle. Renae says *McGraw-Hill My Math* came in first in every criteria examined, and chief among these was rigor.

"The program is built on the rigor of the Common Core, and that has been very valuable for us," Rudolph says. "We have found a resource that was built upon the standards every child needs to meet."

How *McGraw-Hill My Math* Works

At the beginning of each lesson, students using *McGraw-Hill My Math* investigate a concept in Investigate the Math. Students then have many opportunities to practice procedural skills throughout the lesson and tackle harder, higher-order thinking problems at the end of the lesson. This makes it easier for Minot teachers to differentiate and assign students appropriate problems based on their individual levels of proficiency.

McGraw-Hill My Math also teaches multiple problem-solving strategies, allowing students to model math and construct arguments that build the mathematical practices into "habits of mind," resulting in strong conceptual understanding.

McGraw-Hill My Math provides teachers the ability to bring more focus to certain concepts, such as fractions, which Rudolph surmises through exposure to *McGraw-Hill My Math* has led to better student understanding of fractions.

Teacher Tools in *McGraw-Hill My Math*

When asked which *McGraw-Hill My Math* tools have been most effective in the classroom, Rudolph points to a number of things.

"Teachers really liked the Math Talk Component, the Problem of the Day and the Hands-On Math," Rudolph says. "The differentiation resources are very well laid out and easy to use. The pre-made assessment options are plentiful, with the added ability to enhance them or even create our own. Assessments are available in the form of readiness checks, pre-tests, progress checks, chapter tests and benchmark assessments covering multiple chapters."

Students and teachers in the lower grades also seem to like that *McGraw-Hill My Math* allows them to approach problem solving using multiple methods, says Rudolph.

"We also like the performance tasks included with grades first through fifth," Rudolph says. "There are four per grade level, and they provide excellent practice for the performance task that will be included in the new Common Core testing."

Anywhere, Anytime Access and ELL Support

Parents like the online access to the textbook so they can view it whenever they like, she adds. Other school-to-home connections include Math at Home letters, Math at Home games and anytime access to the Student Center, which houses homework assignments, lesson animations, personal tutors, and digital games. eHelp is available for further explanations of concepts.

While the district today has few English language learners, North Dakota's economic boom is contributing to Minot's population growth, which could bring unpredictable changes to the student population. Rudolph says "*McGraw-Hill My Math* is a great resource for ELL students," adding that "We were overwhelmed with the amount of resources *McGraw-Hill My Math* provided. We feel the resources for differentiation and Spanish are there."

Rudolph says that since implementing *McGraw-Hill My*

Math, which requires students to think and reflect more on what they are learning, rigor in the classroom has increased and that "an increasing number of students are attaining their expected annual growth rate as measured by scores on the MAP test. Now, the district is working to sustain that growth and *McGraw-Hill My Math* will be a big part of that."

McGraw-Hill My Math should also help ease the transition for fifth-graders moving to sixth grade, where the district is in its second year using McGraw-Hill Glencoe Math, says Rudolph.

In the end, *McGraw-Hill My Math*'s rigor and alignment with Common Core, combined with differentiated instruction, adaptable online resources, professional development and multiple assessment tools are all helping to achieve results, inspire engagement, and lifelong learning for students in the Minot Public Schools.

"Now, the district is working to sustain that growth and McGraw-Hill My Math will be a big part of that."

Renae Rudolph
Math Cirriculum Director

Mc Graw Hill Education

To learn more about *McGraw-Hill My Math*, visit **mheonline.com/mhmymath**

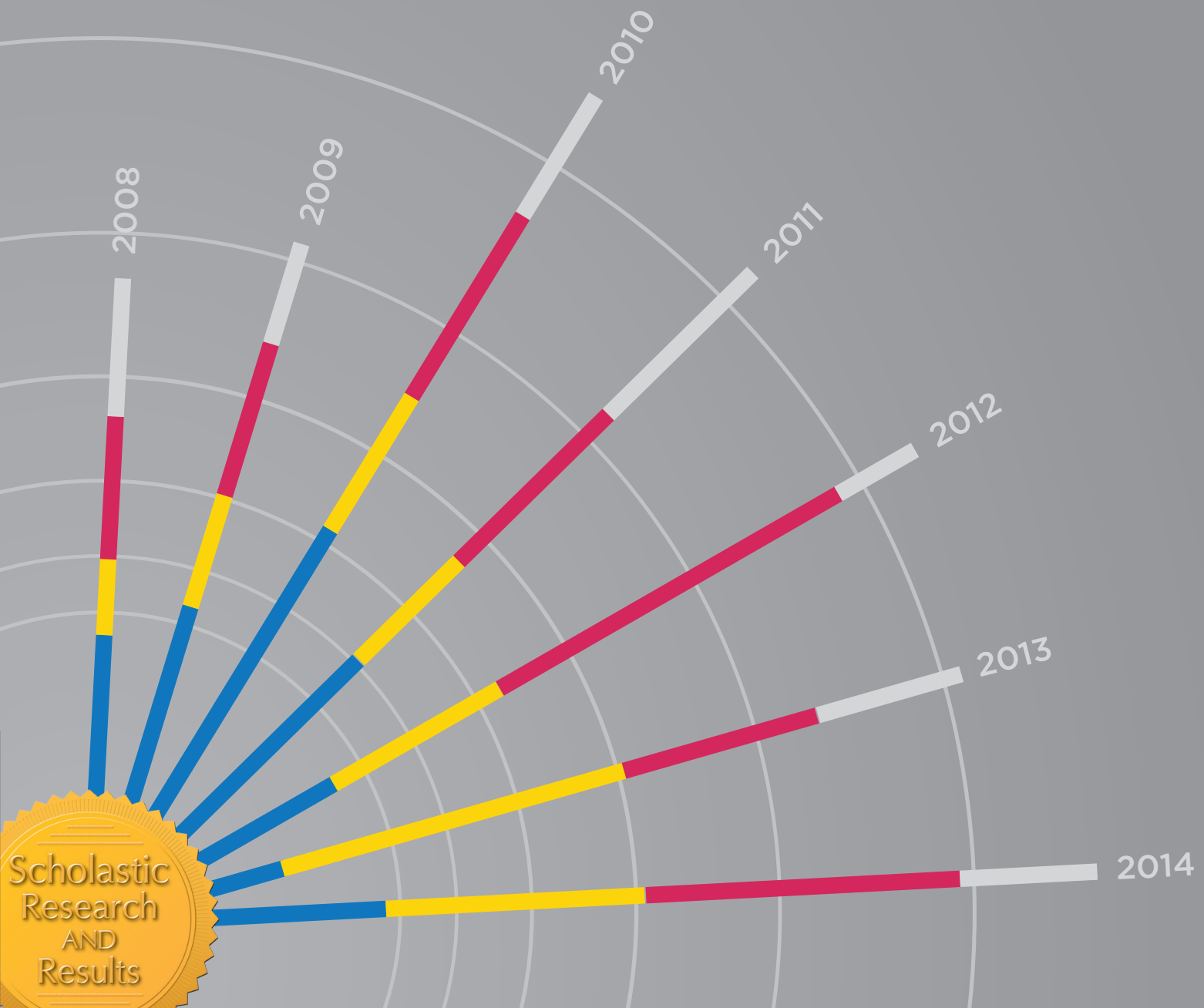
McGraw-Hill My Math

MA14 M 03812

SCHOLASTIC

COMPENDIUM OF

System 44 Research



Dear Educators,

A major impetus of the national push for more rigorous state standards is the continuing decline in the performance of college-bound high school students on college entrance exams. Because this decline has been tied to a progressive simplification of school reading materials over the years, a central goal of rigorous standards initiatives, such as the Common Core State Standards (CCSS) initiative, is that of increasing the levels of text complexity that students must read. For too many students, however, the ability to comprehend texts to the level of complexity recommended by the new standards is currently out of reach.

There is a great need for all students to develop the capacity to read, comprehend, and respond to more complex texts—the sorts of texts they will face in college, the workplace, and their day-to-day responsibilities and opportunities beyond high school. Their lives depend on it. By raising the bar, rigorous standards force us to re-examine expectations and lessons to which we have become accustomed. They force us to ask what else we can and should do to better assist our students. This is the challenge before us, and it is a critical one.

Toward meeting this challenge, it has been my great pleasure to work with Scholastic in bringing the findings of seminal theory and empirical research to the aid of struggling students as we have revised and expanded *System 44*. *System 44* Next Generation, launched in 2013, focuses on providing explicit instruction in phonics, reading comprehension, and writing for the most challenged readers. It is designed to help these students acquire decoding automaticity alongside the linguistic strengths and metacognitive skills on which their literacy growth depends.

To date, *System 44* has been implemented in thousands of schools across the U.S. The profiles in this book are part of a larger body of evidence indicating that *System 44* Next Generation can improve the learning trajectories of even our most challenged readers. Moving forward, we will continue to build off this positive momentum toward ensuring that the literacy levels of all students are ready for college, career, and life upon high school graduation.

Sincerely,

Dr. Marilyn Jager Adams

SCHOLASTIC

System 44 WORKS

NUMBER OF STUDIES BY STUDENT GROUP*

● Elementary ● Middle School ● High School

Economically Disadvantaged

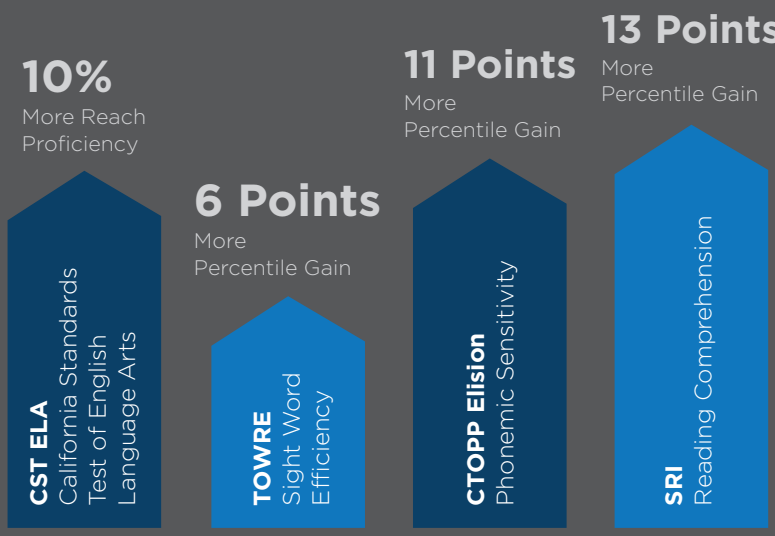
English Language Learners

Ethnicity

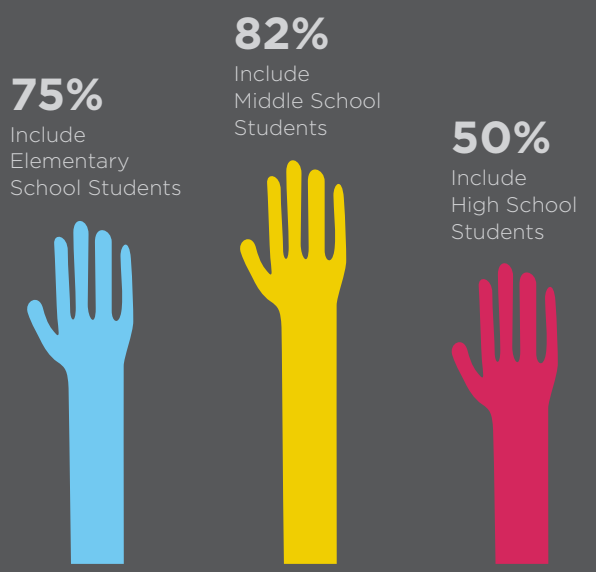
Students With Disabilities

GOLD STANDARD STUDIES

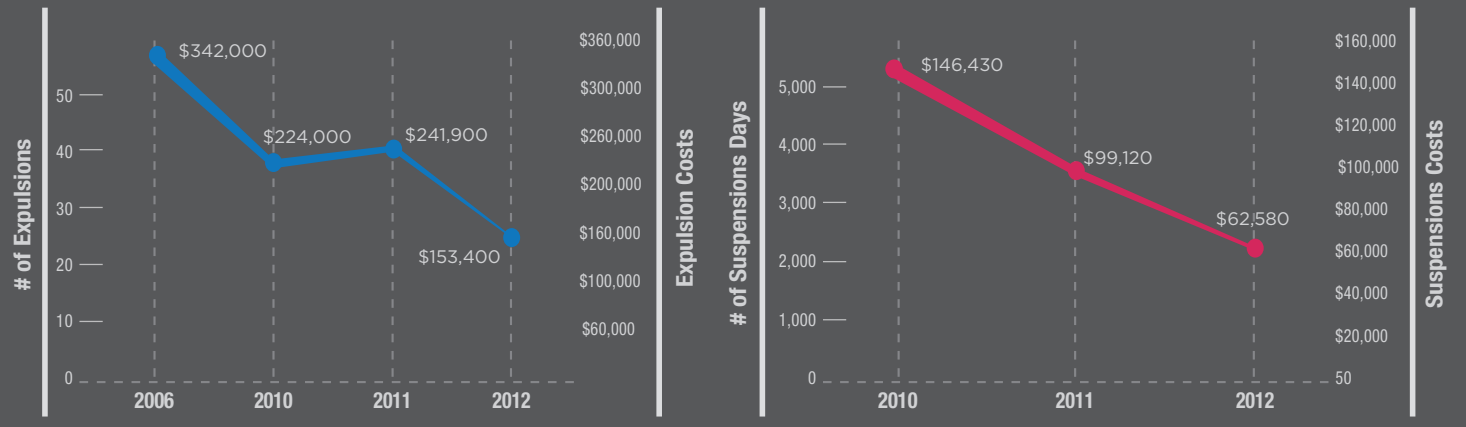
In two Gold Standard studies, *System 44* students show significantly greater gains **over the control** group on numerous standardized reading assessments.



TWENTY-SEVEN STUDIES



RETURN ON INVESTMENT STUDY



System 44 and *Read 180* provide a solid return on investment for Napa Valley Unified School District, CA.

*The infographics on this page only represent the studies included in this compendium. More results can be found online at research.scholastic.com.

TABLE OF CONTENTS

	Page Number	Economically Disadvantaged	English Language Learners	Ethnicity	Implementation	Independent Measure	Specific Learning Disability	Students With Disabilities
A History of Research: *System 44* Timeline	4							
Overview of *System 44* Next Generation	6							
Overview of *Scholastic Reading Inventory* (SRI) and *Scholastic Phonics Inventory* (SPI)	9							
NORTHERN UNITED STATES								
Central Indiana School District, IN	10		●			●	●	●
Lawrence Public Schools, MA	12		●		●	●		
Biddeford School Department, ME	14	●					●	●
Bay City Public Schools, MI	15	●						●
Ann Arbor Public Schools, MI	16			●		●		
Saginaw Public Schools, MI	18	●				●		●
Atlantic City School District, NJ	20	●			●			
Stamford Public Schools, CT	21			●	●			
KIPP NYC, NY	22	●	●			●		●
Patchogue-Medford School District, NY	24				●			
Bethlehem Area School District, PA	26				●			
SOUTHERN UNITED STATES								
Northeastern Public School District, FL	28	●				●	●	
Fayetteville Public Schools, AR	30				●			
Recovery School District, LA	31	●						●
Jefferson Parish Public School System, LA	32	●	●					●
St. James Parish School District, LA	34					●		
Cypress-Fairbanks Independent School District, TX	36							●
Midland Independent School District, TX	38				●	●		●

	Page Number	Economically Disadvantaged	English Language Learners	Ethnicity	Implementation	Independent Measure	Specific Learning Disability	Students With Disabilities
WESTERN UNITED STATES								
Richland School District, WA	40							●
Modesto City Schools, CA	41							●
Murrieta Valley Unified School District, CA	42				●	●		
Napa Valley Unified School District, CA	44					●	●	●
San Juan Unified School District, CA	46		●		●			●
Jefferson County Public Schools, CO	47				●			
David Douglas School District, OR	48	●				●		
MULTI-SITE								
Three Public School Districts: IN, MA, MI English Language Learners	50		●			●		
Three Public School Districts: IN, MA, MI Students With Disabilities	52			●		●		●
APPENDIX								
Assessment Measures	54							
References	56							
Index	57							

Please see the Index for a comprehensive listing of all studies by more categories, including type of assessment, results disaggregated by student group, and research design.

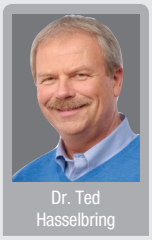
For more resources, visit **research.scholastic.com**.

A HISTORY OF RESEARCH: *System 44*

1985–1996

EARLY RESEARCH

1985–1996


Dr. Ted Hasselbring

Partially funded by a grant from the **U.S. Department of Education's Office of Special Education programs**, research by Dr. Ted Hasselbring of Peabody College, Vanderbilt University, leads to a breakthrough prototype for software that uses individual student performance data to differentiate reading instruction.

1994–1996

Dr. Hasselbring joins forces with **Dr. Janet Allen of the University of Central Florida** and Florida's Orange County public school system to create the Orange County Literacy Project for its lowest-performing students. The project's instructional model, rooted in research-proven literacy practices, becomes the basis of the *READ 180* Instructional Model.

1997–1999

FIELD TESTING

1997

Scholastic enters into collaboration with Vanderbilt University to replicate the best practices of their research in a published program. *READ 180* **adopts the Lexile® Framework for Reading developed by Dr. Jack Stenner of MetaMetrics, Inc.**, as its leveling system. The framework provides a common metric for measuring text difficulty and student reading level.

1998–1999

Council of the Great City Schools pilots *READ 180* in some of its largest urban schools and enters into a research partnership to study the efficacy of the program.

Scholastic publishes *READ 180*, which is immediately implemented in hundreds of schools nationwide.

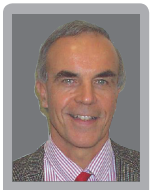
2003–2006

VALIDATION AND IMPLEMENTATION

2003

Dr. Sally Shaywitz came out with the breakthrough book ***Overcoming Dyslexia***, where she states that the most successful programs for students with dyslexia emphasize the same core elements: practice manipulating phonemes, building vocabulary, increasing comprehension, and improving the fluency of reading, and cites *READ 180* as a suitable intervention.

2004–2005


Dr. Kevin Feldman

READ 180 aligns with all 15 structural and instructional recommendations contained in the report ***Reading Next: A Vision for Action and Research in Middle and High School Literacy*** (Biancarosa & Snow, 2004).

Through continued collaboration with **Dr. Ted Hasselbring** and a new partnership with **Dr. Kevin Feldman** and **Dr. Kate Kinsella**, Scholastic launches *READ 180* Enterprise Edition.

- Structured engagement routines are added to ensure full participation by ALL learners, including English learners.
- **In addition to Spanish**, second language support in four new languages is added: **Vietnamese, Hmong, Cantonese, and Haitian Creole**.
- The Scholastic Achievement Manager (SAM) is introduced.

System 44 is reviewed by the Center for Applied Special Technologies (CAST) to ensure maximum access to an inclusive and effective learning environment for all learners, including students with disabilities.

2006

The Alliance for Excellent Education and the Carnegie Corporation publish **Writing Next**, outlining best practices in writing for older, struggling readers. *READ 180* writing instruction aligns with all recommendations.

Dr. Bill Daggett and the **International Center for Leadership in Education** (ICLE) champion *READ 180* as the reading intervention program that most closely aligns with the center's recommendations on secondary school reform.

2006–2014

CONTINUED AND SUSTAINED IMPROVEMENT BASED ON BEST PRACTICES

2006–2007

The **Florida Center for Reading Research** (FCRR) completes an independent and thorough review of *READ 180* Enterprise Edition at the request of Florida districts and documents **multiple strengths and no weaknesses**.

The **Council of Administrators of Special Education** (CASE) endorses *READ 180* for use with special education students. *READ 180* was endorsed again in 2012.

2007–2008

Dr. Marilyn Jager Adams

Dr. Marilyn Jager Adams, author of *Learning to Read*, leads the development of ***System 44***, a breakthrough foundational system combining the very best thinking on **research-based phonemic awareness and phonics instruction** for older students with the power of state-of-the-art adaptive technology.

Dr. Kate Kinsella

Dr. Kate Kinsella, co-author of the *READ 180 rBook*, creates the ***LBook***. Tested in classrooms throughout California by Dr. Kinsella, **the *LBook* provides explicit**

Timeline

systematic instruction for English learners who may be at differing levels of English proficiency.

READ 180 is evaluated in the July–September 2008 issue of **Reading Research Quarterly** in an article titled "Effective Reading Programs for Middle and High Schools: A Best Evidence Synthesis," by Slavin, Cheung, Groff, and Lake (2008) of the Center for Data-Driven Reform at Johns Hopkins University. **The meta-analysis provides a positive assessment of *READ 180* showing more evidence of effectiveness than the other 121 programs considered in the review.** These results are also summarized on the **Best Evidence Encyclopedia** website (www.bestevidence.org) where *READ 180* is cited as **Top Rated Program** for Middle/High School having Moderate Evidence of Effectiveness.

Dr. Julie Washington

Dr. Julie Washington, a leading authority on **articulation and standard classroom English**, builds instructional support for students who speak a community dialect and struggle with academic English.

2008

Scholastic launches *System 44* implemented in almost 2,800 classrooms within the first six months as a Tier III solution.

2009

The ***Journal of Research on Educational Effectiveness*** publishes a Gold-Standard (randomized controlled trial) study of adolescent reading interventions done by the Florida Center for Reading Research (FCRR) and Florida State University that reveals significant gains with *READ 180* (Lang, Torgesen, Vogel, Chanter, Lefsky, & Petscher, 2009).

A review by the federal **What Works Clearinghouse (WWC)** concludes that the extent of evidence for *READ 180* is "medium to large for comprehension and medium to large for general literacy achievement."

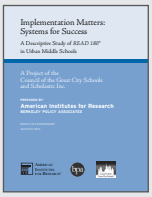
Sholastic Phonics Inventory (SPI), the universal screener aligned with *System 44*, meets the stringent criteria for review by the **National Center on Response to Intervention (RTI).**

2009–2010

Scholastic Research & Development continues to develop new *READ 180* components to add more rigorous reading and to prepare students for college and careers including *READ 180* Stretch, Xtra Advance, and the Real Jobs Library.

2010

The initiative for Common Core State Standards publishes standards that provide a consistent, clear understanding of what students are expected to know and be able to do.



Scholastic, the Council of the Great City Schools, and the American Institutes for Research release ***Implementation Matters: Systems for Success*** (Salinger, Moorthy, Toplitz, Jones, & Rosenthal, 2010). *Implementation Matters* outlines district-wide conditions that sustain on-model implementation of *READ 180* in urban school districts.

2011

US DOE funded Striving Readers program results show that *READ 180* significantly increased reading achievement for struggling students in several school districts across the country.

A US DOE funded evaluation of *READ 180* published in **Educational Evaluation and Policy Analysis** found that students who used *READ 180* after school outperformed the control group on measures of reading comprehension and vocabulary (Kim, Capotosto, Hartry, & Fitzgerald, 2011).

Scholastic launches *READ 180* Next Generation, providing teachers and leadership more visibility into implementation and performance metrics.

The Council of Administrators of Special Education (CASE) endorses *System 44* and re-endorses *READ 180* Next Generation for use with Special Education students.

2012

A review by the **National Center on Intensive Intervention** (NCII) concluded that the extent of evidence ranged from "partially convincing to convincing," demonstrating that *READ 180* is effective as an RTI model.

2013

A Gold Standard study out of Saginaw, MI, reveals that *System 44* has significant effects for students with learning disabilities. **A review of the study by NCII rated its validity highly**, thus establishing that the findings convincingly add to the body of evidence on the efficacy of *System 44* as a literacy intervention for the most challenged readers.

Scholastic launches ***READ 180* Next Generation, on the iPad**. *READ 180* Next Generation was built to meet new heightened standards and includes more rigor throughout, new grade-level text, new text-dependent questions, more nonfiction, new performance-based assessments, and a new Writing Zone.

Scholastic launches *System 44* Next Generation, the proven foundational reading program designed to get the most struggling readers on the path to meeting rigorous new standards. To support students in this, *System 44* Next Generation includes explicit instruction in reading complex text and evidence-based writing.

OVERVIEW *System 44* Next Generation

Students are currently learning to read and write in a time of rapid societal change and continuous education reform. The enactment of the Common Core State Standards (CCSS) reflects a pivotal moment in education history as all states push for more rigorous educational standards.

In response, heightened standards have been created in states across the nation in recognition that we need to do more to advance the reading achievement of our students. Many of the new standards clearly communicate expectations for all students in English Language Arts & Literacy (ELA) and Mathematics at each grade level from Kindergarten through 12th grade—with the goal of preparing all students for college and career.

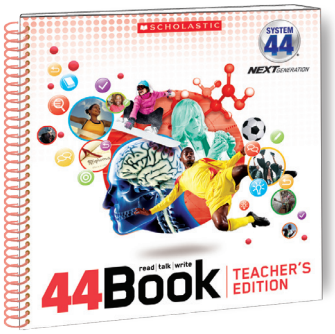
With *System 44* Next Generation, our most challenged readers and their teachers have everything they need to prepare for the CCSS and more rigorous state standards. The goal of *System 44* Next Generation is to ensure that each student masters the system of 44 sounds and 26 letters that constitute the English language, allowing them to become fluent and confident readers. Two of the most authoritative and comprehensive reading research summaries—the National Reading Panel report (NRP, 2000) and Preventing Reading Difficulties in Young Children (Committee on the Prevention of Reading Difficulties in Young Children, the Commission on Behavioral and Social Sciences and Education, and the National Research Council, 1998)—both found convincing and substantial evidence that explicit instruction in the foundational literacy skills of phonemic awareness, phonics, vocabulary, fluency, and comprehension is consistently more effective than instruction that does not contain these components (Torgesen, 2002). In addition, *System 44* Next Generation provides students with access to increasingly more complex texts with supports for comprehension, practice with responding to rigorous text-dependent questions, and multiple opportunities for evidence-based writing. These instructional elements help prepare students for the level of academic rigor that the heightened standards require.

Comprehensive Instruction in *System 44* Next Generation builds on the successful, research-driven practices of Enterprise Edition, blending daily opportunities for teacher-facilitated instruction, personalized technology, and independent reading, while new components outlined below have been designed explicitly to help educators meet the rising demands of the CCSS and more rigorous state standards.

The *System 44* Next Generation Student Software has been enhanced to deliver an even more comprehensive personalized learning path, with new features including:

- A new Dictation activity that provides students with the opportunity to apply decoding skills while building writing fluency;
- A new Context activity in Success that allows students to demonstrate comprehension of nonfiction text with independence;
- A new Writing Strand that provides students with scaffolded practice in writing summaries tied to content in the Software, helping students build comprehension and writing fluency; and
- An enhanced Student Dashboard that allows students to explore and celebrate individual progress through the program.

The NEW *44Book* Teacher's Edition provides a clear path for daily, explicit instruction in phonics, reading, comprehension, and writing skills. The *44Book* includes:



- Readings of increasing text complexity that cover a broad range of content-area topics, supporting the development of academic vocabulary and knowledge;
- Text-based questioning to build comprehension;
- Stretch Texts designed for read-alouds that expose students to complex, grade-level text;
- Instructional routines such as summarizing and collaborative discussions that accompany each lesson;
- Evidence-based writing instruction that focuses on the skills required by rigorous new state standards—informative and argument—and is scaffolded to move students toward independence;
- Performance-based assessments in the form of short research projects that ask students to synthesize and present their learning, preparing them for Next Generation assessments; and
- A *44Book* for use with *READ 180* Next Generation designed for a seamless integration into a *READ 180* class.

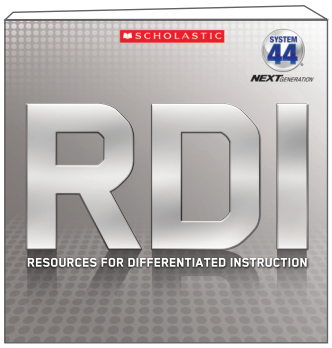
The *System 44* Next Generation Student Library provides students with daily opportunities for modeled and independent reading of high-quality literary and informational text. Each library includes a range of leveled, age-appropriate titles ranging from 100 Lexile measures (L) to 450L, targeting decoding skills and strategies to promote comprehension and build vocabulary and content-area knowledge. The *System 44* Next Generation Library is available in three formats designed to support anytime/anywhere reading: Paperbacks, Audiobooks, and new eBooks. The *System 44* library includes resources that provide scaffolded supports, including Comprehension QuickWrites, Discussion Questions, and *Scholastic Reading Counts!* quizzes for each title.

OVERVIEW *System 44* Next Generation continued

The new Teacher Dashboard increases the capacity of effective teachers. The Teacher Dashboard provides teachers with comprehensive supports for effective teaching and data-driven instruction, including:

- Data snapshots that provide at-a-glance views of implementation and performance data and allow teachers to drive differentiated instruction;
- The Groupinator™ which aggregates student performance data and applies it to a proprietary algorithm, generating groups that are data-driven and 100% automated;
- Embedded Professional Development resources such as on-demand video;
- Access to the Interactive Teaching System (ITS);
- The new Individual Learning Plan (ILP), which gives teachers a snapshot of how students are meeting their academic and behavioral goals; and
- Support for implementing *System 44* Next Generation in a *READ 180* Next Generation classroom.

The *Resources for Differentiated Instruction* (RDI) book is a comprehensive guide that includes a wide array of resources to deliver differentiated instruction. The *RDI* includes a collection of targeted phonics and word analysis lessons, plus instructional routines, aligned to the scope and sequence of phonics instruction. Additionally, the *RDI* book presents research, instructional best practices, and tools for the successful implementation of Multi-Tiered System of Supports (MTSS), including a Positive Behavior Intervention System (PBIS) and Response to Intervention (RTI).



The new Leadership Dashboard provides school and district leaders with transparent visibility into *System 44* implementation metrics, and includes the following:

- Data snapshots to view school- or district-wide performance; and
- Data drill-down into individual school-, class-, and student-level data.

The bilingual *System 44* Next Generation Family Portal, available in English and Spanish, supports the diversity of family members and caregivers invested in the success of *System 44* students. The Family Portal includes a wide variety of information and resources to support phonics instruction at home for all families, including students with disabilities and English language learners.

System 44 Next Generation combines the very best thinking on research-based phonics instruction for older students with the power of state-of-the-art adaptive technology and age-appropriate, supportive fiction, and nonfiction text. The program is brought to life when the student, teacher, technology, and text engage around the highly motivating, instructional content.

OVERVIEW *Scholastic Reading Inventory* (SRI) and *Scholastic Phonics Inventory* (SPI)

***Scholastic Reading Inventory* (SRI)** is a comprehension measure based on the Lexile Framework® for Reading developed by MetaMetrics and now in wide use by schools with students at all levels of proficiency. An SRI Lexile score is often the first indication that a student is a candidate for *System 44*. Scholastic recommends that students who score below 400L on SRI in elementary school or 600L at the secondary level be administered ***Scholastic Phonics Inventory* (SPI)**, which provides a more nuanced assessment of the root cause of reading difficulty and a corresponding prescription for appropriate reading intervention.

SPI was designed to measure fluency for two word-level reading skills: phonological decoding and sight word reading. Phonological decoding fluency is assessed by the speed and accuracy with which pronounceable nonwords are decoded. Sight word fluency is assessed by the speed and accuracy with which high-frequency words are read.

While SPI measures both fluency (i.e., speed and accuracy) and accuracy for sight words and nonwords, fluency is the more critical measure because it frees the reader to attend to comprehension. A fluent response must be accurate as well as sufficiently fast. To get credit for a fluent response to an item, the response has to be accurate and the total response time (latency) cannot exceed the threshold time. Having a score—fluency—that combines accuracy and speed of responding is better than one that is based only on speed or accuracy. With fluency scores, each item contributes to the differentiation of students who have decoding problems from those with adequate decoding. Fluency scores can be reported as raw scores, as well as by percentile rankings.

In the fall of 2010, the screener version of SPI was upgraded to incorporate three alternate forms for screening and progress monitoring purposes. Each form of SPI is administered individually via a personal computer in approximately 10 minutes.

SPI has undergone extensive testing, which provides evidence that SPI Fluency Scores are reliable and valid. Two types of reliability were measured for SPI: 1) internal consistency reliability refers to the degree to which all items in a test measure the same thing; and 2) alternate form reliability refers to the degree to which the different SPI tests are equivalent. In both cases, the magnitude of these results supports both the internal consistency of SPI and the equivalence of the three test forms. The validity analyses indicate that all classification statistics meet the highest standard of acceptability. Content-description (content) validity refers to the examination of the content of the test to determine whether it is a representative sample of the behavior domain that is being assessed.

For further information about criterion-prediction and construct identification validity research, please see the *SPI Technical Manual*, available online at Scholastic.com/system 44.

Table 1: SPI Decoding Status and Placement Recommendations

Levels	Results	Placements Should Include
PRE-DECODER	Student shows no mastery of the alphabetic principle.	**Tier III:** Foundational reading intervention including alphabetic principle and phonemic awareness.
BEGINNING DECODER	Student shows mastery of basic letter recognition, usually consonants.	**Tier III:** Explicit phonics instruction starting with simple consonant-vowel-consonant (CVC) patterns.
DEVELOPING DECODER	Student shows emerging word-building skills with mastery of basic word structures.	**Tier III:** Explicit phonics instruction starting with consonant blends.
ADVANCING DECODER	Student shows adequate mastery of decoding skills.	**Tier II:** Text-based reading with direct support in building vocabulary, reading comprehension, and fluency with connected texts.

CENTRAL INDIANA SCHOOL DISTRICT, IN

AUTHOR: SCHOLASTIC RESEARCH

STUDY PROFILE

Evaluation Period: 2009–2010

Grades: 3–12

Assessment: Test of Word Reading Efficiency (TOWRE), Woodcock-Johnson III (WJ III), *Scholastic Reading Inventory* (SRI), *Scholastic Phonics Inventory* (SPI)

Participants: N=159

Implementation: 50 to 120 minutes daily (Standalone)

Significant improvements in decoding and reading comprehension occur for students with disabilities and English language learners.

OVERVIEW

System 44 was piloted during the 2009–2010 school year in a Central Indiana School District that serves approximately 12,000 students at 13 elementary schools, 10 middle schools, and eight high schools. The district's student population is 71% Caucasian, 10% Hispanic, 9% African American, 5% Asian/Pacific Islander, and 5% multiracial. Thirteen percent are students with disabilities and 11% are limited-English proficient (LEP). Over half (55%) qualify for free or reduced-price lunch.

The district used *System 44* with 159 students in one elementary school, one sixth-grade academy, one middle school (Grades 7–8), and one high school. *System 44* was implemented in the district using a standalone model, for 50 to 120 minutes each day. Students were selected to participate in the intervention program if they scored below 400 Lexile (L) measures on *Scholastic Reading Inventory* (SRI) and exhibited poor word-reading skills on *Scholastic Phonics Inventory* (SPI).

During several years prior, the school district experienced an influx of Burmese refugees. Over half of the struggling readers placed in *System 44* were identified as Pacific Islander, another 18% were Caucasian, 12% were Hispanic, and 8% were African American. Nearly three-quarters (73%) of the *System 44* sample was classified as LEP, 96% were eligible for free or reduced-price lunch, and 57% were male. Approximately one-third (31%) of the *System 44* students were students with disabilities, with the most common classification being specific learning disability.

RESULTS

SPI, SRI, the Test of Word Reading Efficiency (TOWRE), and the Woodcock-Johnson III (WJ III) were administered to all *System 44* students in the fall of 2009 and spring of 2010. Results demonstrated that the central Indiana *System 44* students improved in word-reading skills, as measured by SPI. In spring 2010, after participation in *System 44*, over two-thirds (69%) of students scored at the Developing Decoder performance level or above as compared to 45% in fall 2009 (Graph 1). Improvement in SPI word-reading Fluency was evident at all school levels with elementary school students achieving the largest average gains in Total Fluency (Graph 2).

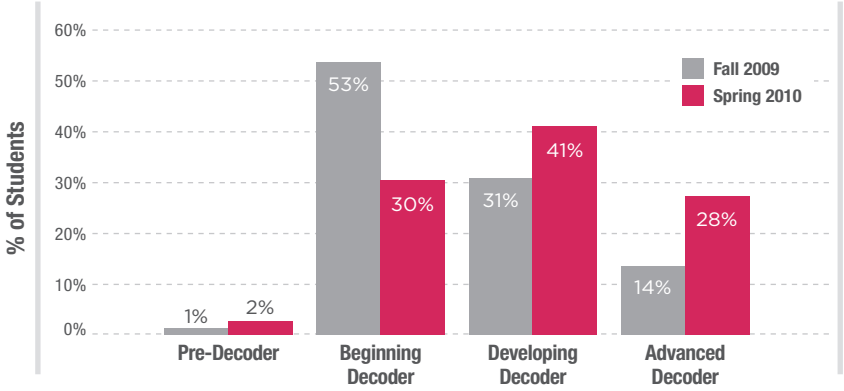
System 44 students also exhibited improvement in reading comprehension skills, as measured by SRI. Overall, the sample of students improved from an average of 112L to 220L over the year, a statistically significant gain of 107L (t=9.79, p=.00). Disaggregated results showed that LEP students and students with disabilities demonstrated significant growth on SRI from fall to spring, averaging gains of 112L (t=9.11, p=.00) and 94L (t=4.41, p=.00), respectively.

Results from the WJ III revealed significant improvements in foundational reading skills. On average, *System 44* students exhibited a statistically significant gain of 5 points (t=6.06; p=.00) on the WJ III. Furthermore, students with disabilities averaged a statistically significant gain of 3 points on the WJ III Basic Reading Skills (BRS), and LEP students averaged a significant gain of 6 points (Table 1).

On the TOWRE, *System 44* students averaged a significant overall gain of 2 points in Total Word Reading Efficiency (t=2.06, p=.00). High school students evidenced a significant average gain of 4 points on the same measure (t=4.05, p=.00). Elementary school, middle school, students with disabilities, and LEP students also demonstrated gains on the TOWRE, though not statistically significant.

GRAPH 1

Central Indiana School District *System 44* Students, Grades 3–12 (N=159)
Performance on SPI by Decoding Status, 2009–2010



Note. The increase in the percentage of students performing at the Developing Decoder or Advanced Decoder level was statistically significant (t=5.67, p=.00).

Northern United States

TABLE 1

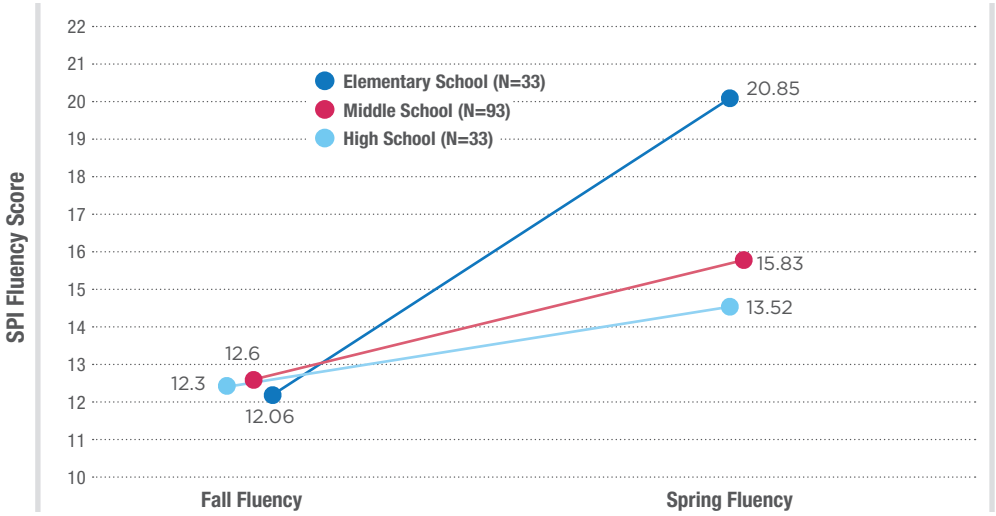
Central Indiana School District *System 44* Students, Grades 3–12 (N=159)
Performance on WJ III by Student Group, 2009–2010

Student Group	N	WJ III Basic Reading Skills Cluster		
		Mean Fall Standard Score (percentile)	Mean Spring Standard Score (percentile)	Mean Change in Standard Score
Limited-English Proficient	116	74 (4th)	80 (9th)	6
Students With Disabilities	49	64 (1st)	68 (2nd)	3

Note. WJ III Basic Reading Skills Cluster gains were statistically significant for limited-English-proficient students (t=5.35, p=.00) and students with disabilities (t=3.62, p=.01).

GRAPH 2

Central Indiana School District *System 44* Students, Grades 3–12 (N=159)
SPI Total Fluency Growth by School Level, 2009–2010



Note. The gains in Fluency score were significant for elementary (t=7.31, p=.00) and middle (t=5.07, p=.00) school students.

LAWRENCE PUBLIC SCHOOLS, MA

AUTHOR: SCHOLASTIC RESEARCH

STUDY PROFILE

Evaluation Period: 2009–2010

Grades: 5–10

Assessment: Woodcock-Johnson III (WJ III), Test of Word Reading Efficiency (TOWRE), *Scholastic Phonics Inventory* (SPI)

Participants: N=52

Implementation: 50 to 60 minutes daily (Standalone)

Native Spanish-speaking students improve word-reading skills on multiple measures.

OVERVIEW

Located in northeastern Massachusetts, Lawrence Public Schools (LPS) serves approximately 12,000 students at 13 elementary schools, 10 middle schools, and eight high schools. The district's student population is predominantly Hispanic (89%), with smaller percentages of Caucasian (6%), Asian (2%), African American (2%), and multi-ethnic students (1%). Eighty-seven percent of students are from low-income backgrounds and 80% speak Spanish as a first language. Twenty-two percent of students are English language learners (ELL) and 20% are students with disabilities.

In the fall of 2009, LPS piloted *System 44* with 52 students in two middle schools and two high schools. Students were selected to participate based on a number of criteria, including performing poorly on the Massachusetts Comprehensive Assessment System (MCAS), scoring below 400 Lexile (L) measures on *Scholastic Reading Inventory,* and exhibiting difficulty with word-reading skills on *Scholastic Phonics Inventory* (SPI). Of these 52 *System 44* students, 90% were Hispanic, 96% spoke Spanish as a first language, and more than half (58%) were classified as limited-English proficient (LEP). The majority (73%) were male, just under half (48%) were students with disabilities, and 92% received free or reduced-price lunch.

A 60-minute standalone version of *System 44* was implemented across schools five days a week, with the exception of one high school classroom that implemented the program for 50 minutes every day.

RESULTS

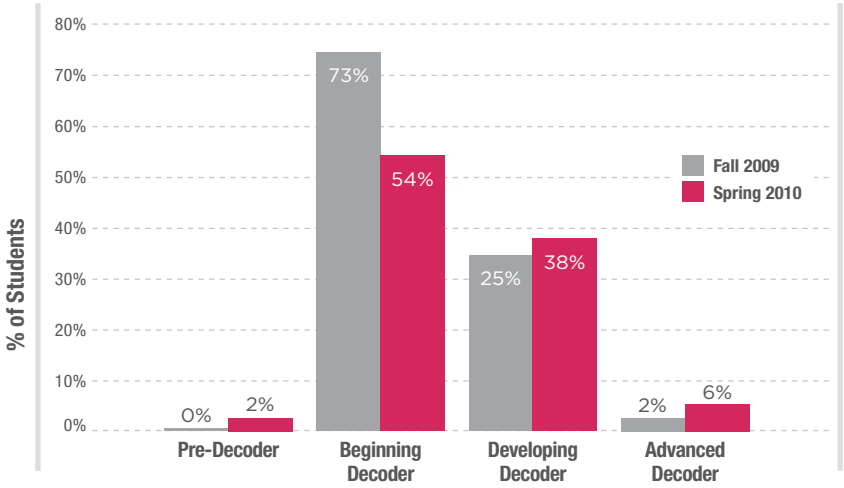
SPI, the Test of Word Reading Efficiency (TOWRE), and Woodcock-Johnson III (WJ III) were administered to all *System 44* students in the fall of 2009 and spring of 2010. Results demonstrated that these students made significant improvements in word-reading skills, as measured by SPI. In fall 2009, prior to the implementation of *System 44*, only 27% of LPS *System 44* students placed at the Developing Decoder or Advanced Decoder performance levels on SPI (the highest two levels). By the spring 2010 SPI administration, 44% of students did so, resulting in a significant increase. Conversely, the percentage of students scoring in the Pre-Decoder or Beginning Decoder performance levels (the lowest two levels) decreased from 73% in fall 2009 to 56% in spring 2010 (Graph 1).

LPS *System 44* students also exhibited improvements in their word-reading skills as measured by the TOWRE. As Table 1 shows, these students demonstrated statistically significant gains, improving by an average of 3 standard score points on Total Word Reading Efficiency, 3 standard score points on Sight Word Efficiency (the subtest which requires students to recognize familiar words), and 2 standard score points on Phonetic Decoding Efficiency (the subtest which measures students' ability to sound out nonwords). *System 44* students demonstrated similarly positive growth on the WJ III (Table 1). On average, students exhibited statistically significant gains of 9 standard score points on Word Attack (subtest measuring proficiency in applying phonics and structural analysis skills to the pronunciation of unfamiliar printed words), 10 standard score points on Letter-Word identification (subtest measuring letter and word identification skills), and 10 standard score points overall in Basic Reading Skills (BRS).

Results also indicated that students spending more time on the *System 44* software exhibited greater improvement on the word-reading measures. On SPI, the percentage of students improving at least one decoding level was nearly twice as high among students who spent 20 or more hours on the software than among students who spent less than 20 hours on the software (32% versus 17%, respectively). Similarly, students completing 20 or more hours on the software averaged significantly greater gains on the Letter- Word Identification subtest of the WJ III (gains of 15 points versus 7 points, respectively) and the Total Word Reading Efficiency subtest of the TOWRE (5 points versus 2 points, respectively).

GRAPH 1

Lawrence Public Schools *System 44* Students, Grades 5–10 (N=52)
Performance on SPI by Decoding Status, 2009–2010



Note. The increase in the percentage of students performing at the Developing Decoder or Advanced Decoder level was statistically significant (t=2.63, p=.00).

Northern United States

TABLE 1

Lawrence Public Schools *System 44* Students, Grades 5–10 (N=52)
Performance on WJ III and TOWRE, 2009–2010

Test	Mean Fall Standard Score (percentile)	Mean Spring Standard Score (percentile)	Mean Change in Standard Score
TOWRE Total Word Reading Efficiency	65 (1st)	68 (2nd)	3
TOWRE Sight Word Efficiency	69 (2nd)	71 (3rd)	3
TOWRE Phonetic Decoding Efficiency	73 (4th)	75 (5th)	2
WJ III Word Attack	74 (4th)	83 (13th)	9
WJ III Letter Word ID	61 (<1)	71 (3rd)	10
WJ III Basic Reading Skills Cluster	64 (1st)	74 (5th)	10

Note. The fall-to-spring gains were statistically significant for TOWRE Total Reading Efficiency (t=4.04, p=.00); TOWRE Sight Word Efficiency (t=3.40, p=.00); TOWRE Phonetic Decoding Efficiency (t=3.24, p=.00); WJ III Word Attack (t=7.25, p=.00); WJ III Letter Word Identification (t=6.06, p=.00); WJ III Basic Reading Skills (t=7.50, p=.00). All numbers in the table are rounded to the nearest integer.

TABLE 2

Lawrence Public Schools *System 44* Students, Grades 5–10 (N=52)
Performance on WJ III and TOWRE by Software Usage, 2009–2010

Measure	Less Than 20 Hours on the Software (n=30)	20 Hours or More on the Software (n=30)
WJ III Letter-Word ID Gain	7	15
TOWRE Total Reading Efficiency Gain	2	5

Note. Measures for which there is a statistically significant relationship between gains and software time: WJ III Letter-Word Identification (F=4.87, p=.03) and TOWRE Total Reading Efficiency (F=5.16, p=.03).

BIDDEFORD SCHOOL DEPARTMENT, ME

AUTHOR: SCHOLASTIC RESEARCH

STUDY PROFILE

Evaluation Period: 2009–2010
Grades: 4–8
Assessment: *Scholastic Reading Inventory* (SRI)
Participants: N=36
Implementation: 45 to 90 minutes daily (Standalone)

▶*System 44* boosts reading achievement for students with disabilities.

OVERVIEW

Located in southeastern Maine, Biddeford School Department (BSD) enrolls approximately 2,700 students in Grades PreK–12. The district's student body is predominantly Caucasian (93%), with the remainder of the student population identified as 2% African American, 2% Hispanic, and 2% Asian/Pacific Islander. Just under half (43%) of all students qualify to receive free or reduced-price lunch.

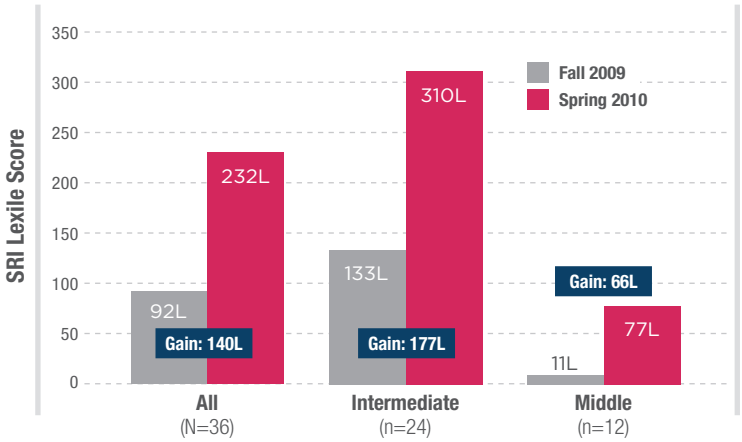
Long interested in improving academic outcomes for their most struggling readers, BSD piloted *System 44* during the 2009–2010 school year with students in the district's Intermediate School (Grades 4 and 5) and Middle School (Grades 6, 7, and 8). Students were placed into *System 44* based on low performance on the New England Common Assessment Program (NECAP), *Scholastic Reading Inventory* (SRI), and *Scholastic Phonics Inventory* (SPI). Most *System 44* students were students with disabilities, with the majority classified as having specific learning disability, autism, or an emotional disability. All classrooms implemented a *System 44* standalone model during a 45- or 90-minute daily classroom period.

RESULTS

Fall 2009 and spring 2010 SRI Lexile (L) data were analyzed for 36 students in Grades 4–8 who participated in the program during the 2009–2010 school year. Findings indicate that, overall, *System 44* students made significant gains in reading comprehension. As Graph 1 shows, on average, *System 44* students improved their SRI performance from 92L at pretest to 232L at posttest, averaging a significant gain of 140L. Disaggregation of results by school level revealed that intermediate and middle school students demonstrated average gains of 177L and 66L, respectively.

GRAPH 1

Biddeford School Department *System 44* Students, Grades 4–8 (N=36)
Performance on SRI by School Level, 2009–2010



Note. The gain in Lexile was statistically significant for all students (t=4.94, p=.00).

BAY CITY PUBLIC SCHOOLS, MI

AUTHOR: SCHOLASTIC RESEARCH

STUDY PROFILE

Evaluation Period: 2009–2010
Grades: 3–8
Assessment: *Scholastic Reading Inventory* (SRI)
Participants: N=129
Implementation: 45 to 90 minutes daily (Standalone)

Northern United States

Strong literacy achievement for students with disabilities and at-risk youth.

OVERVIEW

Bay City Public Schools (BCPS) serves approximately 9,000 students in Grades K–12. The student population is composed of the following ethnicities: 86% Caucasian, 6% Hispanic, 4% African American, 1% American Indian/Alaskan Native, less than 1% Asian/Pacific Islander, and 2% unspecified. Nearly half (47%) of all students are eligible for free or reduced-price lunch.

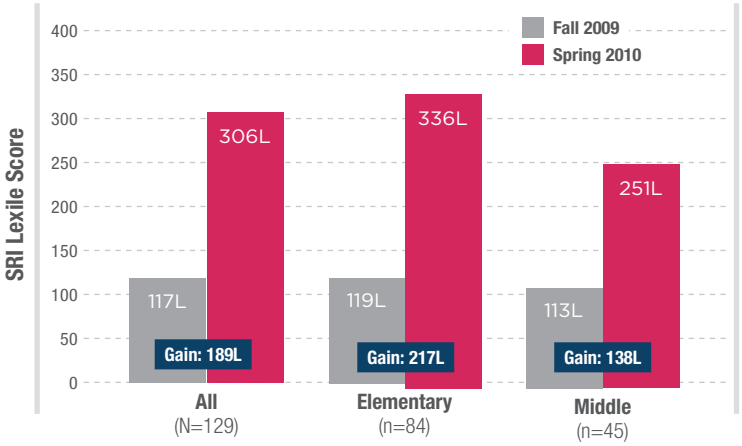
BCPS adopted *System 44* to improve the foundational reading skills of elementary, middle, and high school students performing poorly on the Dynamic Indicators of Basic Early Literacy Skills (DIBELS), *Scholastic Reading Inventory* (SRI), the Michigan Education Assessment Program (MEAP), and oral reading fluency and district benchmark data. BCPS prioritized placing students with disabilities and students who were receiving Title I funds, or who were otherwise designated as being at risk. During the 2009–2010 school year, *System 44* was implemented at seven elementary schools, one middle school, and one high school. The standalone implementation model varied by classroom, and was 45 to 90 minutes per day.

RESULTS

During the 2009–2010 school year, SRI data were collected from 129 students in Grades 3–8. Dependent t-tests revealed that, overall, students demonstrated significant improvement on SRI in Lexile (L) score. On average, students enrolled in *System 44* advanced from 117L in fall 2009 to 306L in spring 2010. The average 189L gain was statistically significant. These improvements were evidenced for both elementary and middle school students. Elementary students in Grades 3–5 gained an average of 217L, and middle school students in Grades 6–8 gained an average of 138L (Graph 1). Due to the success of the program, BCPS expanded the program to an additional middle and high school during the 2010–2011 school year.

GRAPH 1

Bay City Public Schools *System 44* Students, Grades 3–8 (N=129) Performance on SRI by School Level, 2009–2010



Note. The gains in Lexile were statistically significant for all students (t=12.03, p=.00), elementary students (t=10.90, p=.00), and middle school students (t=5.74, p=.00).

ANN ARBOR PUBLIC SCHOOLS, MI

AUTHOR: SCHOLASTIC RESEARCH

STUDY PROFILE

Evaluation Period: 2009–2010

Grades: 3–8

Assessment: Test of Word Reading Efficiency (TOWRE), *Scholastic Reading Inventory* (SRI), *Scholastic Phonics Inventory* (SPI)

Participants: N=118

Implementation: 60 to 90 minutes daily (Standalone)

Students demonstrate significant improvement in word reading and comprehension.

OVERVIEW

Ann Arbor Public Schools (AAPS) serves approximately 16,000 students at 20 elementary schools, five middle schools, six high schools, and one K–8 school. The majority of these students are Caucasian (56%), followed by Asian/Pacific Islander (15%), African American (5%), and Hispanic (5%) with 8% unspecified and less than 1% American Indian or Alaskan Native. Approximately 20% of all students are eligible for free or reduced-price lunch.

During the 2009–2010 school year, AAPS piloted *System 44* in seven elementary schools and three middle schools. Students were selected to participate in *System 44* if they performed poorly on the Michigan Educational Assessment Program (MEAP), scored below 400 Lexile (L) measures on *Scholastic Reading Inventory* (SRI), and exhibited difficulty with word-reading skills on *Scholastic Phonics Inventory* (SPI). Of these participants, 64% were designated as students with disabilities and 20% were English language learners (ELL). In addition, 40% of these participants were African American, 25% were Caucasian, 19% were Hispanic, 12% were multiracial, 2% were Asian, and 4% were not identified.

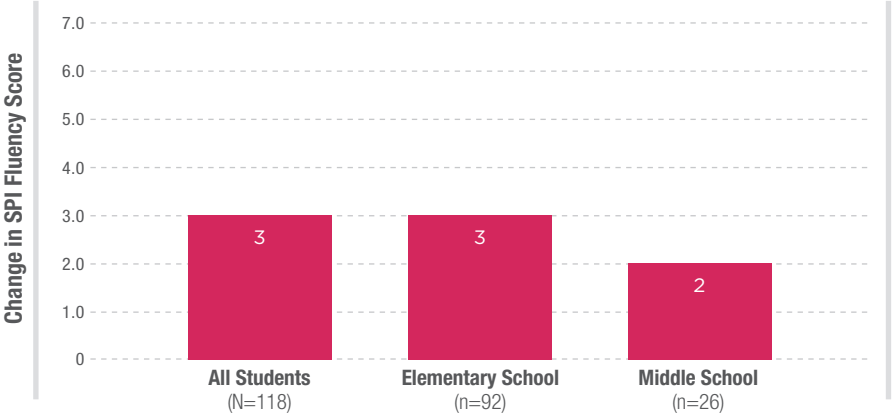
All classrooms implemented a standalone model of *System 44*, with the classroom period varying from 60 to 90 minutes based on school schedule. All classrooms followed a rotational model, including a whole-group introduction in which the teacher led a short warm-up activity to engage students and build phonemic awareness and phonics skills, followed by 20 to 25 minute rotations on the instructional software and in small-group instruction.

RESULTS

SPI, the Test of Word Reading Efficiency (TOWRE), and SRI were administered to all *System 44* students in the fall of 2009 and spring of 2010. As shown in Graph 1, AAPS *System 44* students in Grades 3–8 averaged a significant gain of 3 points in Total Fluency on SPI. On average, the elementary school *System 44* students gained 3 points in Fluency, while the middle school *System 44* students averaged gains of 2 points in Fluency. Consistent with SPI results, *System 44* students evidenced significant gains in word-reading skills on the TOWRE Total Word Reading Efficiency from pretest to posttest. On average, students improved from a standard score of 77 to 81, which corresponds to moving from the 6th to the 10th percentile. Caucasian, Hispanic, African American, and multiracial students averaged significant gains, as well (Table 1). SRI data was also analyzed for the 108 AAPS *System 44* students who had valid pretest and posttest scores. Results demonstrated significant gains in reading comprehension over the 2009–2010 school year. On average, AAPS *System 44* students improved from a pretest score of 84L to a posttest score of 207L, resulting in a statistically significant gain of 123L. Caucasian, Hispanic, African American, and multiracial students averaged significant gains of 153L, 70L, 126L, and 164L, respectively (Graph 2).

GRAPH 1

Ann Arbor Public Schools *System 44* Students, Grades 3–8 (N=118)
SPI Total Fluency by School Level, 2009–2010



Note. Fluency SPI gains were significant for the elementary school sample (Fluency: t=6.32, p=.00), Middle school sample (Fluency: t=2.62, p=.01), and overall sample (Fluency: t=6.83, p=.00).

Northern United States

TABLE 1

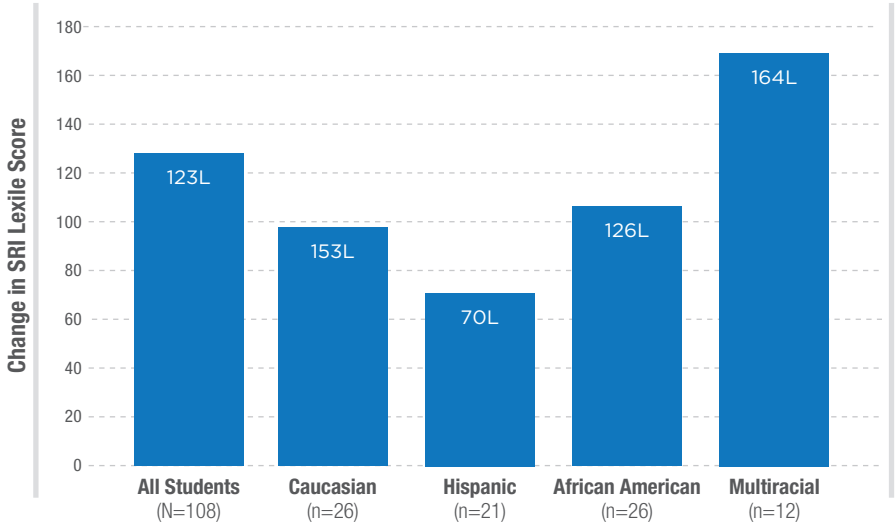
Ann Arbor Public Schools *System 44* Students, Grades 3–8 (N=118)
Performance on TOWRE by Ethnicity, 2009–2010

Subgroup	N	Mean Fall Standard Score (Percentile)	Mean Spring Standard Score (Percentile)	TOWRE Gain
Caucasian	30	76 (5th)	79 (8th)	3
Hispanic	22	82 (12th)	85 (16th)	3
African American	47	75 (5th)	79 (8th)	4
Multiracial	14	75 (5th)	80 (9th)	5
All	**113**	**77** (6th)	**81** (10th)	**4**

Note. TOWRE Total Word Reading Efficiency gains were statistically significant overall (t=6.26, p=.00), for Caucasians (t=2.56, p=.02), Hispanics (t=3.55, p=0.00), African Americans (t=3.99, p=.00), and for multiracial students (t=2.17, p=.05). Values in table are rounded to the nearest integer.

GRAPH 2

Ann Arbor Public Schools *System 44* Students, Grades 3–8 (N=108)
Performance on SRI by Ethnicity, 2009–2010



Note. Asian students (N=2) and Other Race students (N=3) were not included in the above graph. SRI Lexile gains were significant overall (t=8.02, p=.00) for Caucasians (t=4.42, p=.00), Hispanics (t=3.71, p=.00), African Americans (t=5.18, p=.00), and for multiracial students (t=2.56, p=.00).

SAGINAW PUBLIC SCHOOLS, MI

AUTHOR: RMC RESEARCH

STUDY PROFILE

Evaluation Period: 2011–2012

Grades: 4–8

Assessment: Comprehensive Test of Phonological Processing (CTOPP) Elision subtest, Test of Word Reading Efficiency (TOWRE) Sight Word Efficiency and Phonetic Decoding Efficiency subtests, Test of Silent Reading Efficiency and Comprehension (TOSREC), *Scholastic Reading Inventory* (SRI), *Scholastic Phonics Inventory* (SPI)

Participants: N=317

Implementation: 60 minutes daily (Standalone)

Gold standard study reveals *System 44* students outperform comparison group on measures of word reading fluency and comprehension.

OVERVIEW

Saginaw Public Schools (SPS) enrolls approximately 9,000 students in Grades PreK through 12. The majority of students in SPS are African American (65%), 20% are Caucasian, 13% are Hispanic, 1% are Asian/Pacific Islander, and less than 1% are American Indian/Alaskan Native. Eighty-one percent of students are eligible for free or reduced-price lunch.

During the 2011–2012 school year, students from 12 elementary schools and four middle and K–8 schools in SPS were selected to participate in a randomized controlled trial study led by a third party research firm, RMC Research. In order to be eligible to participate, students had to meet the following three criteria: 1) perform below the 50th percentile on the Michigan Educational Assessment Program (MEAP); 2) score below 600 Lexile (L) measures on *Scholastic Reading Inventory* (SRI); and 3) demonstrate foundational reading deficiencies (Beginning or Developing Decoder) on *Scholastic Phonics Inventory* (SPI). Eligible students who were placed into the *System 44* classrooms at SPS during the 2011–2012 school year were expected to receive 60 minutes of *System 44* instruction daily.

RESULTS

Implementation Results

Overall, teachers expected *System 44* to be more effective than their prior year's program in the five foundational literacy skills listed above (phonemic awareness, phonics, vocabulary, fluency, and comprehension). These expectations were realized in phonemic awareness, phonics, vocabulary, and fluency according to Spring 2012 ratings of *System 44* effectiveness. The differences between the perceived effectiveness of the prior program and the *System 44* program, with respect to teaching phonemic awareness and phonics, were statistically significant.

Impact Results Overall

System 44 students performed significantly better than control group students on two of the individual standardized tests of word-level reading: CTOPP Elision (effect size of .27) and TOWRE Sight Word Efficiency (effect size of .16). This represents percentile gains of 11 points and 6 points, respectively. SPI and SRI outcomes also showed positive gains for the *System 44* students over the control group students. The impact was significant on SRI (effect size of .32). This represents a percentile gain of 13 points (Graph 1).

Impact Results for Students With Disabilities

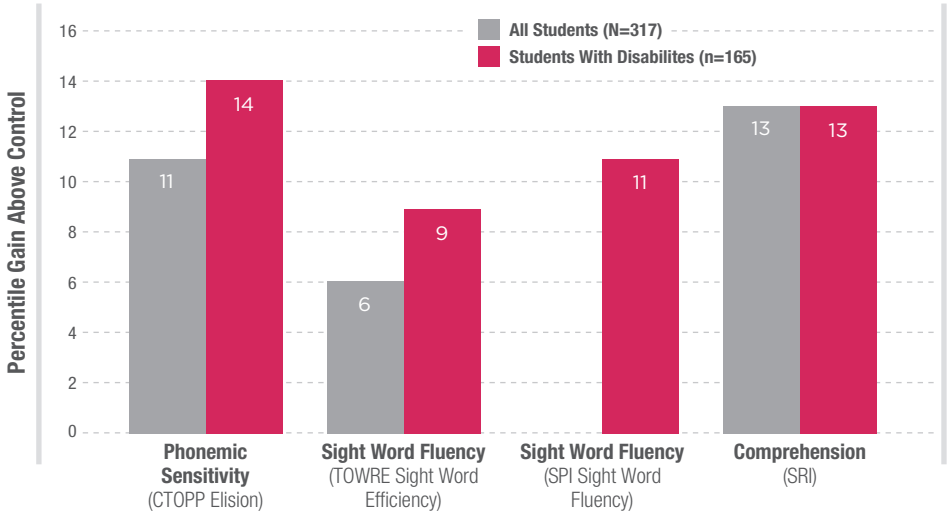
Main effects for disability were revealed. The positive impact for students with disabilities was significantly larger than for the students overall on the CTOPP Elision (effect size of .36) and TOWRE Sight Word Efficiency (effect size of .24). This represents percentile gains of 14 points and 9 points, respectively. The positive impact was also significantly larger on SPI Sight Word Fluency (effect size of .28). This represents a percentile gain of 11 points. In addition, the impact was significant on SRI (effect size of .34). This represents a percentile gain of 13 points (Graph 1).

Impact Results for Middle School Students

The *System 44* middle school students performed significantly better than the control group students on three of the individual standardized tests of word-level reading: CTOPP Elision (effect size of .30), TOWRE Sight Word Efficiency (effect size of .24), and TOSREC (effect size of .20). This represents percentile gains of 12 points, 9 points, and 8 points, respectively. When disaggregated by students with disabilities, the significance held for the CTOPP Elision (effect size of .12) (Graph 2). The impact was significantly greater for the *System 44* middle school students than the control group middle school students on SRI (effect size of .49). This represents percentile gains of 18 points, 22 points, and 19 points, respectively. When disaggregated by students with disabilities, the significance held for SRI (effect size of .31) and SPI Sight Word Fluency (effect size of .28). This represents percentile gains of 12 points and 11 points, respectively.

GRAPH 1

Saginaw Public Schools *System 44* Students, Grades 4-8 (N=317)
Performance on Reading Measures, 2011–2012

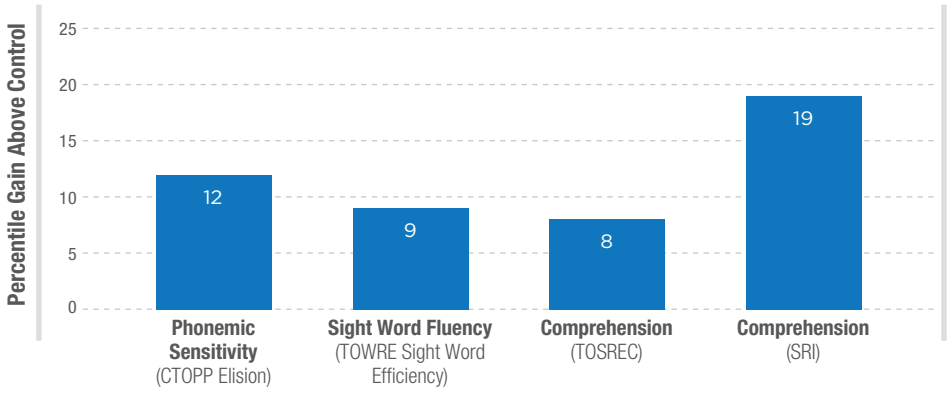


Note. Results shown for measures where significant effects were found.

Northern United States

GRAPH 2

Saginaw Public Schools *System 44* Students, Grades 6–8 (N=145)
Performance on Reading Measures, 2011–2012



Note. Results shown for measures where significant effects were found.

ATLANTIC CITY SCHOOLS, NJ

AUTHOR: SCHOLASTIC RESEARCH

STUDY PROFILE

Evaluation Period: 2009–2010
Grades: 3–7
Assessment: *Scholastic Reading Inventory* (SRI)
Participants: N=36
Implementation: 45 to 60 minutes daily (Standalone)

OVERVIEW

Located in southern New Jersey, the Atlantic City School District (ACSD) enrolls approximately 6,300 students at 11 schools. The district's student population is 40% African American, 37% Hispanic, 13% Asian/Pacific Islander, 9% Caucasian, and less than 1% American Indian/Alaskan Native. Nearly three-quarters (73%) of all students are eligible for free or reduced-price meals.

During the 2009–2010 school year, *System 44* was piloted with students in Grades 3–7 at Sovereign Avenue School. The school principal sought to implement a Tier III intervention program that would provide more phonics instruction for students who were lacking a strong foundation in reading. Students were placed in *System 44* based on a variety of criteria, including scoring in the lowest 30–40% of the New Jersey Assessment of Skills and Knowledge (NJASK), performing poorly on *Scholastic Reading Inventory* (SRI), and exhibiting difficulty with word-reading skills on *Scholastic Phonics Inventory* (SPI). *System 44* was implemented for 45 to 60 minutes daily as a pull-out program for all students.

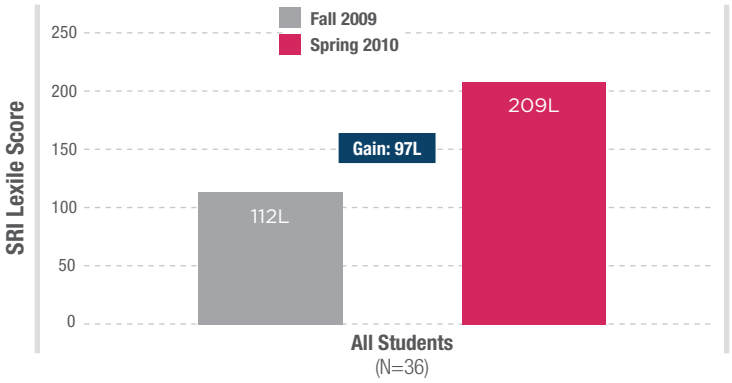
RESULTS

Fall 2009 and spring 2010 SRI Lexile (L) data were collected from 36 *System 44* participants in Grades 3–7. As Graph 1 shows, after one semester of intervention, these students advanced from a pretest score of 112L to a posttest score of 209L, averaging a statistically significant gain of 97L and surpassing annual grade-level growth expectations for middle school. Further analysis showed that students who completed more than 40 topics on the Software averaged higher gains than those who completed fewer topics on the SRI (169L vs. 62L) (Graph 2).

Students show significant growth on SRI after one semester of *System 44*.

GRAPH 1

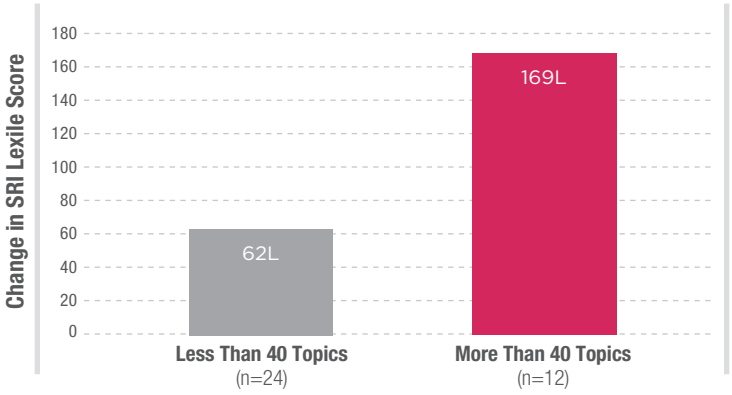
Atlantic City School District *System 44* Students, Grades 3–7 (N=36)
Performance on SRI, 2009–2010



Note. The gain in Lexile was statistically significant (t=5.26, p=.00).

GRAPH 2

Atlantic City School District *System 44* Students, Grades 3-7 (N=36)
Change in SRI Lexile Score as a Function of Software Usage, 2009–2010



Note. The gain in Lexile was significantly higher for students who completed more than 40 topics on the *System 44* software (F=9.27, p=.00).

JULIA A. STARK SCHOOL, STAMFORD PUBLIC SCHOOLS, CT

AUTHOR: SCHOLASTIC RESEARCH

STUDY PROFILE

Evaluation Period: Winter to Spring 2010
Grades: 4–5
Assessment: *Scholastic Reading Inventory* (SRI)
Participants: N=39
Implementation: 45 to 60 minutes daily (Standalone or Integrated with *READ 180*)

Accelerated reading growth on SRI after one semester of *System 44*.

Northern United States

OVERVIEW

Julia A. Stark School, in the Stamford Public Schools (SPS) district, is situated in southeastern Connecticut. SPS enrolls approximately 15,500 students in Grades PreK–12. The district's student body is predominantly Caucasian (40%), while most of the remaining students are Hispanic (32%), African American (21%), Asian/Pacific Islander (7%), and American Indian/ Alaskan Native (less than 1%). Approximately 43% of all SPS students are eligible for free and reduced-price lunch.

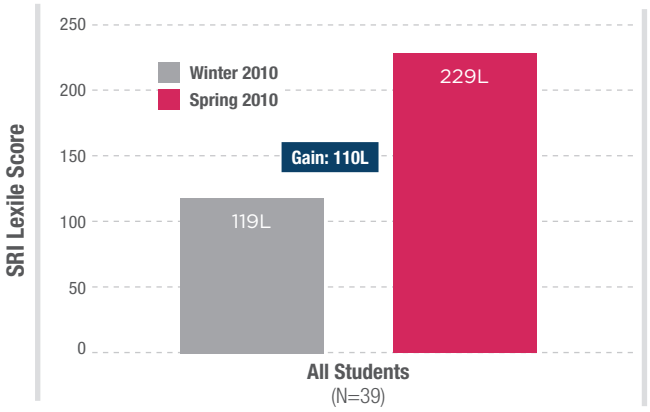
From February to June 2010, 39 SPS students in Grades 4 and 5 at Julia A. Stark School were identified for placement into *System 44*. Students were selected for inclusion in the program based on low performance on *Scholastic Reading Inventory* (SRI) and *Scholastic Phonics Inventory* (SPI). *System 44* was implemented during a 45- or 60-minute reading block. During that time, *System 44* was used as a standalone program or integrated into an existing *READ 180* program. In all classrooms, students were expected to use the *System 44* software for 20 minutes each day. For the purposes of this study both models were analyzed together due to sample size constraints.

RESULTS

In winter and spring 2010, SRI data were collected for the *System 44* students. After one semester of instruction, findings indicated that, overall, these students made significant gains in reading comprehension. On average, *System 44* students improved their SRI performance from 119 Lexile (L) measures at pretest to 229L at posttest, resulting in a significant gain of 110L (Graph 1). Further analysis revealed that students who completed more than 30 topics on the software averaged higher gains on SRI than those who had completed fewer than 30 topics on the software (141L vs 69L) (Graph 2).

GRAPH 1

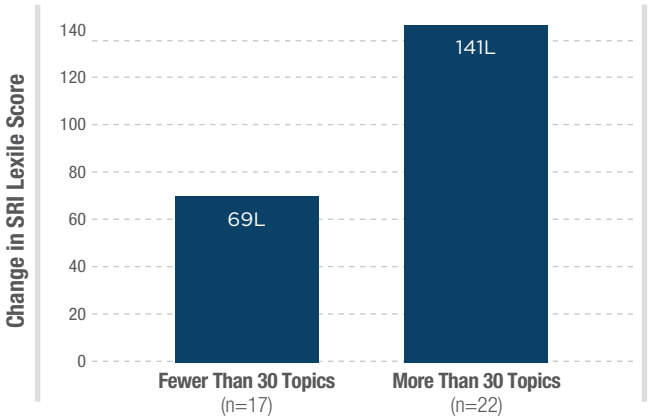
Julia A. Stark School *System 44* Students, Grades 4–5 (N=39)
Performance on SRI, 2010



Note. The gain in Lexile was statistically significant (t=5.81, p=.00).

GRAPH 2

Julia A. Stark School *System 44* Students, Grades 4–5 (N=39)
Change in SRI Lexile Score as a Function of Software Usage, 2010



Note. The gain in Lexile was significantly higher for students who completed more than 30 topics on the *System 44* software (F=3.88, p=.06).

KIPP NYC (KNOWLEDGE IS POWER PROGRAM) NEW YORK CITY, NY

AUTHOR: SCHOLASTIC RESEARCH

STUDY PROFILE

Evaluation Period: 2012–2013

Grades: 5–6

Assessment: Northwest Evaluation Association Measures of Academic Progress (NWEA MAP), *Scholastic Reading Inventory* (SRI), *Scholastic Phonics Inventory* (SPI)

Participants: N=56

Implementation: 45 to 90 minutes daily (Standalone and Integrated with *READ 180* Next Generation)

Middle school children at an urban charter school demonstrate improvements in decoding, fluency, and reading comprehension.

OVERVIEW

Knowledge Is Power Program (KIPP) is a national network of free, open-enrollment, college-preparatory public charter schools with a track record of preparing students in underserved communities for success in college and in life. KIPP NYC, a part of the national network, consists of 10 schools enrolling approximately 3,600 students in Grades K–12. There are four elementary schools, five middle schools, and one high school in KIPP NYC. The majority of the student body is African American (48%) or Hispanic (49%) and receives free or reduced-price lunch (88%). Fifteen percent are students with disabilities, and 8% are English language learners (ELL). The student attendance rate is 95.4%, and the annual student mobility rate is 5%. KIPP NYC's mission is "to teach our students to develop the character and academic skills necessary to succeed in high school and college, to be self-sufficient, successful, and happy in the competitive world, and to build a better tomorrow for themselves and us all."

During the 2012–2013 school year, 56 fifth and sixth grade students in three of KIPP NYC's middle schools (Academy, Infinity, and Washington Heights) were selected to participate in a study of *System 44's* effectiveness. Students were eligible to participate in *System 44* if they first scored below 600L on the *Scholastic Reading Inventory* (SRI), and then scored as Pre-Decoder, Beginning Decoder, or Developing Decoder on *Scholastic Phonics Inventory* (SPI). Of the students in the study sample, 96% received free or reduced-price lunch, 31% were African American and 69% were Hispanic. Forty-five percent were students with disabilities, and 35% were ELL.

Students who were placed into *System 44* classrooms at KIPP NYC were expected to receive 45 to 90 minutes of instruction five times per week. The model varied across the schools with some classrooms using a standalone *System 44* implementation and some classrooms using an integrated *System 44/READ 180* Next Generation model.

RESULTS

SPI, SRI, and NWEA MAP data were collected and analyzed for students who used the program during the 2012–2013 school year. Results demonstrated that the KIPP NYC *System 44* students improved in word-reading skills, as measured by SPI, and in reading comprehension, as measured by SRI and NWEA MAP.

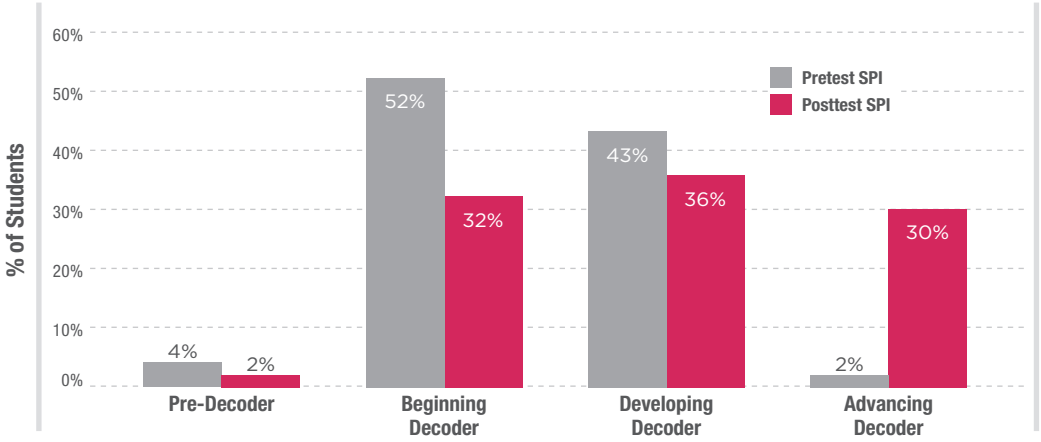
Analysis of SPI Decoding Status showed that the percentage of *System 44* students identified as Advancing Decoder increased from the first SPI assessment to the last; whereas, the percentage of students identified as Pre-Decoder or Beginning Decoder decreased (Graph 1). There was a remarkable increase from only 2% of students (1 student) performing at the Advancing Decoder level at the beginning of the year to 30% of students (17 students) performing at the Advancing Decoder level by the end of the year. Of these students, 9 graduated out of the program before the end of the year.

Overall, *System 44* students also made significant gains in SPI Total Fluency (7.5 points) from the first SPI assessment to the last. When disaggregated by grade, the gains in SPI Total Fluency made by fifth and sixth graders were significant, with fifth graders moving from the 10th percentile at the beginning of the year to the 24th percentile by the end of the year, and sixth graders moving from the 12th percentile at the beginning of the year to the 28th percentile by the end of the year (Table 1). These significant findings held for students with disabilities and ELLs, who made significant gains of 7.7 points and 7.5 points, respectively.

On SRI, *System 44* students demonstrated significant gains in their Lexile (L) scores from pretest to posttest (301L), with an average of three-quarters of students (75%) exceeding their individual yearly growth expectations. These significant findings held for students with disabilities and ELLs, who made gains of 321L and 308L, respectively (Graph 2). On NWEA MAP, students in the fifth and sixth grades demonstrated gains in their reading scores from pretest to posttest with the fifth grade students demonstrating significant gains (13.5 points and 2.9 points, respectively).

GRAPH 1

KIPP NYC *System 44* Students, Grades 5–6 (N=56)
Performance on SPI by Decoding Status, 2012–2013



Northern United States

Note. The Pretest window for SPI was June 2012 to September 2012. All posttest scores were collected in May–June 2013.

TABLE 1

KIPP NYC *System 44* Students, Grades 5–6 (N=56)
Performance on SPI Total Fluency, 2012–2013

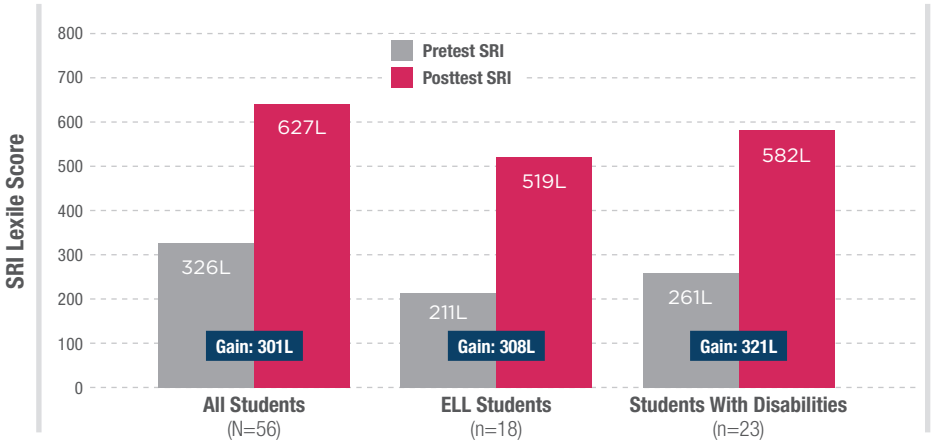
Grade	N	First Fluency Raw Score	First Fluency Percentile Rank*	Final Fluency Raw Score	Final Fluency Percentile Rank*	Average Fluency Gain
5th	41	8	10th percentile	16	24th percentile	8
6th	15	14	12th percentile	22	28th percentile	8
Total	**121**	**9.8**		**17.3**		**7.5***

*Gain significant at $p < .05$.

Note. SPI Form 1 was used for the first fluency percentile rank, and SPI Form 3 was used for the final fluency percentile rank.

GRAPH 2

KIPP NYC *System 44* Students, Grades 5–6 (N=56)
Performance on SRI, 2012–2013



Note. The Pretest window for SRI was June 2012 to September 2012. All posttest scores were collected in May–June 2013.

PATCHOGUE-MEDFORD SCHOOL DISTRICT, NY

AUTHOR: SCHOLASTIC RESEARCH

STUDY PROFILE

Evaluation Period: 2011–2012

Grade: 3

Assessment: *Scholastic Reading Inventory* (SRI), *Scholastic Phonics Inventory* (SPI)

Participants: N=229

Implementation: 40 to 80 minutes daily (Standalone)

With *System 44* instruction, third-grade students make significant gains in decoding and fluency.

OVERVIEW

Patchogue-Medford School District enrolls approximately 8,700 students in grades PreK–12. The majority of students are Caucasian (64%), 28% are Hispanic, 5% are African American, 2% are Asian, and 1% are Other. Twenty-six percent of students are eligible for free or reduced-price meals. In Grade 4 English, 53% of students are meeting standards, and in Grade 8 English, 44% of students are meeting standards.

During the 2011–2012 school year, 229 third-grade students in Patchogue-Medford School District were selected to participate in a study of *System 44*'s effectiveness. Students who were placed into the *System 44* classrooms at Patchogue-Medford were expected to receive 40–80 minutes of instruction daily.

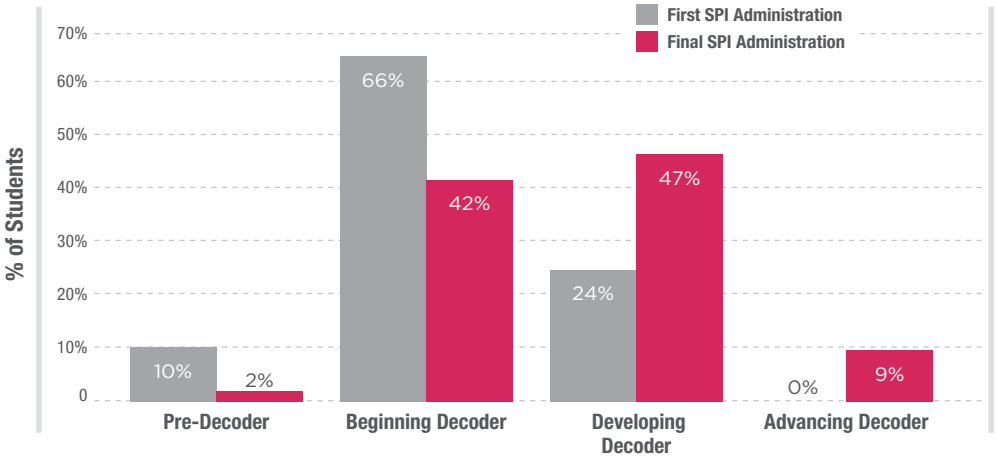
RESULTS

Scholastic Phonics Inventory (SPI) and *Scholastic Reading Inventory* (SRI) data were collected and analyzed for students who used the program during the 2011–2012 school year. SPI and SRI outcomes showed positive gains for the *System 44* students on measures of decoding and fluency. Analysis of SPI Decoding Status showed that the percentage of *System 44* students identified as Developing Decoder or Advancing Decoder increased from the first SPI assessment to the last; whereas, the percentage of students identified as Pre-Decoder or Beginning Decoder decreased (Graph 1). *System 44* students also made significant gains in SPI Total Fluency moving from the 26th percentile on the first SPI assessment to the 45th percentile on the last. On SRI, *System 44* students demonstrated significant gains in their Lexile (L) scores from pretest to posttest (184L), with an average of nearly one-third of students exceeding their individual growth targets.

When both SPI and SRI outcomes were considered as a function of *System 44* Software progress, students who completed more topics demonstrated greater gains. For SPI Fluency, students completing more software topics demonstrated higher initial fluency scores, as well as significantly greater gains in fluency across the school year (Graph 2). For SRI, students completing 50+ Software topics demonstrated significantly greater Lexile gains across the school year than students completing fewer than 50 Software topics (Graph 3).

GRAPH 1

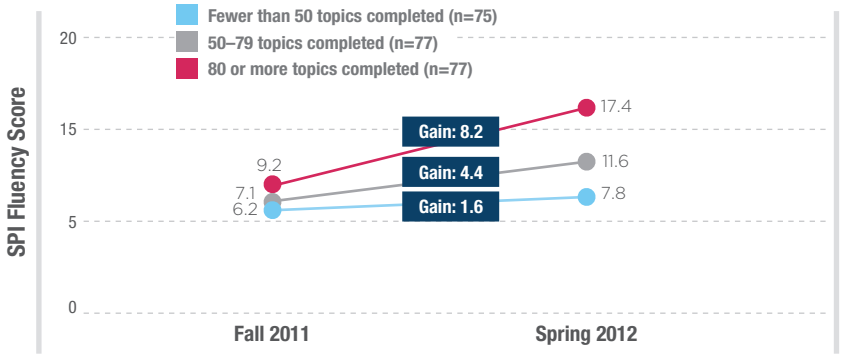
Patchogue-Medford School District *System 44* Students, Grade 3 (N=229)
Performance on SPI by Decoding Status, 2011–2012



Northern United States

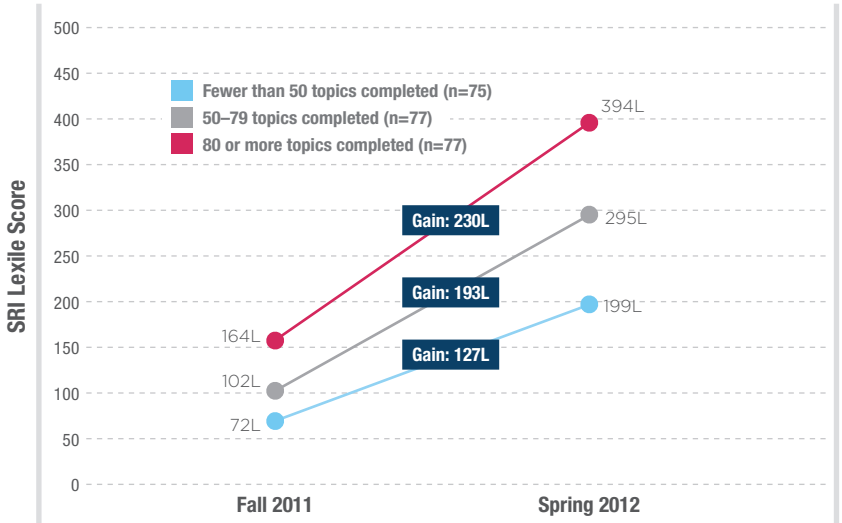
GRAPH 2

Patchogue-Medford School District *System 44* Students, Grade 3 (N=229)
Performance on SPI Total Fluency as a Function of *System 44* Software Usage, 2011–2012



GRAPH 3

Patchogue-Medford School District *System 44* Students, Grade 3 (N=229)
Performance on SRI as a Function of *System 44* Software Usage, 2011–2012



BETHLEHEM AREA SCHOOL DISTRICT, PA

AUTHOR: SCHOLASTIC RESEARCH

STUDY PROFILE

Evaluation Period: 2011–2012

Grades: 3–5

Assessment: *Scholastic Reading Inventory* (SRI), *Scholastic Phonics Inventory* (SPI)

Participants: N=68

Implementation: 60 to 90 minutes three to five days per week (Standalone and Integrated with *READ 180*)

Elementary students demonstrate significant gains on decoding and fluency after using *System 44*.

OVERVIEW

Bethlehem Area School District enrolls approximately 15,000 students in Grades K–12 in 16 elementary schools, four middle schools, and two high schools. The majority of students in Bethlehem are Caucasian (55%), 9.5% are African American, 32.3% are Hispanic, 3.1% are Asian, and 0.2% are Native American.

During the 2011–2012 school year, 68 elementary school students in Grades 3 through 5 in Bethlehem Area School District were selected to participate in a study of *System 44*'s effectiveness. *System 44* was first implemented in the district during the 2009–2010 school year making it the third year that the program had been implemented in the elementary schools. Six elementary schools participated in the study, each of which was a Title 1 school. While the eligibility criteria varied from school to school, the schools were directed to use the following data points: Pennsylvania System of School Assessment (PSSA), Dynamic Indicators of Basic Early Literacy Skills (DIBELS), Study Island, and Developmental Reading Assessment (DRA) for third graders. Reading Specialists then targeted kids based on these data points, as well as on *Scholastic Phonics Inventory* (SPI) and *Scholastic Reading Inventory* (SRI) scores. Generally, students who were at the low end of Basic and the high end of Below Basic on SRI for their grade levels were eligible for *System 44*. Teacher recommendations were also considered. Students who were placed into *System 44* classrooms at Bethlehem were expected to receive 60 to 90 minutes of instruction, three to five times per week. The model varied across the district with some schools using a standalone *System 44* model and some schools using an integrated *System 44*/*READ 180* model.

RESULTS

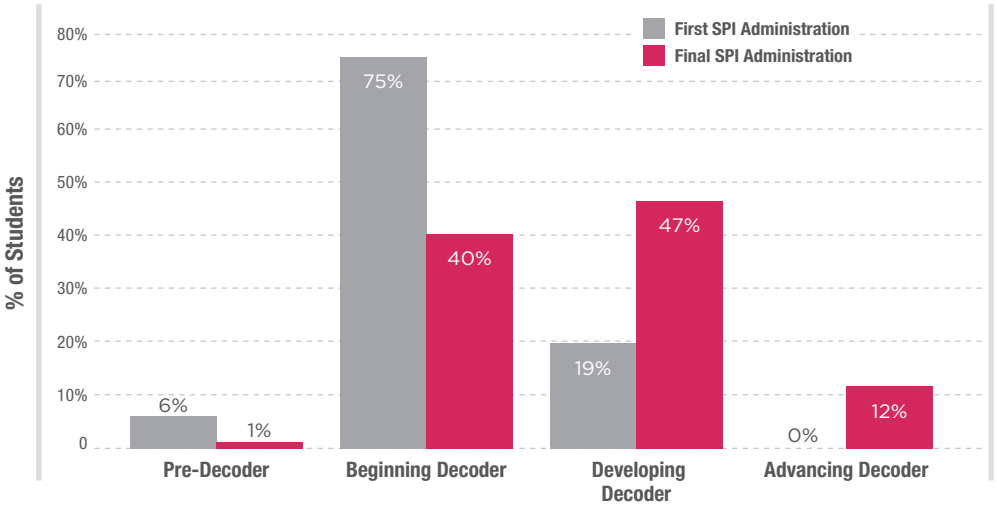
SPI and SRI data were collected and analyzed for students who used the program during the 2011–2012 school year. SPI and SRI outcomes showed positive gains for the *System 44* students on measures of decoding and fluency. Analysis of SPI Decoding Status showed that the percentage of *System 44* students identified as Developing Decoder or Advancing Decoder increased from the first SPI assessment to the last, whereas the percentage of students identified as Pre-Decoder or Beginning Decoder decreased (Graph 1). *System 44* students also made significant gains in SPI Total Fluency (6.6 points) from the first SPI assessment to the last. On SRI, *System 44* students demonstrated significant gains in their Lexile (L) scores from pretest to posttest (215L), with an average of nearly one-third of students exceeding their individual growth targets.

When both SPI and SRI outcomes were considered as a function of *System 44* software progress, students who completed more topics demonstrated greater gains. For SPI Fluency, students completing more software topics demonstrated higher initial fluency scores, as well as significantly greater gains in fluency across the school year (Graph 2). For SRI, students completing 60+ software topics demonstrated significantly greater Lexile gains across the school year than students completing fewer than 60 software topics (Graph 3).

GRAPH 1

Bethlehem *System 44* Students, Grades 3-5 (N=68)

Performance on SPI by Decoding Status, 2011–2012

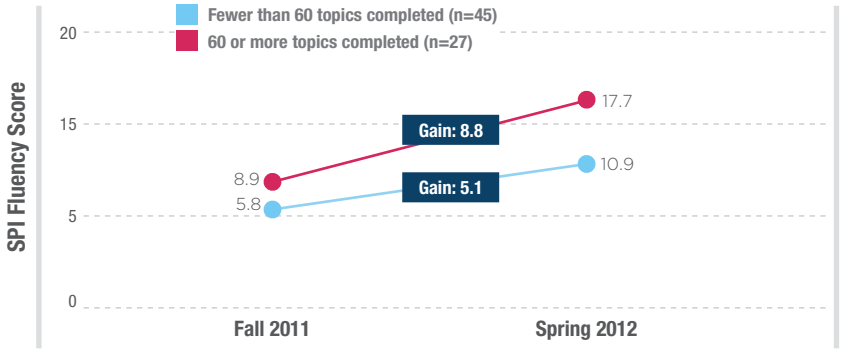


Northern United States

GRAPH 2

Bethlehem *System 44* Students, Grades 3-5 (N=68)

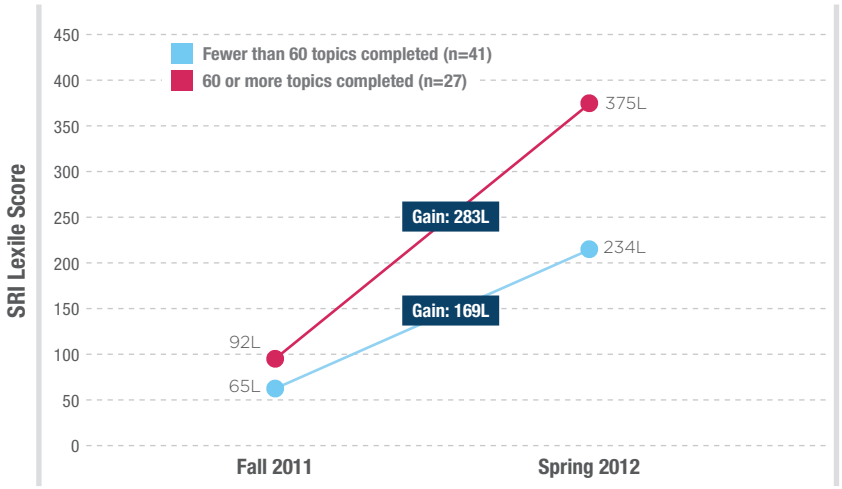
Performance on SPI Total Fluency as a Function of *System 44* Software Usage, 2011–2012



GRAPH 3

Bethlehem *System 44* Students, Grades 3–5 (N=68)

Performance on SRI as a Function of *System 44* Software Usage, 2011–2012



NORTHEASTERN FLORIDA PUBLIC SCHOOL DISTRICT

AUTHOR: SCHOLASTIC RESEARCH

STUDY PROFILE

Evaluation Period: 2008–2009

Grades: 6–8

Assessment: Florida Oral Reading Fluency (FORF), Florida Comprehensive Assessment Test (FCAT), *Scholastic Reading Inventory* (SRI)

Participants: N=63

Implementation: 90 minutes daily (Standalone or Integrated with *READ 180*)

Middle school students demonstrate oral reading fluency and comprehension gains on FORF and FCAT.

OVERVIEW

This profile focuses on the achievement outcomes from a public school district in Northeastern Florida that serves approximately 122,000 students in 175 schools. The district's student population is 45% African American, 41% Caucasian, 7% Hispanic, 4% multiracial, 4% Asian/Pacific Islander, and less than 1% American Indian/Alaskan Native. Fifty-five percent of all students are eligible to receive free or reduced-price lunch and 14% are students with disabilities.

During the 2008–2009 school year, a public school district in Northeastern Florida piloted *System 44* with 63 middle school students in nine classes. Students were placed into *System 44* if they performed poorly on *Scholastic Reading Inventory* (SRI) and exhibited poor word-reading skills on *Scholastic Phonics Inventory* (SPI). Of the 63 middle school students participating in *System 44*, 76% were African American, 16% were Caucasian, and 8% were Hispanic. Eighty-one percent qualified for free or reduced-price lunch and 71% were students with disabilities who were classified as having either learning, intellectual, or emotional disability. Teachers integrated *System 44* into a 90-minute reading block. In three of the nine classrooms, a standalone version of *System 44* was implemented. In six classrooms, *System 44* was incorporated into an existing *READ 180* program. In all classrooms, students were expected to use the software for 15–20 minutes per day. For the purposes of this report both models were analyzed together.

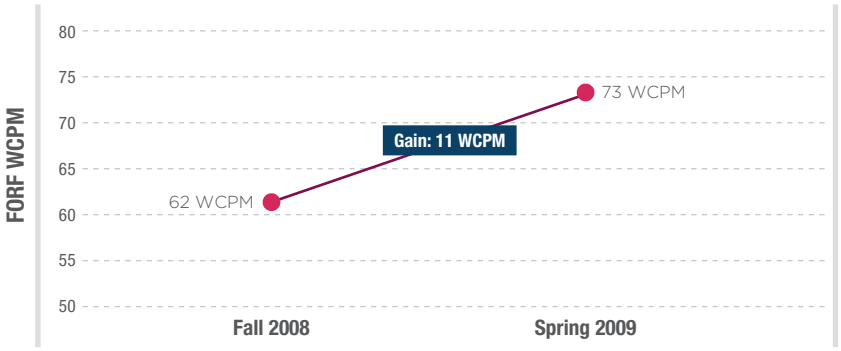
RESULTS

In order to measure changes in oral reading fluency, data from the Florida Oral Reading Fluency (FORF) assessment were obtained from 48 *System 44* students with fall 2008 and spring 2009 scores. Dependent t-tests revealed that these students improved, on average, from a fall pretest score of 62 words correct per minute (WCPM) to a posttest score of 73 WCPM, resulting in a statistically significant gain of 11 WCPM (Graph 1). *System 44* students also exhibited improvements in their reading comprehension as measured by performance on SRI. Results indicate that the 52 students who had pretest and posttest SRI data averaged a statistically significant gain of 147 Lexile (L) measures over the course of the 2008–2009 school year (Graph 2).

Consistent with these findings, *System 44* students demonstrated gains on the Florida Comprehensive Assessment Test (FCAT) Reading test. Overall, the 59 students who had spring 2008 and spring 2009 FCAT Developmental Scale Scores (DSS) achieved an average pretest score of 1051 and an average posttest score of 1182, resulting in a statistically significant gain of 131 DSS points (Graph 3).

GRAPH 1

Northeastern Florida Public School District *System 44* Students, Grades 6–8 (N=48)
Performance on FORF WCPM, 2008–2009

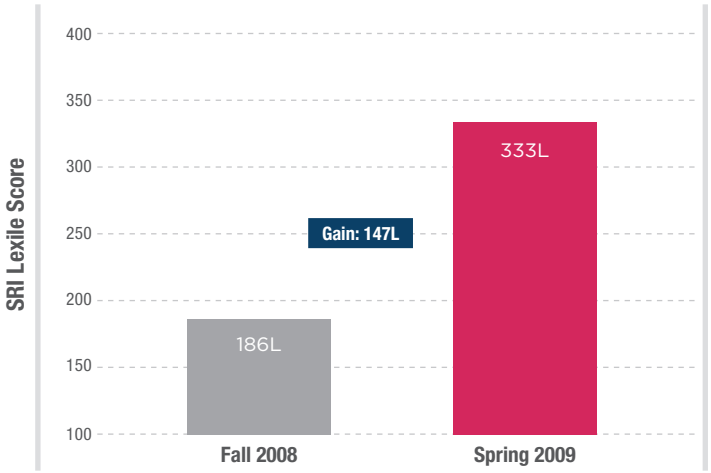


Note. The gain in words correct per minute (WCPM) was statistically significant (t=3.27, p=.00).

Southern United States

GRAPH 2

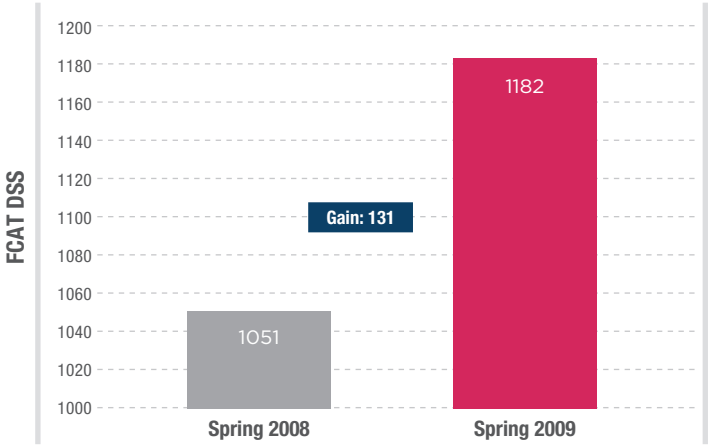
Northeastern Florida Public School District *System 44* Students, Grades 6–8 (N=52)
Performance on SRI, 2008–2009



Note. The gain in Lexile was statistically significant (t=6.37, p=.00).

GRAPH 3

Northeastern Florida Public School District *System 44* Students, Grades 6–8 (N=59)
Performance on FCAT, 2008–2009



Note. The gain in DSS scores was statistically significant (t=3.61, p=.00).

FAYETTEVILLE PUBLIC SCHOOLS, AR

AUTHOR: SCHOLASTIC RESEARCH

STUDY PROFILE

Evaluation Period: 2010–2011
Grades: 3–11
Assessment: *Scholastic Reading Inventory* (SRI)
Participants: N=152
Implementation: 90 minutes daily (Standalone or Integrated with *READ 180*)

OVERVIEW

Nestled in the Ozark Mountains, Fayetteville Public Schools (FPS) enrolls 8,400 students, including both children of employees of the University of Arkansas and immigrant families who work in the city's burgeoning poultry industry. Seventy-three percent of students are Caucasian, 11% are African American, 9% are Hispanic, 4% are Asian/Pacific Islander, 1% are American Indian/Alaskan Native, and 2% are multi-racial. Currently, more than 43 languages are spoken by district students.

During the 2010–2011 school year, FPS piloted *System 44* with general education students, English language learners (ELL), and students with disabilities in Grades 3–11 in eight elementary schools, one K–7 school, two middle schools, two junior high schools, and one high school. Placement criteria included results from the Augmented Benchmark Examinations, Northwest Evaluation Association Measures of Academic Progress (MAP), *Scholastic Reading Inventory* (SRI), *Scholastic Phonics Inventory* (SPI), and teacher recommendations. *System 44* was implemented during a 90-minute reading block. During that time, *System 44* was used as a standalone program or integrated into an existing *READ 180* program.

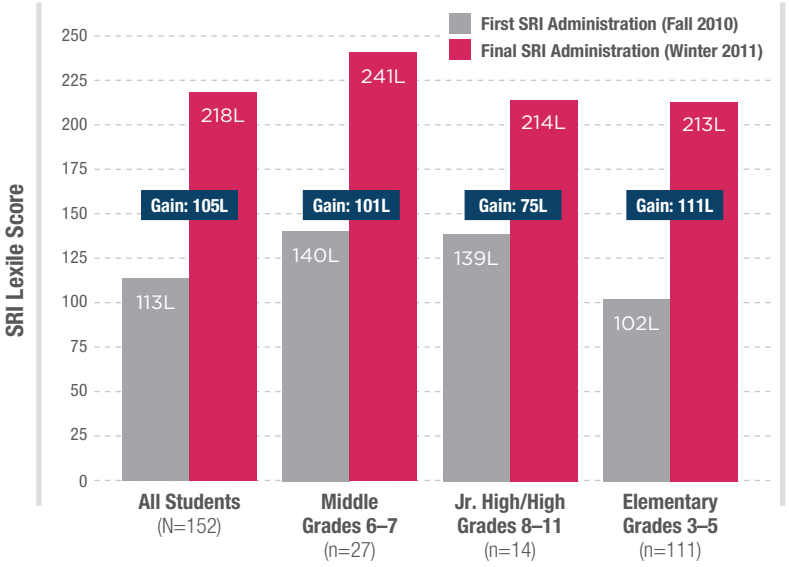
RESULTS

SRI Lexile (L) data was analyzed for 152 *System 44* students in Grades 3–11 who had both fall 2010 and winter 2011 scores. Results demonstrated that *System 44* students improved, on average, from a pretest score of 113L to a midyear score of 218L, resulting in a statistically significant gain of 105L. Moreover, significant Lexile growth was evidenced at all school levels (Graph 1). Further analysis showed that students who completed a greater number of *System 44* software topics averaged greater Lexile gains than those students who completed fewer topics (Graph 2). Students completing 60 or more topics averaged a gain of 124L, nearly twice the gain of students completing fewer than 40 topics (gain of 69L).

Improved reading skills on SRI after one semester of *System 44*.

GRAPH 1

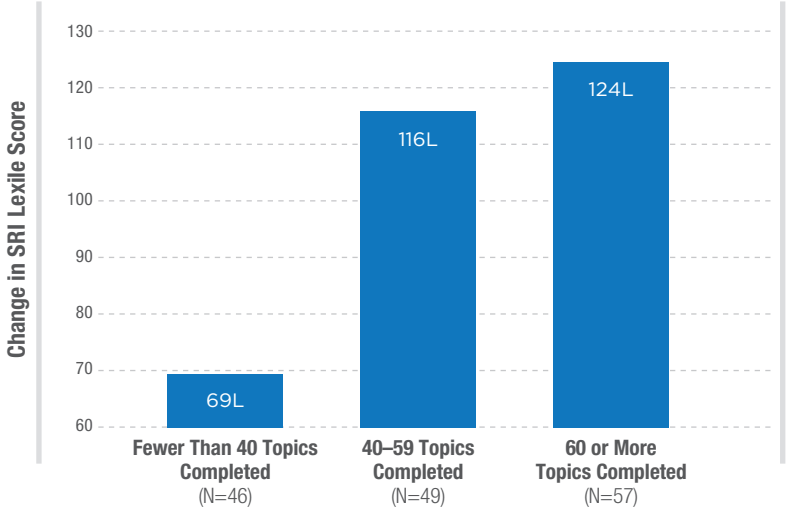
Fayetteville Public Schools *System 44* Students, Grades 3–11 (N=152)
Performance on SRI, 2010–2011



Note. The 2010–2011 gains were statistically significant for all students (t=8.81, p.=.00), the elementary students (t=7.48, p=.00), the middle school students (t=4.13, p=.99), and the junior high/high students (t=2.30, p=.04).

GRAPH 2

Fayetteville Public Schools *System 44* Students, Grades 3–11 (N=152)
Change in SRI Lexile Score as a Function of *System 44* Software Usage, 2010–2011



RECOVERY SCHOOL DISTRICT, LA

AUTHOR: SCHOLASTIC RESEARCH

STUDY PROFILE

Evaluation Period: 2009–2010
Grade: 4
Assessment: *Scholastic Reading Inventory* (SRI)
Participants: N=29
Implementation: 90 minutes daily (Standalone)

Fourth-grade students with severe behavioral problems enrolled in *System 44* achieve significant Lexile gains.

Southern United States

OVERVIEW

The Recovery School District (RSD) in New Orleans, Louisiana, enrolls nearly 25,000 students in Grades K–12 in both traditional and charter schools. Created by legislation passed in 2003, RSD is designed to take underperforming schools and transform them into successful places for children to learn. Since 2005, RSD has had the added challenge of addressing the needs of children who experienced the traumatic events of Hurricane Katrina. RSD students are predominantly African American (98%). Thirteen percent are students with disabilities and 88% are eligible for free or reduced-price lunch.

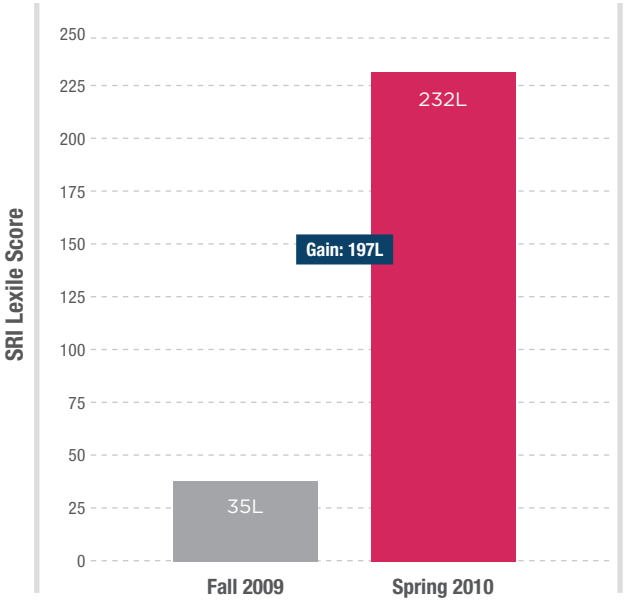
In 2009, RSD piloted *System 44* in one fourth-grade classroom at Reed Elementary School. Students were selected to participate based on a number of criteria, including performing poorly on the Integrated Louisiana Education Assessment Program (iLEAP) and/or Louisiana Education Assessment Program (LEAP), scoring below 200L on *Scholastic Reading Inventory* (SRI), and exhibiting difficulty with word-reading skills on *Scholastic Phonics Inventory* (SPI). Most students demonstrated severe behavioral problems and were reading two to three years behind grade level. Reed Elementary School implemented *System 44* as a standalone program for 90 minutes daily, five days a week in one fourth-grade classroom. The classroom followed a rotational model, including a whole-group introduction in which the teacher led a short warm-up activity to engage students and build phonemic awareness and phonics skills, followed by two 20–25 minute rotations on the instructional software and in small-group instruction.

RESULTS

Fall 2009 and spring 2010 SRI data were collected for 29 fourth-grade participants. Overall, findings indicate that *System 44* fourth-grade students demonstrated significant improvements in reading comprehension on SRI. On average, students' Lexile (L) score improved from 35L at pretest to 232L at posttest, a significant gain of 197L. The fourth-grade teacher reported observing a surge in student confidence and a decrease in behavior problems as students developed the ability to successfully access grade-level texts.

GRAPH 1

Recovery School District *System 44* Students, Grade 4 (N=29) Performance on SRI, 2009–2010



Note. The gain in Lexile score was statistically significant for students in fourth grade (t=6.20, p=.00).

JEFFERSON PARISH PUBLIC SCHOOL SYSTEM, LA

AUTHOR: SCHOLASTIC RESEARCH

STUDY PROFILE

Evaluation Period: 2009–2010

Grades: 6–9

Assessment: Louisiana Education Assessment Program (LEAP), Integrated Louisiana Education Assessment Program (iLEAP), *Scholastic Reading Inventory* (SRI)

Participants: N=124

Implementation: 60 to 90 minutes daily (Standalone or Integrated with *READ 180*)

Limited-English proficient students and students with disabilities demonstrate significant improvements on the LEAP/iLEAP.

OVERVIEW

Jefferson Parish Public School System (JPPSS) is located nine miles east of New Orleans. Its 89 schools enroll 44,000 students in Grades PreK–12. The district's student population is 50% African American, 32% Caucasian, 13% Hispanic, 5% Asian/Pacific Islander, and less than 1% American Indian/Alaskan Native. Seventy-five percent of all students qualify for free or reduced-price lunch.

At the beginning of the 2009–2010 school year, JPPSS's superintendent decided to allocate newly available federal stimulus funds for a reading program that would help the district meet the needs of its most struggling students. Students were enrolled in *System 44* based on several criteria, including performing at the Unsatisfactory or Approaching Basic levels on the Louisiana Education Assessment Program (LEAP) and Integrated Louisiana Education Assessment Program (iLEAP) English Language Arts (ELA) assessments, performing poorly on *Scholastic Reading Inventory* (SRI), and demonstrating difficulty with word-reading skills on *Scholastic Phonics Inventory* (SPI).

A total of 124 students were selected to participate in *System 44*. Of these students 60% were African American, 24% were Caucasian, 10% were Hispanic, and 2% were Asian. Thirty-two percent were designated as students with disabilities, and 12% were limited-English proficient (LEP).

JPPSS piloted *System 44* at 16 middle schools, seven high schools, and one alternative school with students who had not yet mastered basic phonics and decoding skills. *System 44* was either implemented as a 60-minute standalone program or embedded into existing *READ 180* classrooms for 90 minutes daily. Regardless of the model, all students used the software for at least 20–25 minutes a day.

RESULTS

In 2009 and 2010, SRI and LEAP or iLEAP data were gathered from 124 students. Overall, *System 44* students demonstrated a significant improvement in reading comprehension on SRI. On average, students' Lexile (L) scores advanced from 181L at pretest to 348L at posttest, an average gain of 167L. These statistically significant gains continued when results were disaggregated by student group. On average, LEP students and students with disabilities gained 97L and 124L, respectively (Graph 1).

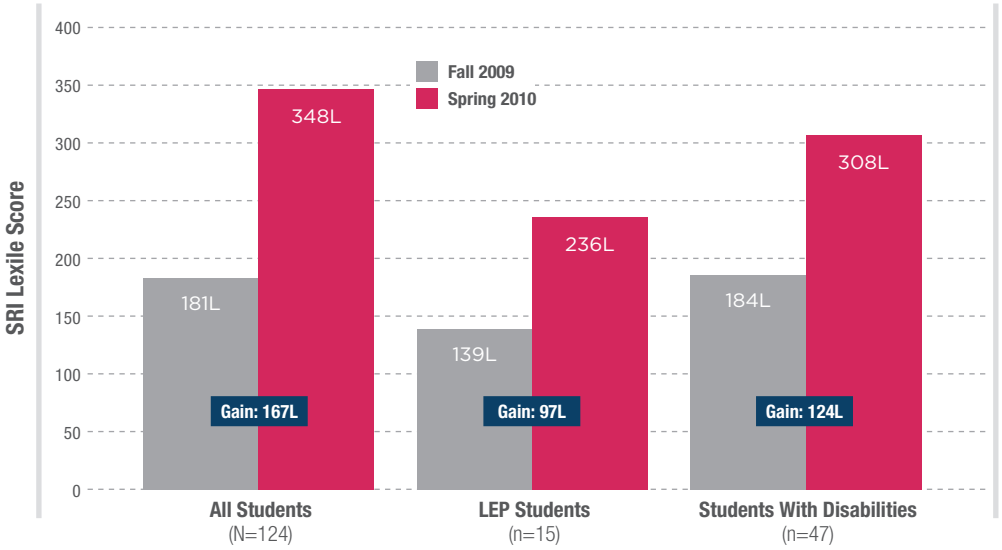
Results demonstrated that *System 44* students as a whole made improvements in reading ability, as measured by the LEAP/iLEAP (Graph 2). In spring 2009, prior to the implementation of *System 44*, only 2% of these students achieved the Basic Performance Level. However, Graph 2 shows that by the spring 2010 LEAP/iLEAP administration, the percentage of students scoring in the Basic Performance Level increased to 9%. Conversely, the percentage of students scoring in the Unsatisfactory Level decreased from 68% in spring 2009 to 60% in spring 2010.

Further analysis revealed that among the 74 students who scored in the Unsatisfactory Level on the 2009 LEAP/iLEAP, 34% (30% +4%) of students moved up one or more Performance Levels on the 2010 LEAP/iLEAP. Similarly, of the 37 students who scored in the Approaching Basic Performance Level, 19% moved to the Basic Performance Level on the LEAP/iLEAP (Table 1).

These positive trends continued when the results were analyzed by student group. *System 44* LEP students and students with disabilities made substantial gains in terms of the percentage of students scoring in the Basic range from 2009 to 2010. The percentage of *System 44* LEP students achieving Basic on the LEAP/iLEAP increased from 0% to 13% and the percentage of students with disabilities scoring in the Basic category increased from 3% to 8%.

GRAPH 1

Jefferson Parish Public School System *System 44* Students, Grades 6–9 (N=124)
Performance on SRI by Student Group, 2009–2010



Note. The gains in Lexile were significant overall (t=9.83, p=.00), for students who were limited-English proficient (t=2.64, p=.02), and for students with disabilities (t=3.92, p=.00).

Southern United States

GRAPH 2

Jefferson Parish Public School System *System 44* Students, Grades 6–9 (N=124)
Performance Levels on LEAP/iLEAP, 2009–2010

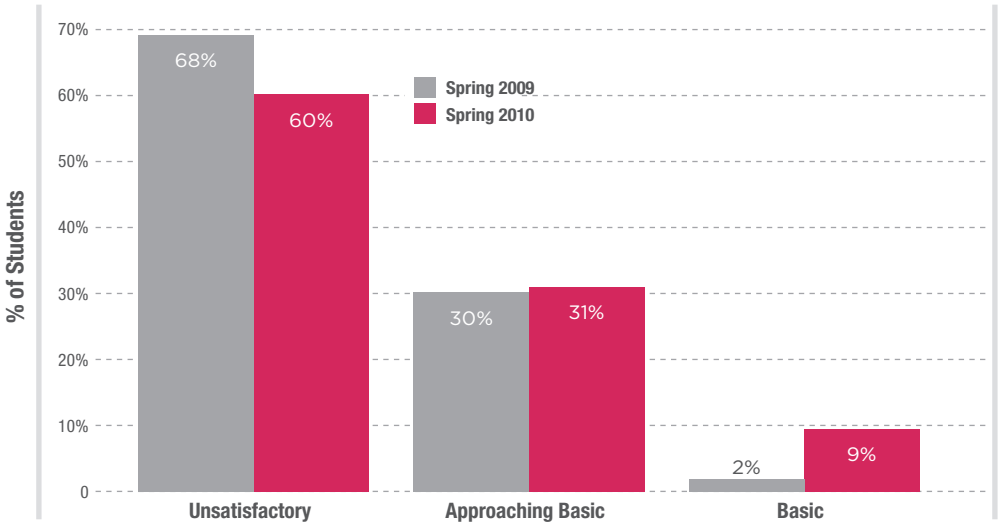


TABLE 1

Jefferson Parish Public School System *System 44* Students, Grades 6–9 (N=124)
Performance Levels on LEAP/iLEAP, 2009–2010

2009 Leap/iLeap Performance Levels		2010 Leap/iLeap Performance Levels			2009 Total Count
		Unsatisfactory	Approaching Basic	Basic	
	Unsatisfactory	67%	30%	4%	84
	Approaching Basic	46%	35%	19%	37
	Basic	33%	33%	33%	3
2010 Total Count		74	39	11	124

Note. Of the 74 students who performed in the Unsatisfactory Performance Level on the Leap/iLeap 67% remained in this level, 30% moved to the Approaching Basic Level, and 4% moved to the Basic Level.

ST. JAMES PARISH SCHOOL DISTRICT, LA

AUTHOR: SCHOLASTIC RESEARCH

STUDY PROFILE

Evaluation Period: 2012–2013

Grades: 2–8

Assessment: *Scholastic Reading Inventory* (SRI), *Scholastic Phonics Inventory* (SPI)

Participants: N=112

Implementation: 60 to 90 minutes daily (Standalone and Integrated with *READ 180*)

Elementary and middle school students improve on decoding and fluency after using *System 44*.

OVERVIEW

St. James Parish School District (SJPSD) enrolls approximately 4,200 students in Grades PreK–12 in 11 schools. The majority of students in St. James Parish are African American (66%), 33% are Caucasion, and 1% are Hispanic. Twelve percent are students with disabilities.

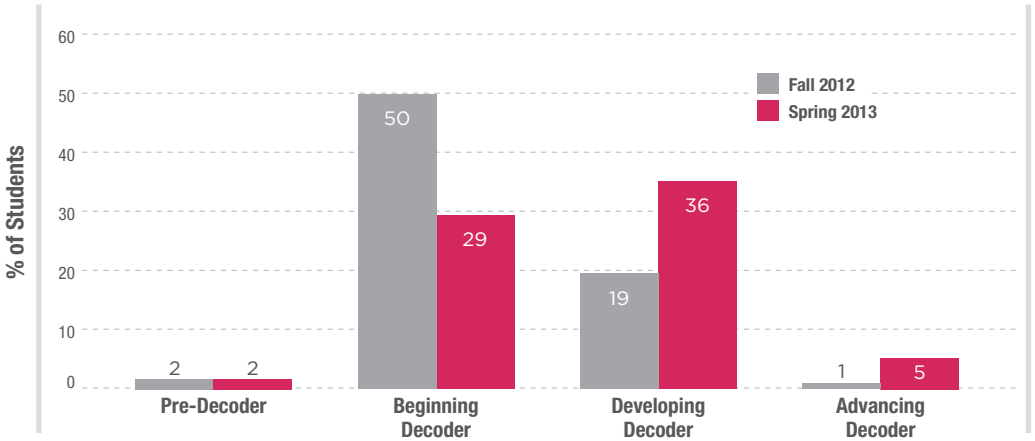
During the 2012–2013 school year, SJPSD implemented *System 44* across eight schools throughout the district. A total of 112 elementary and middle school students in Grades 2 through 8 were selected to participate in a study of *System 44*'s effectiveness. Students who were placed into *System 44* classrooms at SJPSD were expected to receive 60 to 90 minutes of instruction five times per week. The model varied across the district with some schools using a standalone *System 44* implementation and some schools using an integrated *System 44*/*READ 180* model.

RESULTS

SPI and SRI data were collected and analyzed for students who used the program during the 2012–2013 school year. SPI and SRI outcomes showed positive gains for the *System 44* students on measures of decoding, fluency, and comprehension. Analysis of SPI Decoding Status showed that the percentage of *System 44* students identified as Developing Decoder or Advancing Decoder increased from the first SPI assessment to the last, whereas the percentage of students identified as Pre-Decoder or Beginning Decoder decreased (Graph 1). *System 44* students also made gains in SPI Total Fluency from the first SPI assessment to the last, with over half of students (54%) demonstrating a 4+ point increase in fluency. On SRI, *System 44* students demonstrated gains in their Lexile (L) scores from pretest to posttest (240L), with 41% of students exceeding individual growth expectations (Graph 2).

GRAPH 1

St. James Parish School District *System 44* Students, Grades 2–8 (N=112)
Performance on SPI by Decoding Status, 2012–2013



Southern United States

GRAPH 2

St. James Parish School District *System 44* Students, Grades 2–8 (N=112)
Performance on SRI, 2012–2013

CYPRESS-FAIRBANKS INDEPENDENT SCHOOL DISTRICT, TX

AUTHOR: SCHOLASTIC RESEARCH

STUDY PROFILE

Evaluation Period: 2009–2010
Grades: 4–12
Assessment: *Scholastic Reading Inventory* (SRI)
Participants: N=459
Implementation: 60 to 90 minutes daily (Standalone)

Students with disabilities achieve statistically significant gains on SRI after one year of *System 44*.

OVERVIEW

Located outside of Houston, Texas, the Cypress-Fairbanks Independent School District (CFISD) enrolls more than 105,000 students in 52 elementary schools, 16 middle schools, 11 high schools, and four special program campuses. The district's student population is 42% Hispanic, 31% Caucasian, 16% African American, 8% Asian American, and less than 1% Native American. Forty-six percent of all students receive free or reduced-price lunch, and 22% of all students are limited English proficient (LEP).

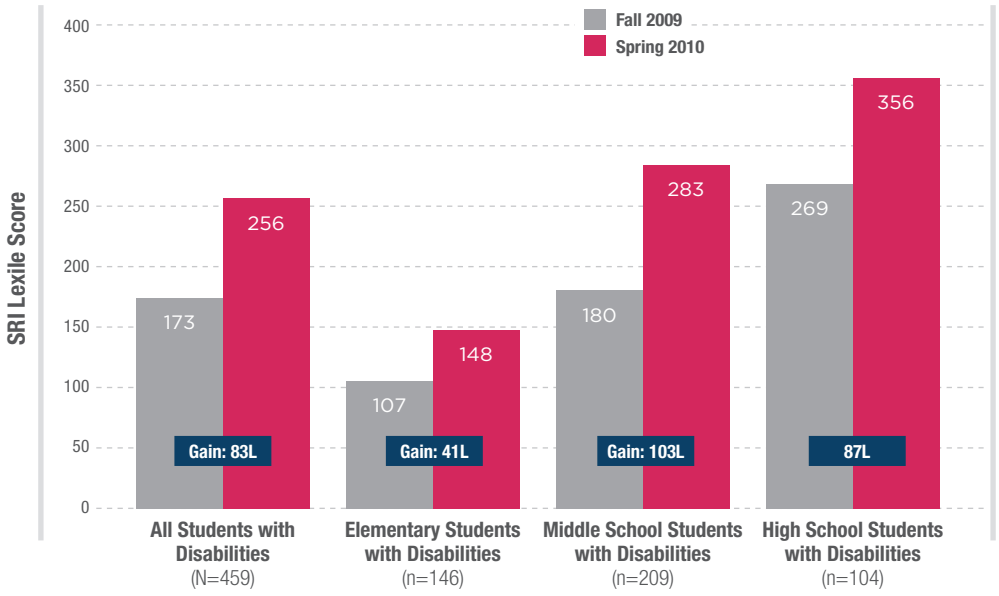
During the fall of 2009, CFISD implemented *System 44* at 39 campuses—including elementary, middle, and high schools—with over 500 students with disabilities. In addition to their disability classification, 524 students in Grades 4–12 were selected to participate based on a number of criteria, including performing poorly on the Texas Assessment of Knowledge and Skills (TAKS) Reading, scoring below 400L on *Scholastic Reading Inventory* (SRI), and exhibiting difficulty with word-reading skills on *Scholastic Phonics Inventory* (SPI). All classrooms implemented a standalone model of *System 44*, with the classroom period varying from 60 to 90 minutes based on school schedule. All classrooms followed a rotational model, including a whole-group introduction, followed by 20- to 25-minute rotations in small-group instruction or on the instructional software.

RESULTS

Fall 2009 and spring 2010 SRI data were collected and analyzed from 524 students in Grades 4–12 who used the program during the 2009–2010 school year. Findings revealed that *System 44* students demonstrated gains on SRI during the 2009–2010 school year. *System 44* students improved, on average, from a pretest score of 173L to a posttest score of 256L, resulting in a statistically significant gain of 83L (Graph 1). Elementary students in Grades 4 and 5 demonstrated a significant gain of 41L, middle school students in Grades 6–8 exhibited a significant gain of 103L, and high school students in Grades 9–12 achieved a significant gain of 87L. As Table 1 shows, results were particularly impressive for eighth-grade and ninth-grade students who demonstrated a significant achievement gain of 123L and 121L, respectively (Table 1).

GRAPH 1

Cypress-Fairbanks Independent School District *System 44* Students With Disabilities, Grades 4–12 (N=459)
Performance on SRI, 2009–2010



Southern United States

Note. The gains in Lexile were statistically significant for all students (t=11.46, p=.00), elementary school students (t=4.29, p=.00), middle school students (t=9.18, p=.00), and high school students (t=6.04, p=.00).

TABLE 1

Cypress-Fairbanks Independent School District *System 44* Students With Disabilities, Grades 4–12 (N=459)
Performance on SRI, 2009–2010

Grade	N	PRETEST SRI LEXILE	POSTTEST SRI LEXILE	GAIN IN SRI LEXILE
4	90	70L	120L	50L
5	56	147L	170L	23L
6	84	125L	233L	108L
7	71	181L	287L	106L
8	54	250L	373L	123L
9	41	238L	360L	121L
10	38	303L	408L	105L
11	15	280L	320L	39L
12	10	246L	277L	31L
All	**459**	**173L**	**256L**	**83L**

Note. The gains in Lexile were statistically significant for all students in fourth grade (t=3.82, p=.00), sixth grade (t=4.98, p=.00), seventh grade (t=6.44, p=.00), eighth grade (t=5.35, p=.00), ninth grade (t=4.11, p=.00), and tenth grade (t=4.94, p=.00). SRI Lexile gains have been rounded to the nearest integer.

MIDLAND INDEPENDENT SCHOOL DISTRICT, TX

AUTHOR: SCHOLASTIC RESEARCH

STUDY PROFILE

Evaluation Period: 2009–2010

Grades: 4–9

Assessment: Texas Assessment of Knowledge and Skills (TAKS), *Scholastic Reading Inventory* (SRI)

Participants: N=346

Implementation: 45 minutes daily (Standalone)

Greater numbers of students with disabilities meet or exceed the standard on the TAKS.

OVERVIEW

Midland Independent School District (MISD) is located between El Paso and Dallas/Ft. Worth, with an economic base in oil and ranching. Its 38 schools enroll approximately 21,000 students in Grades PreK–12. The district's population is predominantly Hispanic (66%), while most of the remaining students are Caucasian (37%) and African American (10%). Forty-eight percent are eligible for free or reduced-price lunch, and 34% are students with disabilities. Approximately 19% are limited-English proficient (LEP), and 92% of these students speak Spanish as their first language.

Following two years of a successful *READ 180* implementation, the district chose to implement *System 44* as a district-wide curriculum for students who lacked foundational literacy skills. Priority was given to LEP students and students with disabilities.

During the 2009–2010 school year, MISD implemented a standalone model of *System 44* in 23 classrooms. Elementary, middle, and high school students were placed into the intervention program if they scored below 400 Lexile (L) measures on *Scholastic Reading Inventory* (SRI) and exhibited difficulty with word-reading skills on *Scholastic Phonics Inventory* (SPI).

A total of 346 students in Grades 4–9 comprise the sample in this report. Approximately half (52%) were male. Approximately 66% of these students were Hispanic, 14% were Caucasian, 18% were African American, and 2% were not identified. Twenty-three percent were students with disabilities.

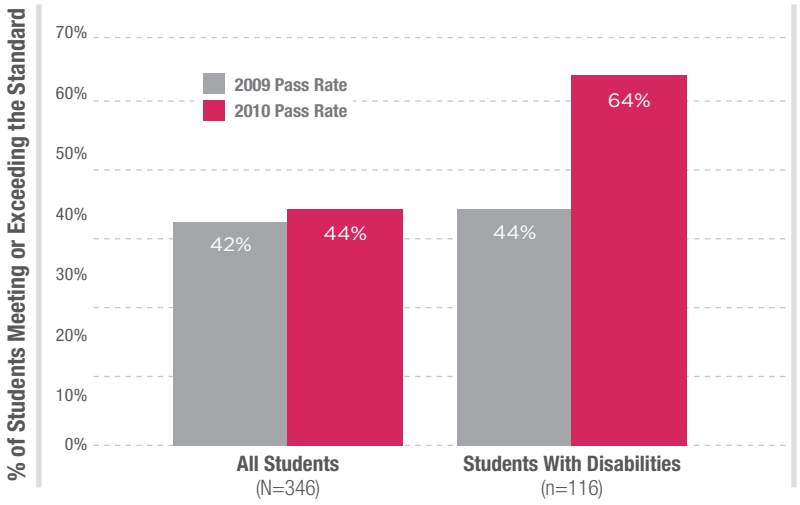
RESULTS

Texas Assessment of Knowledge and Skills (TAKS) Reading and SRI data were collected and analyzed for 346 students in Grades 4–9 who used the program during the 2009–2010 school year. Findings indicated that, on average, the percentage of *System 44* students meeting or exceeding the standard on TAKS Reading increased from 2009 to 2010. Overall, the percentage of *System 44* students meeting or exceeding the standard on TAKS Reading improved from 42% in 2009 to 44% in 2010. These improvements in performance were magnified when the data was disaggregated by student group. As Graph 1 illustrates, the percentage of students with disabilities who met or exceeded the standard on TAKS Reading improved from 44% in 2009 to 64% in 2010. SRI results revealed similar trends in reading performance for students in elementary and junior/freshman high. As Table 1 shows, overall, *System 44* students in MISD gained an average of 207L, with elementary students gaining an average of 210L, and junior/freshman high students gaining an average of 197L.

Further, data showed that more time spent on *System 44* software was associated with greater improvement on SRI. Students were divided into groups depending upon the number of software sessions they completed. A one-way ANOVA test and subsequent post-hoc analyses confirmed that Lexile gains were significantly greater for students who completed 80 or more sessions than for students who completed fewer than 80 sessions.

GRAPH 1

Midland Independent School District *System 44* Students, Grades 4–9 (N=346)
Performance on TAKS Reading by Education Classification, 2009–2010



Note. The increase in pass rates was statistically significant for students with disabilities (t=3.36, p=.00).

Southern United States

TABLE 1

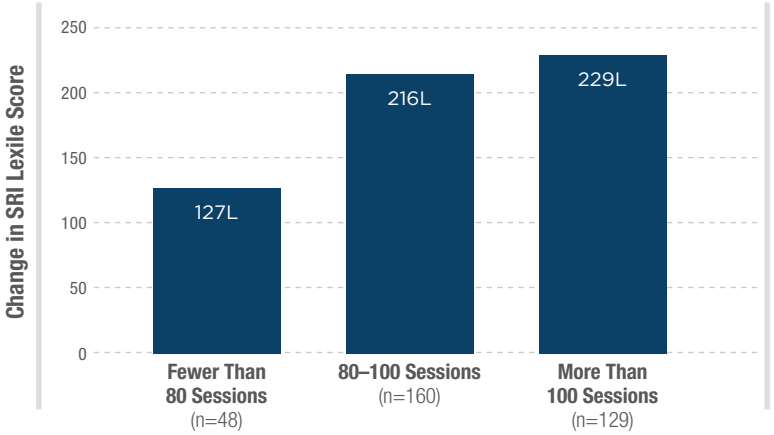
Midland Independent School District *System 44* Students, Grades 4–9 (N=346)
Performance on SRI by Grade Level, 2009–2010

School Level	N	Mean Pretest SRI	Mean Posttest SRI	Mean SRI Lexile Gain
Elementary (4th–6th)	291	191L	401L	210L
Junior & Freshman High (7th–9th)	55	155L	352L	197L
All	**346**	**186L**	**393L**	**207L**

Note. The gain in Lexile was statistically significant for elementary students (t=21.87, p=.00), freshman and junior high school students (t=9.10, p=.00), and all students (t=23.71, p=.00).

GRAPH 2

Midland Independent School District *System 44* Students, Grades 4–9 (N=346)
Change in SRI Lexile Score as a Function of Software Usage, 2009–2010



Note. The gain in Lexile was significantly greater for students who completed 80 or more sessions than for students who completed fewer than 80 sessions (F=7.41, p=.00).

RICHLAND SCHOOL DISTRICT, WA

AUTHOR: SCHOLASTIC RESEARCH

STUDY PROFILE

Evaluation Period: 2009–2010
Grades: 9–12
Assessment: *Scholastic Reading Inventory* (SRI)
Participants: N=20
Implementation: 50 to 110 minutes daily (Standalone or Integrated with *READ 180*)

High school students with physical and mental challenges benefit from *System 44*.

OVERVIEW

Richland School District is a small public school district serving approximately 10,700 students in Washington State. In 2009, the district's student body was largely Caucasian (82%), while most of the remaining students were Hispanic (9%), Asian/Pacific Islander (5%), African American (3%), and Native American (1%). Nearly a third of students (30%) qualified for free or reduced-price lunch, 12% were students with disabilities, and 2% were classified as Transitional Bilingual.

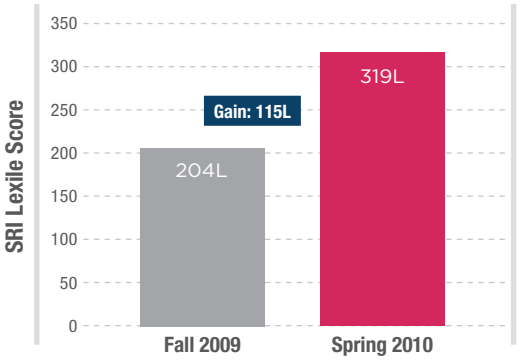
In the fall of 2009, 20 students in Grades 9–12 were identified for placement into *System 44*. Students were selected for inclusion in the program based on a combination of factors including low performance on the Northwest Evaluation Association Measures of Academic Progress (MAP) assessment, *Scholastic Reading Inventory* (SRI), and *Scholastic Phonics Inventory* (SPI). *System 44* was implemented in two high schools. In one high school, it was integrated into an existing *READ 180* program for 100 to 110 minutes each day. In the other high school, *System 44* was used in two Life Skills classrooms serving students with physical and cognitive impairments. In the Life Skills classrooms, a 50- to 55-minute standalone version was used. In all classrooms, students were expected to use the *System 44* software for 20 minutes each day. For the purposes of this study both models were analyzed together.

RESULTS

In order to measure the impact of *System 44* on student achievement, fall 2009 and spring 2010 SRI Lexile (L) data were gathered for the *System 44* students. Findings revealed that, on average, students improved from a pretest score of 204L to a posttest score of 319L, a statistically significant gain of 115L (Graph 1).

GRAPH 1

Richland School District *System 44* Students, Grades 9–12 (N=20) Performance on SRI, 2009–2010



MODESTO CITY SCHOOLS, CA

AUTHOR: SCHOLASTIC RESEARCH

STUDY PROFILE

Evaluation Period: 2009–2010
Grades: 4–11
Assessment: *Scholastic Reading Inventory* (SRI)
Participants: N=74
Implementation: 90 minutes daily (Standalone and Integrated with *READ 180*)

Students with disabilities demonstrate higher performance on SRI.

Western United States

OVERVIEW

Located in California's central valley, Modesto City Schools (MCS) serves approximately 30,600 students in Grades K–12. Approximately 36% of the student population is Hispanic, 29% Caucasian, 7% Asian/ Pacific Islander, 5% African American, 1% Native American, and 2% include other ethnic origins. One-quarter (26%) of students are English language learners (ELL), and 13% are students with disabilities.

During the 2009–2010 school year, MCS implemented *System 44* with students with disabilities in elementary, middle, and high school Special Day Classes (SDC). These students performed at the Below Basic or Far Below Basic performance level on the California Standards Test of English Language Arts (CST ELA) or scored at performance level 1, 2, or 3 on the California English Language Development Test (CELDT). They evidenced low reading comprehension scores on *Scholastic Reading Inventory* (SRI) and difficulty with word-reading skills on *Scholastic Phonics Inventory* (SPI).

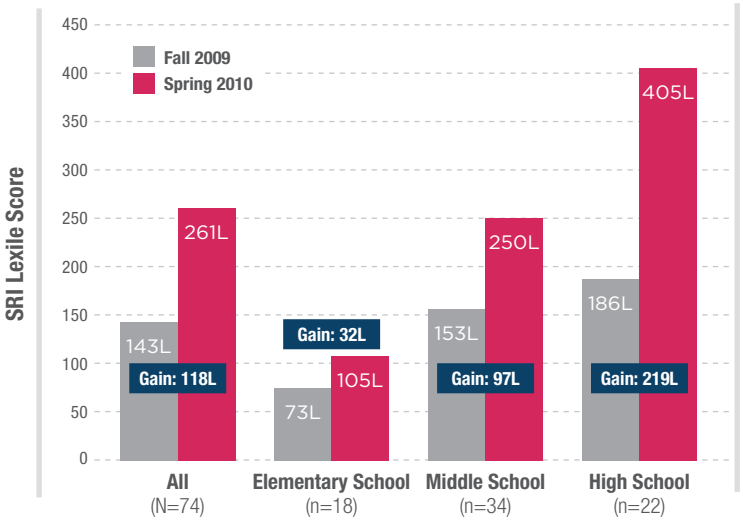
Teachers integrated *System 44* into a 90-minute reading block. In the majority of classrooms, *System 44* was incorporated into the existing *READ 180* program. A standalone version was implemented in the district's Language Academy. In all classrooms, students were expected to use the Software for at least 20 minutes each day.

RESULTS

Fall 2009 and spring 2010 SRI Lexile (L) data were collected from 74 MCS *System 44* students in Grades 4–11. SRI results indicated that on average, *System 44* students improved from a pretest score of 143L to a posttest score of 261L, a statistically significant gain of 118L. As Graph 1 shows, over the course of the school year, elementary, middle, and high school *System 44* students achieved average gains of 32L, 97L, and 219L respectively.

GRAPH 1

Modesto City Schools *System 44* Students, Grades 4–11 (N=74) Performance on SRI by Grade Level, 2009–2010



Note. The gains in Lexile were statistically significant for all students (t=4.73, p.=.00), middle school students (t=2.78, p=.01); and high school students (t=4.21, p=.00). Gains in Lexile are rounded to the nearest integer.

MURRIETA VALLEY UNIFIED SCHOOL DISTRICT, CA

AUTHOR: RMC RESEARCH

STUDY PROFILE

Evaluation Period: 2010–2011

Grades: 4–8

Assessment: California Standards Test of English Language Arts (CST ELA), *Scholastic Phonics Inventory* (SPI)

Participants: N=293

Implementation: 60 minutes daily (Standalone)

▶*System 44* gold standard study reveals significant improvement on word reading fluency and comprehension.

OVERVIEW

Murrieta Valley Unified School District (MVUSD) is located in Murrieta, California, on the southwestern edge of Riverside County. MVUSD serves approximately 22,000 students across 18 schools from Grades K through 12. The majority of MVUSD students are either Caucasian (48%) or Hispanic (33%). Other ethnicities represented include African American (5%), Asian (4%), and Filipino (4%). Four percent are English language learners (ELL) and 11% are students with disabilities. Approximately one-quarter of all students in the district are eligible for free or reduced-price meals.

During the 2010–2011 school year, students from 11 schools in MVUSD were selected to participate in a randomized, controlled study based on a two-tiered screening process. Tier 1 consisted of students who performed below the 50th percentile on the California Standards Test of English Language Arts (CST ELA) and who scored below 600 Lexile (L) measures on *Scholastic Reading Inventory* (SRI). Tier 2 consisted of students who met Tier 1 criteria and also demonstrated foundational reading deficiencies (Beginning or Developing Decoder) on *Scholastic Phonics Inventory* (SPI). Students who met Tier 2 criteria were placed into *System 44* classrooms where they were expected to receive 60 minutes of *System 44* instruction daily.

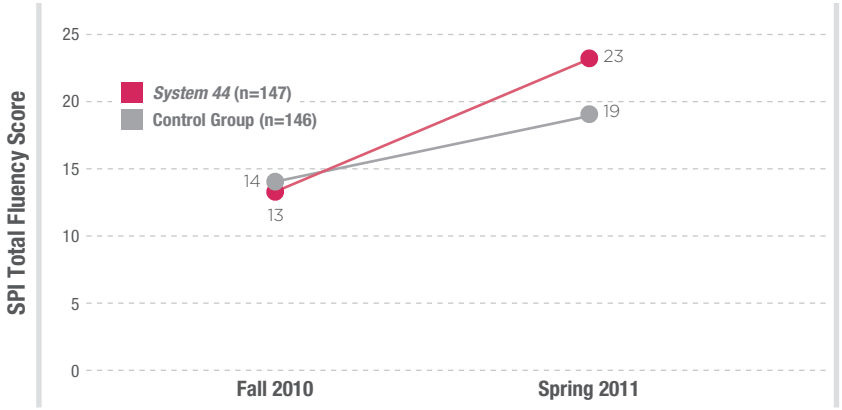
RESULTS

SPI and CST ELA data were collected and analyzed for students who used the program during the 2010–2011 school year. SPI results demonstrated that *System 44* students significantly outperformed control group students in reading fluency (Graph 1). Results from the CST ELA showed a significant increase in the percentage of students who achieved proficiency for both the *System 44* and control group students; however, *System 44* students improved from 11% Proficient in 2010 to 41% Proficient in 2011, whereas control group students improved from 12% Proficient to 32% Proficient (Graph 2).

Additional analyses indicated that Software dosage was significantly related to reading outcomes (Graph 3). Specifically, students who completed 100 or more topics out of a total of 160 *System 44* topics made significantly higher gains than students who completed fewer than 100 topics on Woodcock Johnson III (WJ-III) Word Identification ($p < .05$), SPI Sight Word Fluency ($p < .001$), SPI Nonword Fluency ($p < .001$), and SPI Total Fluency ($p < .001$).

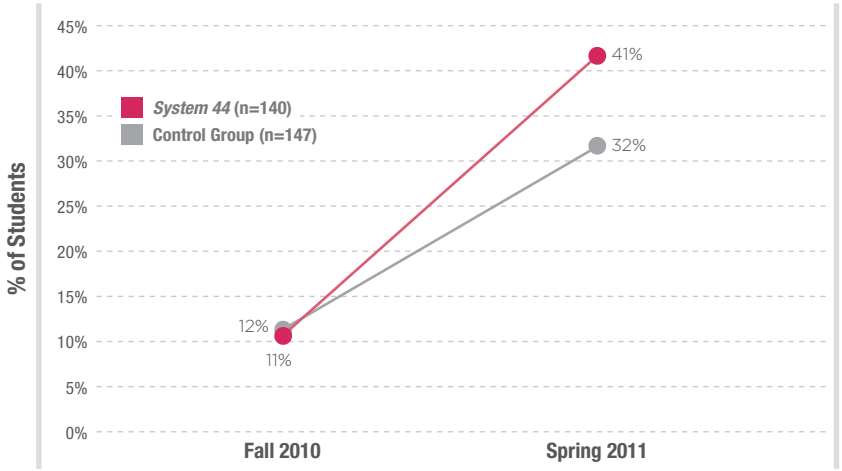
GRAPH 1

Murrieta Valley USD *System 44* and Control Group Students, Grades 4–8 (N=293)
Performance on SPI Total Fluency, 2010–2011



GRAPH 2

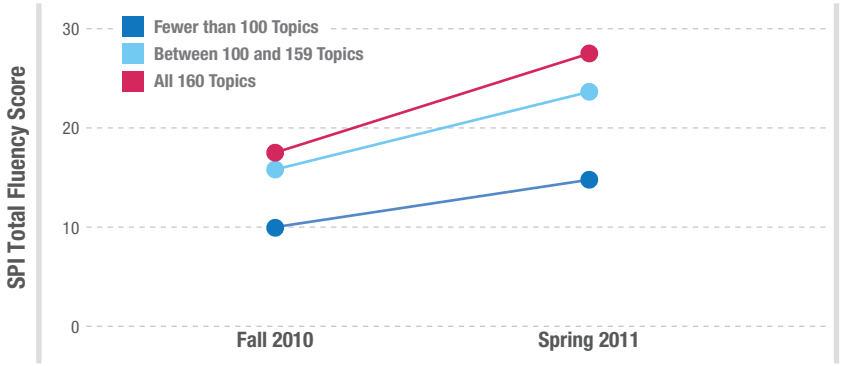
Murrieta Valley USD *System 44* and Control Group Students, Grades 4–8 (N=287)
Percentage of Students Scoring Proficient on CST ELA, 2010 and 2011



Western United States

GRAPH 3

Murrieta Valley USD *System 44* Students, Grades 4–8 (N=172)
SPI Total Fluency Growth as a Function of *System 44* Software Usage, 2010–2011



Note. The sample sizes are as follows: Fewer than 100 Topics Completed (n=43); Between 100 and 159 Topics Completed (n=37); and All 160 Topics Completed (n=92).

NAPA VALLEY UNIFIED SCHOOL DISTRICT, CA

AUTHOR: WHITEBOARD ADVISORS

STUDY PROFILE

Evaluation Period: 2011–2012

Grades: 3–11

Assessment: California Standards Test of English Language Arts (CST ELA), California English Language Development Test (CELDT)

Participants: N=517

Implementation: 30 to 120 minutes daily (Standalone and Integrated with *READ 180*)

Improving outcomes and reducing costs with *System 44* and *READ 180*.

OVERVIEW

Napa Valley Unified School District (NVUSD) is representative of school districts in California and serves 18,078 students in 30 schools. Hispanic students comprise just over half of the student population. Located in a demanding agricultural region, the district also serves a large migrant population.

In the 2011–2012 school year, NVUSD partnered with Scholastic and Whiteboard advisors to investigate the use of *System 44* and *Read 180* with its students in Grades 3 through 11. These programs were chosen by the district as they are among the most researched competency-based reading intervention programs available. Additionally, *System 44* and *READ 180* are designed to support positive behavior interventions and supports (PBIS) that identify and sustain effective school-wide academic and behavioral practices that improve student outcomes. The programs do this by incorporating instructional management routines, classroom engagement, clear goal setting, and rewards that may be implemented in parallel with positive behavior interventions. In these ways, *System 44* and *READ 180* are in line with NVUSD's vision for improving student outcomes while reducing costs.

RESULTS

California Standards Test of English Language Arts (CST ELA) and California English Language Development Test (CELDT) scores were collected and analyzed for both *System 44* and *READ 180* students in Grades 3 through 11 who used the program during the 2011–2012 school year. This study reports out on results among students using *System 44* during the 2011–2012 school year, including 517 students with valid CST ELA data and 444 students with valid CELDT data.

Results from the CST ELA and CELDT demonstrated that students significantly improved their reading comprehension skills after one year of *System 44* (Graph 1). From 2011 to 2012, the percentage of *System 44* students in Grades 3 through 11 scoring Proficient and Above on the CST ELA increased from 6% to 16%, including a jump from 4% to 32% for the district's fourth graders. The CELDT corroborated these gains. Students using *System 44* experienced significant improvements from 2011 to 2012. In 2012, 41% of *System 44* students scored Early Advanced and Above on CELDT, up from 12% in the prior year. Similar results were reported for *READ 180* students[1].

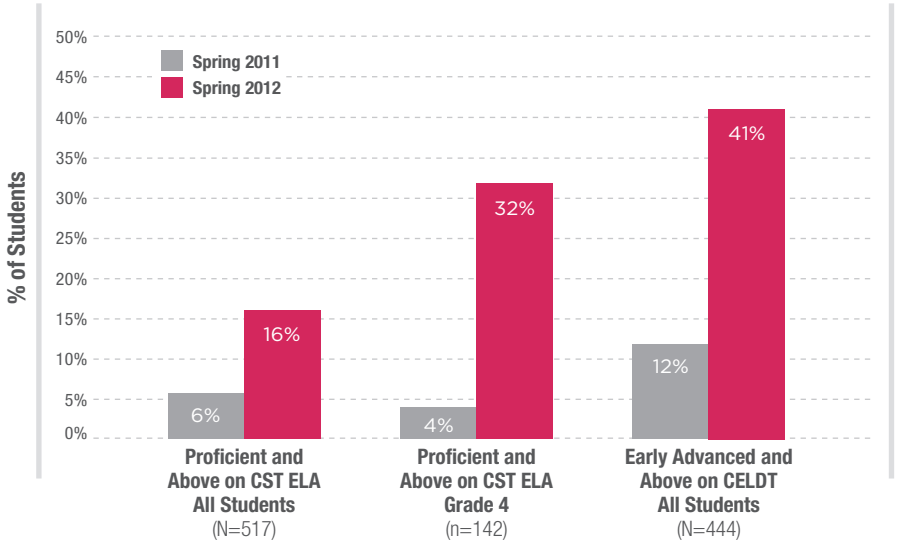
In addition, referral rates, expulsion and suspension data, and financial data were collected and analyzed. The district tracked lower referral rates into special education since using *System 44* and *READ 180* (Graph 2). In 2004 the district recorded 1,164 students with specific learning disabilities. In 2011 that count dropped to 695. This trend allowed NVUSD to reduce its special education caseload, reduce its associated costs for students with specific learning disabilities, and better focus its services on its academic and behavioral priorities.

As part of the positive behavioral intervention program implemented at NVUSD, *System 44* and *READ 180* contributed to improved behavioral outcomes and cost savings (Graph 3). In 2009, the district recorded 58 expulsions. That figure dropped to 26 expulsions in 2012, which represented $188,600 captured by the district. Suspensions days dropped from 4,881 to 2,086 from 2010 to 2012, representing $83,850 that the district would have otherwise lost. The captured funds are reinstated back into NVUSD's program and behavioral priorities.

[1]These results can be found in the *READ 180 Next Generation Compendium* at research.scholastic.com.

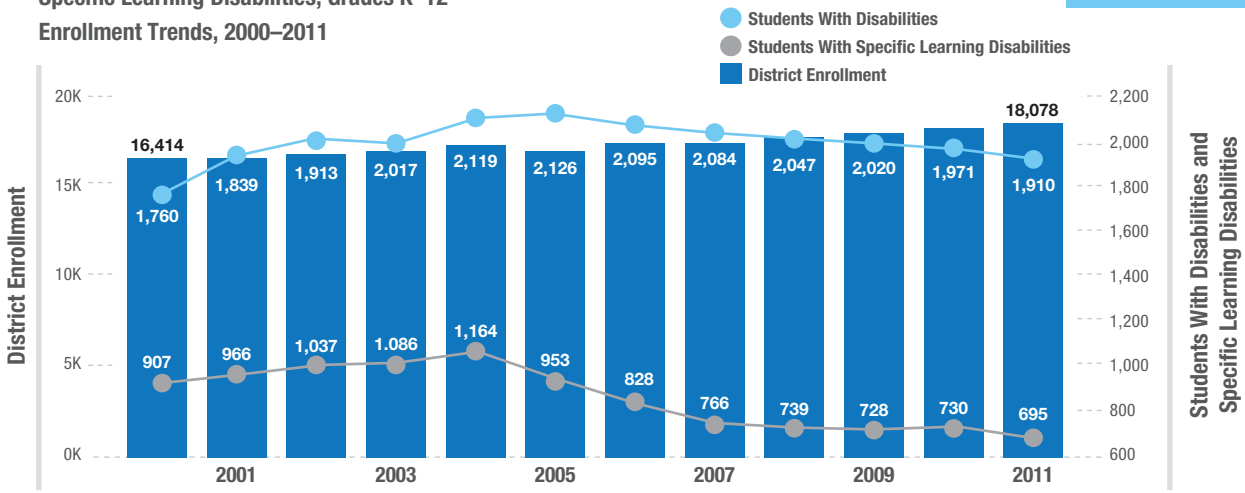
GRAPH 1

Napa Valley Unified School District *System 44* Students, Grades 3–11 (N=517)
Performance on CST ELA and CELDT, 2011–2012



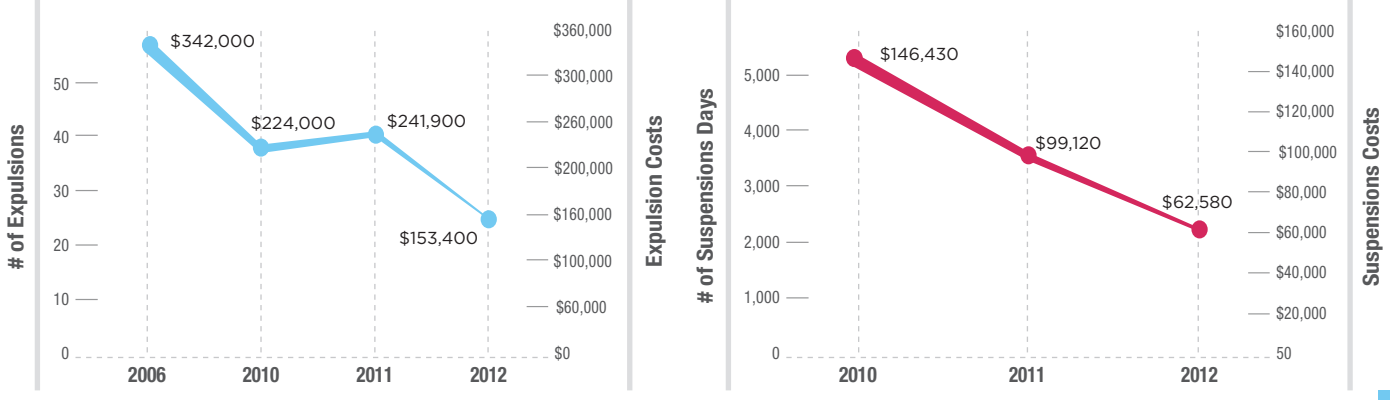
GRAPH 2

Napa Valley Unified School District Students With Disabilities and Specific Learning Disabilities, Grades K–12
Enrollment Trends, 2000–2011



GRAPH 3

Napa Valley Unified School District Students, Grades K–12
Expulsion Counts and Suspension and Costs, 2006–2012



SAN JUAN UNIFIED SCHOOL DISTRICT, CA

AUTHOR: SCHOLASTIC RESEARCH

STUDY PROFILE

Evaluation Period: 2009–2010
Grades: 4–12
Assessment: *Scholastic Reading Inventory* (SRI)
Participants: N=662
Implementation: 90 minutes daily (Integrated with *READ 180*)

OVERVIEW

Located in northeastern Sacramento County, San Juan Unified School District (SJUSD) serves more than 40,000 students in 70 schools. The district's student population is largely Hispanic (17%) and Caucasian (66%). The remaining students are African American (8%), Native American (2%), Asian/Pacific Islander (7%), or represented by other ethnicities (1%). Ten percent of the students are English language learners (ELL), and 36% are eligible for free or reduced-price lunch.

SJUSD introduced *System 44* in the district in 2009 for struggling readers who had not yet mastered foundational reading skills. The district prioritized placement for students with disabilities and ELLs. Students were enrolled if their performance on *Scholastic Reading Inventory* (SRI) and *Scholastic Phonics Inventory* (SPI) indicated that they had difficulty with both reading comprehension and word-reading skills.

During the 2009–2010 school year, *System 44* was incorporated within a 90-minute *READ 180* classroom period. All classes included whole-group and small-group instruction. Students were expected to use the *System 44* instructional software for at least 20 minutes a day.

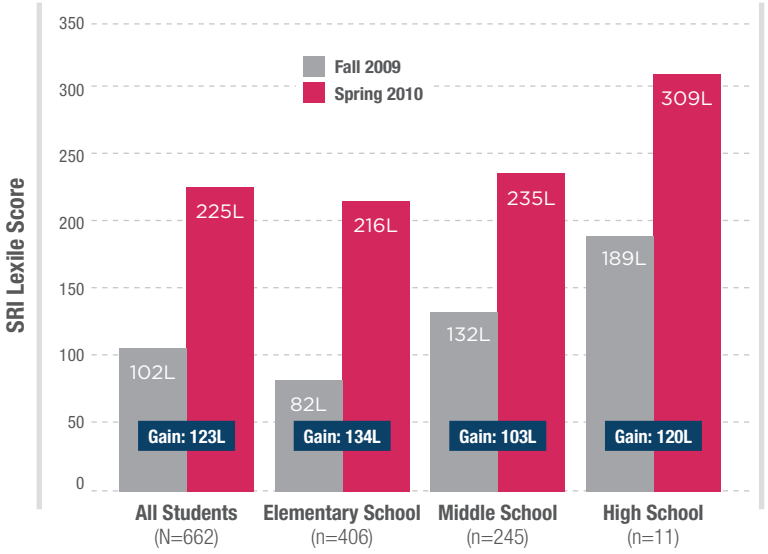
RESULTS

In order to measure the impact of *System 44* on students' reading achievement, fall 2009 and spring 2010 SRI Lexile (L) measures were collected from 662 *System 44* students in Grades 4–12. Results indicate that *System 44* students' reading comprehension skills improved during the school year. Overall, *System 44* students advanced from 102L in 2009 to 225L in 2010, a statistically significant gain of 123L. Elementary, middle, and high school *System 44* students made gains of 134L, 103L, and 120L, respectively (Graph 1). Further analysis showed that students who completed more topics on the *System 44* instructional software demonstrated greater Lexile gains on SRI (Graph 2).

Students with disabilities and English language learners surpass grade-level expectations on SRI.

GRAPH 1

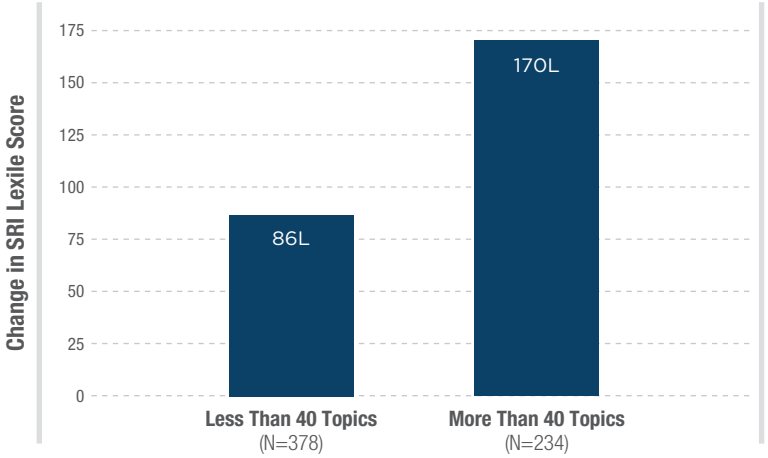
San Juan Unified School District *System 44* Students, Grades 4–12 (N=662)
Performance on SRI by Grade Level, 2009–2010



Note. The gains in Lexile were statistically significant for all students (t=17.11, p=.00), elementary school students (t=15.40, p=.00), and middle school students (t=8.18, p=.00). The high school sample was too small to test for significance.

GRAPH 2

San Juan Unified School District *System 44* Students, Grades 4–12 (N=662)
Change in SRI Lexile Score as a Function of Software Usage, 2009–2010



Note. There was a statistically significant difference in Lexile gains between the two groups as determined by a one-way ANOVA (t=35.63, p=.00).

JEFFERSON COUNTY PUBLIC SCHOOLS, CO

AUTHOR: SCHOLASTIC RESEARCH

STUDY PROFILE

Evaluation Period: 2009–2010
Grades: 7–11
Assessment: *Scholastic Reading Inventory* (SRI)
Participants: N=57
Implementation: 90 minutes daily (Integrated with *READ 180*)

Middle and high school students improve reading skills.

Western United States

OVERVIEW

Jefferson County Public Schools (JEFFCO) is situated in Golden, Colorado, 15 miles west of Denver. It is the largest school district in Colorado, enrolling more than 84,000 students in Grades K–12. The district's student body is 73% Caucasian, 20% Hispanic, 4% Asian/Pacific Islander, 2% African American, and 1% Native American. Twenty-nine percent of students are eligible for free or reduced-price lunch and 9.3% of students are categorized as English language learners.

In the fall of 2009, JEFFCO piloted *System 44* with a small group of students in Grades 7–11. These 57 students were selected to participate based on a number of criteria, including scoring below 400 Lexile (L) measures on *Scholastic Reading Inventory* (SRI) and exhibiting difficulty with word-reading skills on *Scholastic Phonics Inventory* (SPI). Teachers integrated *System 44* into a 90-minute existing *READ 180* program. In all classes students were expected to use the software for 20 minutes per day.

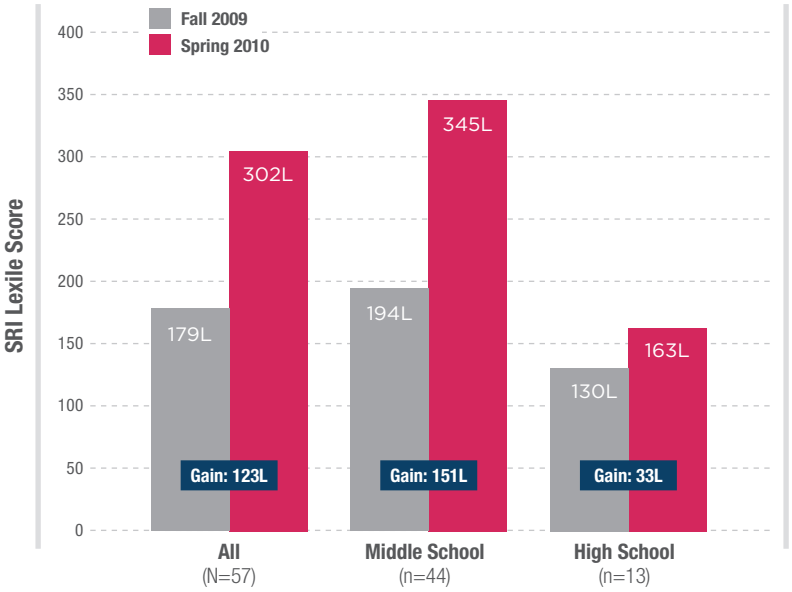
RESULTS

The SRI was administered to 57 *System 44* students in the fall of 2009 and spring of 2010. Findings indicated that these students exhibited improvements in their reading comprehension skills. Overall, *System 44* students advanced from 179L at pretest to 302L at posttest, a statistically significant average gain of 123L (Graph 1). Middle and high school *System 44* students gained 151L and 33L, respectively.

As Graph 2 displays, further analysis showed that students who completed more than 50 topics on the *System 44* Software averaged higher gains on SRI than those who completed fewer topics on the Software (155L vs. 102L).

GRAPH 1

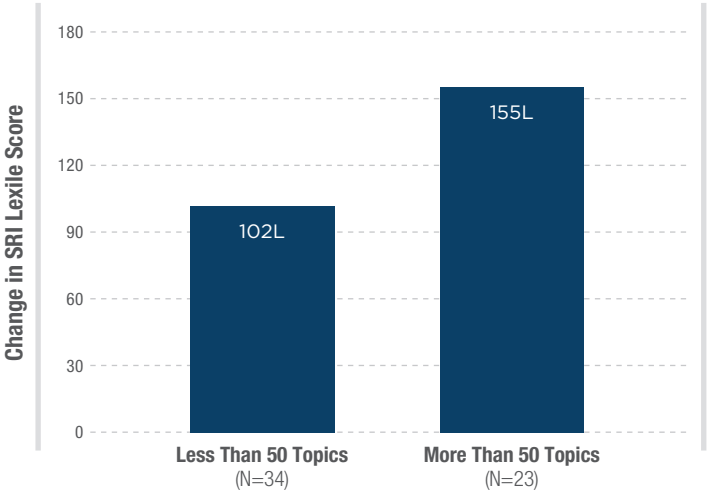
Jefferson County Public Schools *System 44* Students, Grades 7–11 (N=57)
Performance on SRI by Grade Level, 2009–2010



Note. The gains in Lexile were statistically significant for all students (t=5.40, p=.00) and middle school students (t=6.08, p=.01). The high school sample was too small to test for significance.

GRAPH 2

Jefferson County Public Schools *System 44* Students, Grades 7–11 (N=57)
Change in SRI Lexile Score as a Function of Software Usage, 2009–2010



DAVID DOUGLAS SCHOOL DISTRICT, OR

AUTHOR: SCHOLASTIC RESEARCH

STUDY PROFILE

Evaluation Period: 2012–2013

Grades: 6–12

Assessment: Oregon Assessment of Knowledge and Skills (OAKS), *Scholastic Phonics Inventory* (SPI)

Participants: N=280

Implementation: 85 minutes daily or every other day (Standalone and Integrated with *READ 180*)

Middle and high school students demonstrate improved achievement on OAKS.

OVERVIEW

System 44 was implemented during the 2012–2013 school year in David Douglas School District. The district serves approximately 10,538 students at nine elementary schools, three middle schools, and one high school. The district's student population is 43% Caucasian, 25% Hispanic, 15% Asian, 10% African American, 6% Multiracial, 1% Pacific Islander, and <1% Native American. Fourteen percent of students have disabilities, 20% receive English language learner (ELL) and English language development (ELD) services, and 80% are economically disadvantaged.

The district used *System 44* with 309 students in three middle schools and one high school. *System 44* was primarily implemented in the district using a standalone model for 85 minutes each day or every other day. The remaining students used an integrated model with *READ 180* for 85 minutes each day. Of the 309 students enrolled in the program, 280 were included in the analytic sample. Of these students, the majority were Asian (30%) followed by Caucasian (28%), Hispanic (21%), African American (18%), Pacific Islander (2%), and American Indian (1%). Forty-one percent were students with disabilities, and 65% were limited English proficient (LEP).

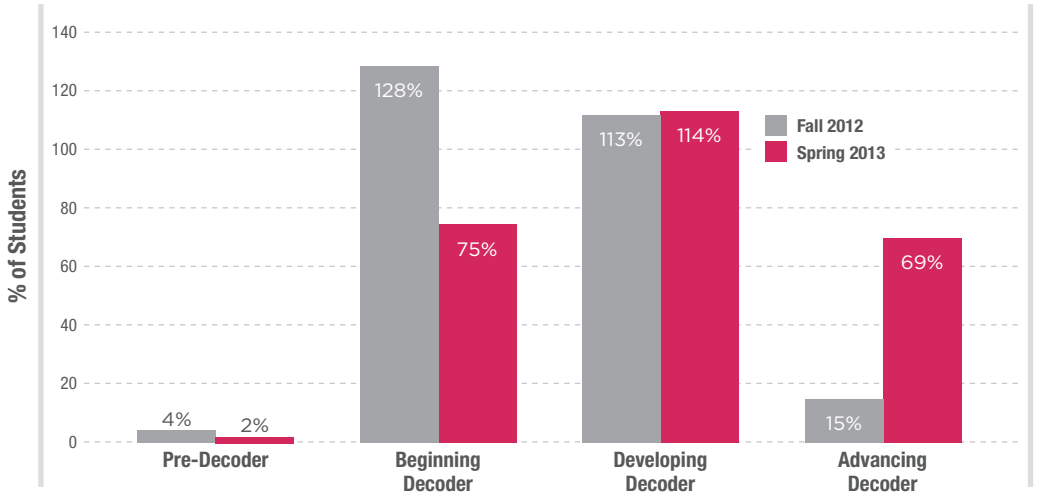
RESULTS

SPI and Oregon Assessment of Knowledge and Skills (OAKS) data were collected and analyzed for students who used the program during the 2012–2013 school year. SPI outcomes showed positive gains for the *System 44* students on measures of decoding and fluency. Analysis of SPI Decoding Status showed that the percentage of *System 44* students identified as Developing Decoder or Advancing Decoder increased from the first SPI assessment to the last; whereas, the percentage of students identified as Pre-Decoder or Beginning Decoder decreased (Graph 1). *System 44* students also made gains in SPI Total Fluency from the first SPI assessment to the last, with over half of students (55%) demonstrating a 4+ point increase in fluency.

Results from OAKS also revealed improvements in *System 44* students' mastery of the Oregon reading standards. As Graph 2 displays, the percentage of students whose performance level was Nearly Meets or Meets increased from spring 2012 to spring 2013; whereas, the percentage of students whose performance level was Low or Very Low decreased from spring 2012 to spring 2013. Eighty-two percent of *System 44* students demonstrated RIT growth on OAKS.

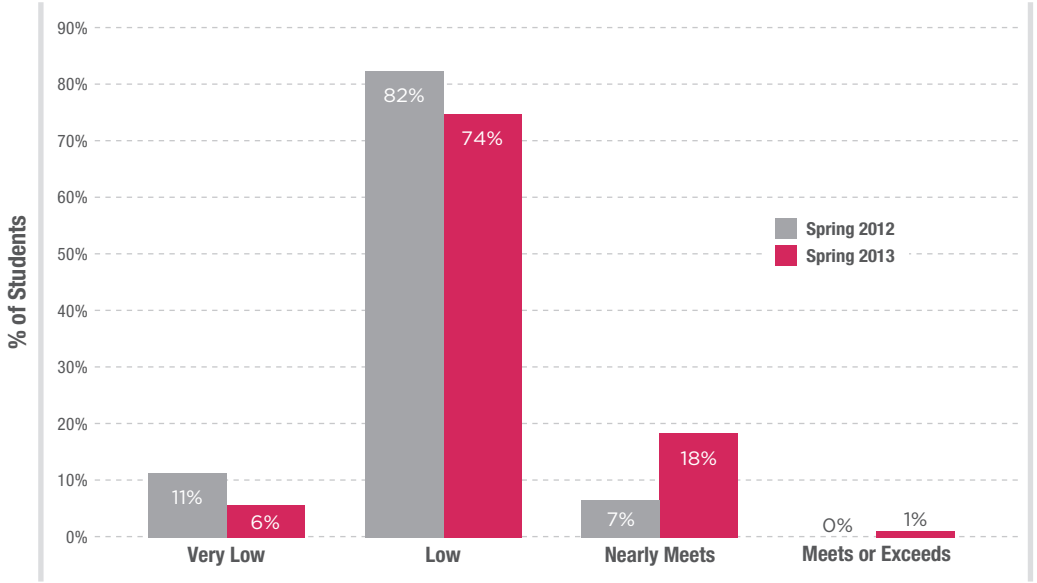
GRAPH 1

David Douglas School District *System 44* Students, Grades 6–12 (N=280)
Performance on SPI by Decoding Status, 2012–2013



GRAPH 2

David Douglas School District *System 44* Students, Grades 6–12 (N=176)
Performance on OAKS, 2012–2013



THREE PUBLIC SCHOOL DISTRICTS: IN, MA, MI

AUTHOR: SCHOLASTIC RESEARCH

STUDY PROFILE

Evaluation Period: 2009–2010

Grades: 3–11

Assessment: Woodcock-Johnson III (WJ III), *Scholastic Reading Inventory* (SRI), *Scholastic Phonics Inventory* (SPI)

Participants: N=170

Implementation: 50 to 90 minutes daily (Standalone)

English language learners demonstrate significant improvement in decoding and word-reading fluency.

OVERVIEW

During the 2009–2010 school year, three public school districts in central Indiana, eastern Massachusetts, and southeastern Michigan piloted *System 44* for their most challenged readers who had not yet mastered basic phonics and decoding skills. Total student enrollment in these three urban districts varied from 12,220 to 16,536 students, representing a diverse mix of English language learners (ELL) and students with disabilities. Across the three districts, a total of 331 students participated in *System 44* during the 2009–2010 school year. Approximately 170 of the 331 *System 44* students were ELLs. The ethnic demographics of the sample varied across the three districts. In the Indiana district, the majority of ELLs were Asian/Pacific Islander (83%) or Hispanic (16%). In the Massachusetts district, a large proportion of the ELLs were Hispanic (87%) and 13% were identified as Multiracial/Other. The ELL population in the Michigan district was 58% Hispanic, 25% Caucasian, 8% African American, 4% Asian/Pacific Islander, and 4% Multiracial/Other.

A total of 170 third- through eleventh-grade ELLs across the three districts comprise the sample in this report. Students were placed into *System 44* if they performed poorly on *Scholastic Reading Inventory* (SRI), and then exhibited poor word-reading skills on *Scholastic Phonics Inventory* (SPI). *System 44* was implemented using a standalone model in all three districts. In one district, *System 44* was implemented in a 60-minute classroom period that started with a 10-minute whole-group introduction, followed by 25-minute rotations on the instructional software and in small-group instruction. In the other two districts, *System 44* classroom periods ranged from 50 to 90 minutes. In all of these classrooms, students participated in whole-group and small-group instruction and were expected to use the software for at least 25 minutes a day. For the purposes of this analysis, all models were analyzed together.

RESULTS

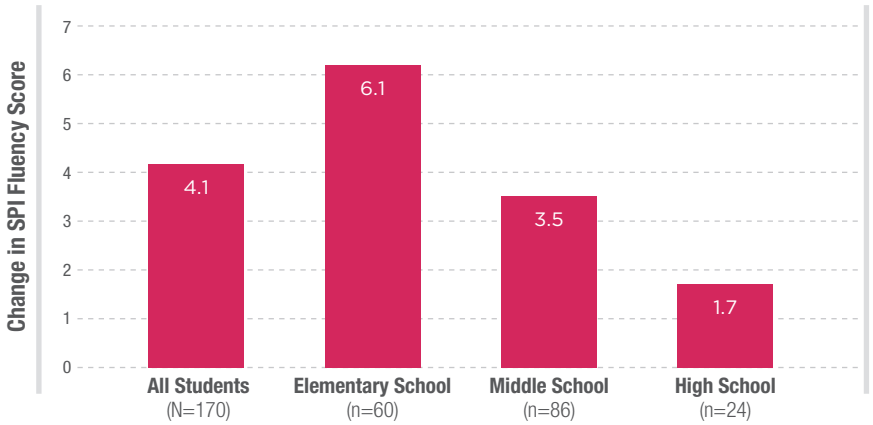
In order to measure changes in reading skills, SPI, Woodcock-Johnson III (WJ III), and SRI data were obtained from 170 elementary, middle, and high school students who used the program during the 2009–2010 school year. Findings indicate that this sample of *System 44* ELLs demonstrated significant improvement in performance on SPI. As shown in Graph 1, ELLs across all grades averaged gains of 4.1 points in Fluency. The elementary school students in the sample averaged a 6.1 point gain in Fluency. Middle school ELLs gained 3.5 points in Fluency, on average, and high school students evidenced a 1.7 point gain in Fluency, though not statistically significant.

System 44 ELLs demonstrated significant improvements on the Basic Reading Skills cluster from the WJ III. Overall, students' mean score was 7 points higher at posttest than at pretest. Students at the elementary, middle, and high school levels averaged significant gains of 4 points, 8 points, and 11 points on the WJ III Basic Reading Skills cluster, respectively (Table 1).

SRI results indicated that on average, *System 44* ELLs also made significant gains in reading comprehension. On average, students improved from 55 Lexile (L) measures at pretest to 148L at posttest, a statistically significant gain of 93L. As Graph 2 indicates, over the course of the school year, elementary school *System 44* ELLs improved 141L over the year, middle school students gained 61L, and high school students improved 52L.

GRAPH 1

Three Public School Districts' *System 44* Students, Grades 3–11 (N =170)
Change in SPI Fluency Score by Grade Level, 2009–2010



Note. The gains were statistically significant for overall Fluency (t=8.20, p=.00), elementary school Fluency (t=7.19, p=.00), and middle school Fluency (t=4.83, p=.00).

TABLE 1

Three Public School Districts' *System 44* Students, Grades 3–11 (N=170)
Performance on WJ III Basic Reading Skills Cluster by School Level, 2009–2010

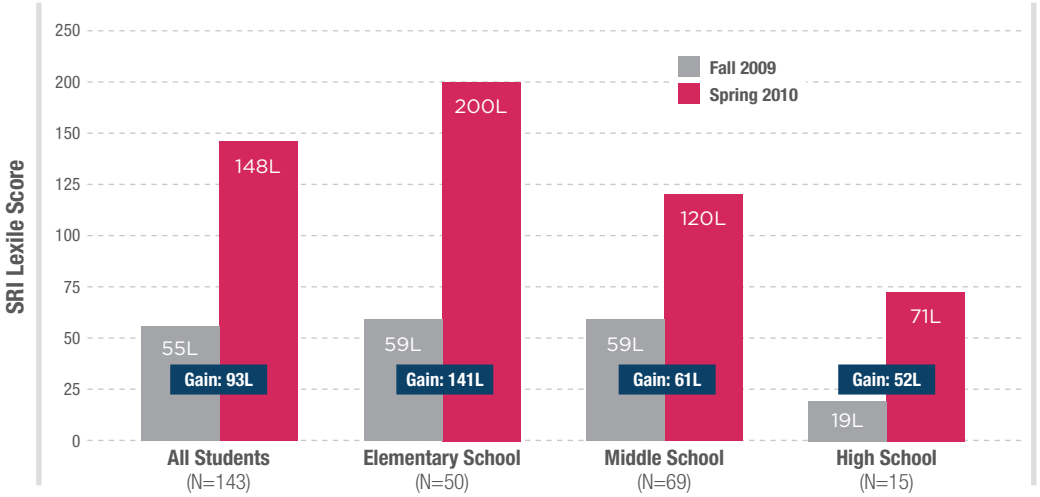
Grade Level	N	Fall WJ III Basic Reading Skills Cluster Standard Score (Percentile)	Spring WJ III Basic Reading Skills Cluster Standard Score (Percentile)	WJ III BRS Gain (Percentile Points)
Elementary	60	83 (13th)	87 (19th)	4
Middle	86	72 (3rd)	80 (8th)	8
High	24	54 (<1)	65 (3rd)	11
All	**170**	**73** (4th)	**80** (9th)	**7**

Note. The increase in score was statistically significant for elementary school (t=3.50, p=.00), middle school (t=5.39, p=.00), high school (t=4.14, p=.00), and overall (t=7.41, p=.00). Standard scores are rounded to the nearest integer.

Multi-Site

GRAPH 2

Three Public School Districts' *System 44* Students, Grades 3–11 (N=143)
Performance on SRI by School Level, 2009–2010



Note. The gain in Lexile score was statistically significant for all students (t=8.08, p=.00), elementary school students (t=10.35, p=.00), middle school students (t=3.72, p=.00), and high school students (t=2.35, p=.03).

THREE PUBLIC SCHOOL DISTRICTS: IN, MA, MI

AUTHOR: SCHOLASTIC RESEARCH

STUDY PROFILE

Evaluation Period: 2009–2010

Grades: 3–11

Assessment: Woodcock-Johnson III (WJ III), Test of Word Reading Efficiency (TOWRE), *Scholastic Reading Inventory* (SRI)

Participants: N=85

Implementation: 50 to 90 minutes daily (Standalone)

Students with disabilities demonstrate significant improvement in decoding and reading achievement.

OVERVIEW

During the 2009–2010 school year, three public school districts in central Indiana, eastern Massachusetts, and southeastern Michigan piloted *System 44* for their most challenged readers who had not yet mastered basic phonics and decoding skills. Total student enrollment in these three urban districts varied from 12,220 to 16,536 students, representing a diverse mix of English language learners (ELL) and students with disabilities. Across the three districts, a total of 331 students participated in *System 44* during the 2009–2010 school year. Of the 85 students with disabilities, 30 (35%) were elementary school students, 35 (41%) were middle school students, and 20 (24%) were high school students. The multi-site sample varied ethnically: 40% of the students were Hispanic, 25% were Caucasian, 25% were African American, and 10% were multiethnic.

A total of 85 *System 44* third- through eleventh-grade students with disabilities across the three districts comprise the sample in this report. Students were placed into *System 44* if they scored below 400 Lexile (L) measures on *Scholastic Reading Inventory* (SRI) and exhibited difficulty with word reading skills on *Scholastic Phonics Inventory* (SPI). A standalone model was used in all three districts. In one district, *System 44* was implemented in a 60-minute classroom period that started with a 10-minute whole-group introduction, followed by 25-minute rotations on the instructional software and in small-group instruction. In the other two districts, *System 44* classroom periods ranged from 50 to 90 minutes. In all of these classrooms, students participated in whole-group and small-group instruction and were expected to use the software for at least 25 minutes a day. For the purposes of this analysis, all models were analyzed together.

RESULTS

Fall 2009 and spring 2010 Woodcock-Johnson III (WJ III), Test of Word Reading Efficiency (TOWRE), and SRI data were gathered from 85 *System 44* students with disabilities. Results showed that the *System 44* students with disabilities revealed significant improvements in both word-reading and reading comprehension skills. After participation in *System 44*, students in the sample averaged a statistically significant standard score gain of 3 points on the Basic Reading Skills (BRS) cluster of the WJ III, a test that measures word identification skills and proficiency in applying phonics and structural analysis to the pronunciation of unfamiliar printed words. Students demonstrated a gain of 2 points on the TOWRE Total Word Reading Efficiency, the subtest that measures students' ability to recognize sight words and "sound out" nonwords (Table 1).

Additionally, an evaluation of changes in grade equivalent scores on the WJ III Basic Reading Skills cluster showed that from 2009 to 2010, the percentage of students with disabilities performing at the fourth-grade equivalent or higher more than doubled, from 11% to 26% (Graph 1). Overall, *System 44* students with disabilities demonstrated a significant improvement in reading comprehension on SRI. On average, the 71 *System 44* students with pretest and posttest SRI Lexile data advanced from 157L in the fall to 241L in the spring, a significant gain of 84L (Graph 2).

TABLE 1

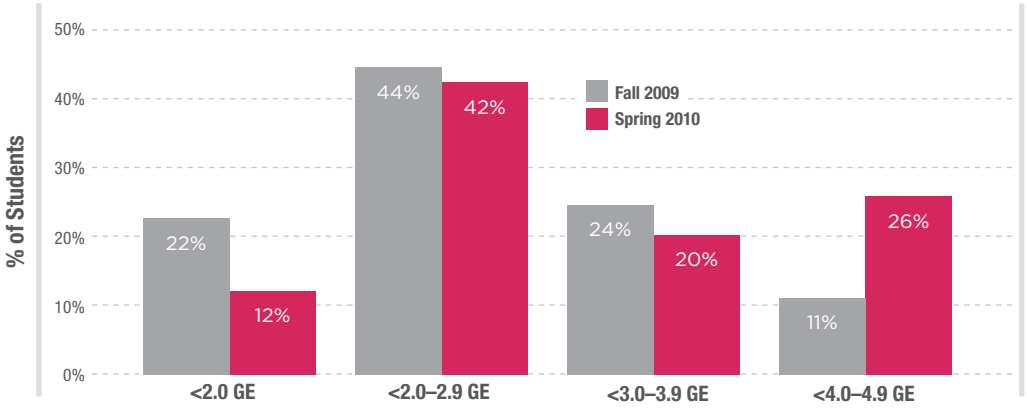
Three Public School Districts' *System 44* Students, Grades 3–11 (N=85)
Performance on WJ III and TOWRE by School Level, 2009–2010

Grade Level	N	Fall WJ III Basic Reading Skills Cluster Standard Score (Percentile)	Spring WJ III Basic Reading Skills Cluster Standard Score (Percentile)	WJ III BRS Gain	Fall TOWRE Standard Score (Percentile)	Spring TOWRE Standard Score (Percentile)	TOWRE Total Gain
Elementary	30	81 (13th)	83 (19th)	+2	76 (5th)	80 (9th)	+4
Middle	35	69 (3rd)	72 (8th)	+3	65	66	+1
High	20	56 (<1)	62 (1st)	+5	61 (3rd)	64 (1st)	+3
All Students With Learning Disabilities	**85**	**70** (4th)	**74** (9th)	**+3**	**68** (2nd)	**71** (3rd)	**+2**

Note. The gains on WJ III and TOWRE are statistically significant (t=5.19, p=.00, and t=4.40, p=.00, respectively).

GRAPH 1

Three Public School Districts' *System 44* Students, Grades 3–11 (N=85)
Grade Equivalent Performance on WJ III Basic Reading Skills Cluster, 2009–2010

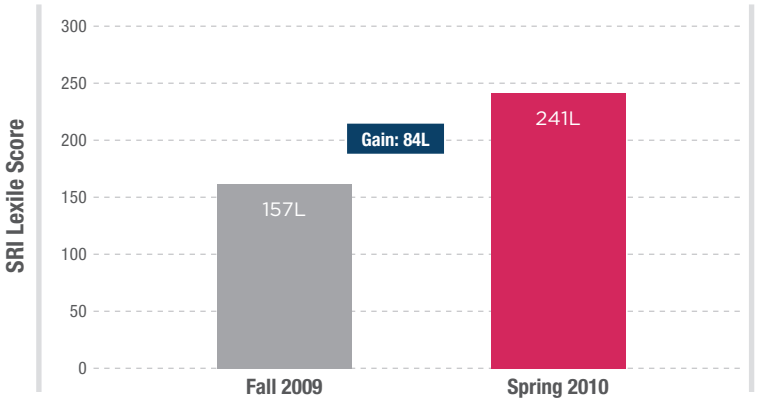


Multi-Site

Note. The increase in percentage of students performing at the fourth-grade equivalent or higher was significant (t=3.34, p=.00).

GRAPH 2

Three Public School Districts' *System 44* Students, Grades 3–11 (N=71)
Performance on SRI, 2009–2010



Note. The increase in Lexile was statistically significant (t=5.41, p=.00).

ASSESSMENT MEASURES

California English Language Development Test (CELDT)

An English skills test is required by law for students in Grades K–12 whose home language is not English. The CELDT is the English skills test given in California. It was developed to identify students with limited English proficiency, determine the level of English language proficiency of those students, and assess the progress of limited English-proficient students in acquiring the skills of listening, speaking, reading, and writing in English. The CELDT results are reported by the following performance levels: Beginning, Early Intermediate, Intermediate, Early Advanced, and Advanced. Results show the overall English performance level attained by students as well as performance in each domain by level.

California Standards Test of English Language Arts (CST ELA)

The CST ELA is given to students in Grades 2–11 as a part of the Standardized Testing and Reporting (STAR) Program. Developed exclusively for California's public schools, the CST ELA provides information that can be used to determine how well students are achieving state content standards. The CST ELA reports students' performance as both a scale score (which can range from 150–600) and as one of five Performance Levels. Each of the five Performance Levels (Far Below Basic, Below Basic, Basic, Proficient, or Advanced) is associated with a range of scale scores for each grade level.

Comprehensive Test of Phonological Processing (CTOPP)

The CTOPP assesses phonological awareness, phonological memory, and rapid naming. It was developed to aid in the identification of individuals from kindergarten through college who may profit from instructional activities to enhance their phonological skills. Results are provided in percentiles, standard scores, and age and grade equivalents.

Florida Comprehensive Achievement Test (FCAT): Reading Test

The FCAT Reading Test is a criterion-referenced test administered to students in Grades 3–11 to measure student progress toward meeting the state benchmarks in English language arts standards. The test measures four key areas: 1) words and phrases in context; 2) main idea, plot, and purpose; 3) comparisons and cause/effect; and 4) reference and research. The FCAT Reading Test provides vertically scaled Developmental Scale Scores (DSS) which range from 0–3000 and allow student progress to be tracked over time.

Florida Oral Reading Fluency (FORF)

The FORF includes grade-level passages that students read aloud for one minute. The score represents the number of words correct per minute (WCPM). The FORF is administered to students in Grades 6–10 who have scored in Level 1 or Level 2 on the prior year's FCAT and is administered three times each year, in the fall, winter, and spring.

The Integrated Louisiana Educational Assessment Program (iLEAP)

Students in Grades 3, 5, 6, and 7 take the state's iLEAP test, which is designed to measure student progress but does not determine whether they will be retained in their current grades. The iLEAP is referred to as an "integrated" LEAP because it combines a norm-referenced test, which compares a student's test results to the performance of students in a national sample, and a criterion-referenced test, which reports student results in terms of the state's standards. The assessment reports students' performance as both a scale score and as one of five Performance Levels (Advanced, Mastery, Basic, Approaching Basic, and Unsatisfactory). The iLEAP tests include mostly multiple-choice questions, but also include some constructed-response items that require students to compose an answer and generally require higher-order thinking.

The Louisiana Educational Assessment Program (LEAP): English Language Arts

The LEAP ELA is a high-stakes test given to fourth- and eighth-grade students. The assessment reports students' performance as both a scale score and as one of five Performance Levels (Advanced, Mastery, Basic, Approaching Basic, and Unsatisfactory). In order to pass the assessment, students must score in the Basic or above performance level.

Northwest Evaluation Association Measures of Academic Progress (NWEA MAP)

MAP consists of computerized adaptive assessments, aligned to national and state curricula and standards, which provide immediate feedback on student progress. Every test item on a MAP assessment corresponds to a value on the RIT Scale. The RIT Scale is a curriculum scale that uses individual item difficulty values to measure growth over time and an equal interval scale that has the same meaning regardless of grade level.

Oregon Assessment of Knowledge and Skills (OAKS)

Partnering with the American Institutes for Research (AIR), the Oregon Department of Education created this online testing system to assess students' mastery of Oregon English Language Arts content standards, as well as mathematics, science, and social studies. The OAKS assessments are criterion-referenced tests that report student performance in each subject using five levels (Exceeds, Meets, Nearly Meets, Low, and Very Low).

Scholastic Phonics Inventory (SPI)

SPI is a computer-based test that is designed to measure fluency for two word-level reading skills: phonological decoding and sight word reading. Phonological decoding fluency is assessed by the speed and accuracy with which pronounceable nonwords are decoded. Sight word fluency is assessed by the speed and accuracy with which high-frequency words are read. An overall accuracy and fluency score reflects the performance for these two skills. SPI contains three equivalent forms for screening and progress monitoring purposes. The software selects the appropriate form automatically; each time a student logs on to take a test, the software delivers a new form. SPI was validated against two forms of the Sight Word Efficiency and the Phonetic Decoding Efficiency Subtets from the Test of Word Reading Efficiciency (TOWRE) (Torgesen, Wagner, & Rashotte, 1999), and the Word Attack and Letter-Word Identification subtests from the Woodcock-Johnson III (Woodcock, McGrew, & Mather, 2001).

Scholastic Reading Inventory (SRI)

SRI is designed to measure how well readers comprehend literary and expository texts. It focuses on the following skills: identifying details in a passage; recognizing cause-and-effect relationships and sequence of events; drawing conclusions; and making comparisons and generalizations. During test administration, the computer adapts the test continually, according to student respon ses. Performance on SRI is reported as a Lexile® (L). The higher a student's score, the more challenging material that student is likely to be able to read and understand. Scores can range from Beginner Reader (less than 100L) to Graduate-School Readers (1500L).

Test of Silent Reading Efficiency and Comprehension (TOSREC)

The TOSREC is a brief group or individually administered test of reading that assesses silent reading of connected text for comprehension. The measure can be used for screening, progress monitoring, and clinical and research purposes. The TOSREC has four test forms at each grade level from first to 10th grade and above. Test forms require respondents to read and verify the truthfulness of as many sentences as possible within three minutes.

Test of Word Reading Efficiency (TOWRE)

The TOWRE is a measure of an individual's ability to pronounce printed words (Sight Word Efficiency) and phonemically regular nonwords (Phonemic Decoding Efficiency) accurately and fluently. The Sight Word subtest requires recognizing familiar words as whole units or "sight words," and the Phonemic Decoding Efficiency subtest measures students' ability to "sound out" nonwords. The TOWRE Total Word Reading Efficiency score is based on the combined performance on the two subtests.

Texas Assessment of Knowledge and Skills (TAKS)

The TAKS Reading test assesses a subtest of the Texas Essential Knowledge and Skills (TEKS), the state-mandated curriculum, and includes a variety of narrative and expository texts. Four objectives are measured: basic text understanding, knowledge of literary elements, analysis using reading strategies, and analysis using critical thinking skills. A student's performance on the TAKS Reading test is reported as both a scale score and a performance level descriptor (Did Not Meet the Standard, Met the Standard, and Commended Performance).

Woodcock-Johnson III (WJ III)

The WJ III Basic Reading Skills (BRS) Cluster score measures a student's ability to identify words and his or her proficiency in applying phonics and structural analysis skills to the pronunciation of unfamiliar printed words.

REFERENCES

National Reading Panel. (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction* (NIH Pub. No. 00-4769). Washington, D.C.: National Institute of Child Health and Human Development.

National Research Council. (1998). *Preventing reading difficulties in young children*. C. E. Snow, M. S. Burns, & P. Griffin (Eds.). Washington, DC: National Academies Press.

Scholastic Research & Validation. (2010). *Northeastern Florida School District Research Update*. New York: Scholastic Inc.

Scholastic Research & Validation. (2011). *Ann Arbor Public Schools Research Update*. New York: Scholastic Inc.

Scholastic Research & Validation. (2011). *Central Indiana School District Research Update*. New York: Scholastic Inc.

Scholastic Research & Validation. (2011). *Lawrence Public Schools Research Update*. New York: Scholastic Inc.

Scholastic Research & Validation. (2011). *Midland Independent School District Research Update*. New York: Scholastic Inc.

Scholastic Research & Validation. (2011). *Three Public School Districts: English Language Learners Research Update*. New York: Scholastic Inc.

Scholastic Research & Validation. (2011). *Three Public School Districts: Students With Learning Disabilities Research Update*. New York: Scholastic Inc.

Scholastic Research & Validation. (2012). *Murrieta Valley Unified School District Research Update*. New York: Scholastic Inc.

Scholastic Research & Validation. (2013). *Saginaw Public Schools Research Update*. New York: Scholastic Inc.

Scholastic Research & Validation. (2014). *Napa Valley Unified School District Research Update*. New York: Scholastic Inc.

Torgesen, J. K. (2002). The prevention of reading difficulties. *Journal of School Psychology, 40*(1), 7–26.

INDEX

Alphabetical Listing of Studies

Ann Arbor Public Schools, MI…16
Atlantic City School District, NJ…20
Bay City Public Schools, MI…15
Bethlehem Area School District, PA…26
Biddeford School Department, ME…14
Central Indiana School District, IN…10
Cypress-Fairbanks Independent School District, TX…36
David Douglas School District, OR…48
Fayetteville Public Schools, AR…30
Jefferson County Public Schools, CO…47
Jefferson Parish Public School System, LA…32
KIPP NYC, NY…22
Lawrence Public Schools, MA…12
Midland Independent School District, TX…38
Modesto City Schools, CA…41
Murrieta Valley Unified School District, CA…42
Napa Valley Unified School District, CA…44
Northeastern Public School District, FL…28
Patchogue-Medford School District, NY…24
Recovery School District, LA…31
Richland School District, WA…40
Saginaw Public Schools, MI…18
Saint James Parish School District, LA…34
San Juan Unified School District, CA…46
Stamford Public Schools, CT…21
Three Public School Districts: IN, MA, MI—
English Language Learners…50
Three Public School Districts: IN, MA, MI—
Students With Disabilities…52

Assessment

California English Language Development Test (CELDT)
Napa Valley Unified School District, CA …44

California Standards Test English Language Arts (CST ELA)
Murrieta Valley Unified School District, CA…42
Napa Valley Unified School District, CA…44

Comprehensive Test of Phonological Processing (CTOPP)
Saginaw Public Schools, MI…18

Florida Comprehensive Assessment Test (FCAT)
Northeastern Public School District, FL…28

Florida Oral Reading Fluency (FORF)
Northeastern Public School District, FL…28

The Integrated Louisiana Educational Assessment Program (iLEAP)
Jefferson Parish Public School System, LA…32

The Louisiana Educational Assessment Program (LEAP): English Language Arts
Jefferson Parish Public School System, LA…32

Northwest Evaluation Association Measures of Academic Progress (NWEA MAP)
KIPP NYC, NY…22

Oregon Assessment of Knowledge and Skills (OAKS)
David Douglas School District, OR…48

Scholastic Phonics Inventory (SPI)
Ann Arbor Public Schools, MI…16
Bethlehem Area School District, PA…26
Central Indiana School District, IN…10
David Douglas School District, OR…48
Fayetteville Public Schools, AR…30
KIPP NYC, NY…22
Lawrence Public Schools, MA…12
Saginaw Public Schools, MI…18
Murrieta Valley Unified School District, CA…42
Patchogue-Medford School District, NY…24
Saginaw Public Schools, MI…18
St. James Parish School District, LA…34
Three Public School Districts: IN, MA, MI—
English Language Learners…50

Scholastic Reading Inventory (SRI)
Ann Arbor Public Schools, MI…16
Atlantic City School District, NJ…20
Bay City Public Schools, MI…15
Bethlehem Area School District, PA…26
Biddeford School Department, ME…14
Central Indiana School District, IN…10
Cypress-Fairbanks Independent School District, TX…36
Jefferson County Public Schools, CO…47
Jefferson Parish Public School System, LA…32
KIPP NYC, NY…22
Midland Independent School District, TX…38
Modesto City Schools, CA…41
Northeastern Public School District, FL…28
Patchogue-Medford School District, NY…24
Recovery School District, LA…31
Richland School District, WA…40
Saginaw Public Schools, MI…18
San Juan Unified School District, CA…46
St. James Parish School District, LA…34
Stamford Public Schools, CT…21
Three Public School Districts: IN, MA, M—
English Language Learners…50
Three Public School Districts: IN, MA, MI—
Students With Disabilities…52

Test of Silent Reading Efficiency and Comprehension (TOSREC)
Saginaw Public Schools, MI…18

Test of Word Reading Efficiency (TOWRE)
Ann Arbor Public Schools, MI…16
Central Indiana School District, IN…10
Lawrence Public Schools, MA…12
Saginaw Public Schools, MI…18
Three Public School Districts: IN, MA, MI—
Students With Disabilities…52

Texas Assessment of Knowledge and Skills (TAKS)
Midland Independent School District, TX…38

Woodcock-Johnson III (WJ III)
Central Indiana School District, IN…10
Lawrence Public Schools, MA…12
Three Public School Districts: IN, MA, MI—
English Language Learners…50
Three Public School Districts: IN, MA, MI—
Students With Disabilities…52

Author

Murrieta Valley Unified School District, CA…42
Napa Valley Unified School District, CA…44
Saginaw Public Schools, MI…18

Disaggragated Results

English Language Learner/Limited English Proficient
Central Indiana School District, IN…10
Jefferson Parish Public School System, LA…32
KIPP NYC, NY…22
Lawrence Public Schools, MA…12
San Juan Unified School District, CA…46
Three Public School Districts: IN, MA, MI—
English Language Learners…50

Ethnicity
Ann Arbor Public Schools, MI…16
Stamford Public Schools, CT…21
Three Public School Districts: IN, MA, MI—
Students With Disabilities…52

Implementation Dosage
Atlantic City School District, NJ…20
Bethlehem Area School District, PA…26
Fayetteville Public Schools, AR…30
Jefferson County Public Schools, CO…47
Lawrence Public Schools, MA…12
Midland Independent School District, TX…38
Murrieta Valley Unified School District, CA…42
Patchogue-Medford School District, NY…24
San Juan Unified School District, CA…46
Stamford Public Schools, CT…21

INDEX

Independent Measure
Ann Arbor Public Schools, MI…16
Central Indiana School District, IN…10
David Douglas School District, OR…48
KIPP NYC, NY…22
Lawrence Public Schools, MA…12
Midland Independent School District, TX…38
Murrieta Valley Unified School District, CA…42
Napa Valley Unified School District, CA…44
Northeastern Public School District, FL…28
Saginaw Public Schools, MI…18
St. James Parish School District, LA…34
Three Public School Districts: IN, MA, MI—English Language Learners…50
Three Public School Districts: IN, MA, MI—Students With Disabilities…52

Students With Disabilities
Bay City Public Schools, MI…15
Biddeford School Department, ME…14
Central Indiana School District, IN…10
Cypress-Fairbanks Independent School District, TX…36
Jefferson Parish Public School System, LA…32
KIPP NYC, NY…22
Midland Independent School District, TX…38
Modesto City Schools, CA…41
Napa Valley Unified School District, CA…44
Recovery School District, LA…31
Richland School District, WA…40
Saginaw Public Schools, MI…18
San Juan Unified School District, CA…46
Three Public School Districts: IN, MA, MI—Students With Disabilities…52

Evaluation Period

2008–2009
Northeastern Public School District, FL…28

2009–2010
Ann Arbor Public Schools, MI…16
Atlantic City School District, NJ…20
Bay City Public Schools, MI…15
Biddeford School Department, ME…14
Central Indiana School District, IN…10
Cypress-Fairbanks Independent School District, TX…36
Jefferson County Public Schools, CO…47
Jefferson Parish Public School System, LA…32
Lawrence Public Schools, MA…12
Midland Independent School District, TX…38
Modesto City Schools, CA…41
Recovery School District, LA…31
Richland School District, WA…40
San Juan Unified School District, CA…46
Stamford Public Schools, CT…21
Three Public School Districts: IN, MA, MI—English Language Learners…50
Three Public School Districts: IN, MA, MI—Students With Disabilities…52

2010–2011
Fayetteville Public Schools, AR…30
Saginaw Public Schools, MI…18
Murrieta Valley Unified School District, CA…42

2011–2012
Bethlehem Area School District, PA…26
Napa Valley Unified School District, CA…44
Patchogue-Medford School District, NY…24
Saginaw Public Schools, MI…18

2012–2013
David Douglas School District, OR…48
KIPP NYC, NY…22
St. James Parish School District, LA…34

Geography

North
Ann Arbor Public Schools, MI…16
Atlantic City School District, NJ…20
Bay City Public Schools, MI…15
Bethlehem Area School District, PA…26
Biddeford School Department, ME…14
Central Indiana School District, IN…10
KIPP NYC, NY…22
Lawrence Public Schools, MA…12
Patchogue-Medford School District, NY…24
Saginaw Public Schools, MI…18
Stamford Public Schools, CT…21

South
Cypress-Fairbanks Independent School District, TX…36
Fayetteville Public Schools, AR…30
Jefferson Parish Public School System, LA…32
Midland Independent School District, TX…38
Northeastern Public School District, FL…28
Recovery School District, LA…31
St. James Parish School District, LA…34

West
David Douglas School District, OR…48
Jefferson County Public Schools, CO…47
Modesto City Schools, CA…41
Murrieta Valley Unified School District, CA…42
Napa Valley Unified School District, CA…44
Richland School District, WA…40
San Juan Unified School District, CA…46

Multi-Sites
Three Public School Districts: IN, MA, MI—English Language Learners…50
Three Public School Districts: IN, MA, MI—Students With Disabilities…52

Implementation

Flexible Model
Atlantic City School District, NJ…20
Bay City Public Schools, MI…15
Bethlehem Area School District, PA…26
Biddeford School Department, ME…14
Central Indiana School District, IN…10
KIPP NYC, NY…22
Lawrence Public Schools, MA…12
Midland Independent School District, TX…38
Napa Valley Unified School District, CA…44
Patchogue-Medford School District, NY…24
Richland School District, WA…40
Stamford Public Schools, CT…21
Three Public School Districts: IN, MA, MI—English Language Learners…50
Three Public School Districts: IN, MA, MI—Students With Disabilities…52

Integrated Model with *READ 180*
Bethlehem Area School District, PA…26
David Douglas School District, OR…48
Fayetteville Public Schools, AR…30
Jefferson County Public Schools, CO…47
Jefferson Parish Public School System, LA…32
KIPP NYC, NY…22
Modesto City Schools, CA…41
Napa Valley Unified School District, CA…44
Northeastern Public School District, FL…28
Richland School District, WA…40
San Juan Unified School District, CA…46
St. James Parish School District, LA…34
Stamford Public Schools, CT…21

Standalone Model
Ann Arbor Public Schools, MI…16
Atlantic City School District, NJ…20
Bay City Public Schools, MI…15
Bethlehem Area School District, PA…26
Biddeford School Department, ME…14
Central Indiana School District, IN…10
Cypress-Fairbanks Independent School District, TX…36
David Douglas School District, OR…48
Fayetteville Public Schools, AR…30
Jefferson Parish Public School System, LA…32
KIPP NYC, NY…22
Lawrence Public Schools, MA…12
Midland Independent School District, TX…38
Modesto City Schools, CA…41
Murrieta Valley Unified School District, CA…42
Napa Valley Unified School District, CA…44
Northeastern Public School District, FL…28
Patchogue-Medford School District, NY…24
Recovery School District, LA…31
Richland School District, WA…40

St. James Parish School District, LA…34
Stamford Public Schools, CT…21
Three Public School Districts: IN, MA, MI—English Language Learners…50
Three Public School Districts: IN, MA, MI—Students With Disabilities…52

Elementary School

Ann Arbor Public Schools, MI…16
Atlantic City School District, NJ…20
Bay City Public Schools, MI…15
Bethlehem Area School District, PA…26
Biddeford School Department, ME…14
Central Indiana School District, IN…10
Cypress-Fairbanks Independent School District, TX…36
Fayetteville Public Schools, AR…30
Lawrence Public Schools, MA…12
Midland Independent School District, TX…38
Modesto City Schools, CA…41
Murrieta Valley Unified School District, CA…42
Napa Valley Unified School District, CA…44
Patchogue-Medford School District, NY…24
Recovery School District, LA…31
Saginaw Public Schools, MI…18
San Juan Unified School District, CA…46
St. James Parish School District, LA…34
Stamford Public Schools, CT…21
Three Public School Districts: IN, MA, MI—English Language Learners…50
Three Public School Districts: IN, MA, MI—Students With Disabilities…52

Middle School

Ann Arbor Public Schools, MI…16
Atlantic City School District, NJ…20
Bay City Public Schools, MI…15
Biddeford School Department, ME…14
Central Indiana School District, IN…10
Cypress-Fairbanks Independent School District, TX…36
David Douglas School District, OR…48
Fayetteville Public Schools, AR…30
Jefferson County Public Schools, CO…47
Jefferson Parish Public School System, LA…32
KIPP NYC, NY…22
Lawrence Public Schools, MA…12
Midland Independent School District, TX…38
Modesto City Schools, CA…41
Murrieta Valley Unified School District, CA…42
Napa Valley Unified School District, CA…44
Northeastern Public School District, FL…28
Saginaw Public Schools, MI…18
San Juan Unified School District, CA…46
St. James Parish School District, LA…34
Three Public School Districts: IN, MA, MI—English Language Learners…50
Three Public School Districts: IN, MA, MI—Students With Disabilities…52

High School

Central Indiana School District, IN…10
Cypress-Fairbanks Independent School District, TX…36
David Douglas School District, OR…48
Fayetteville Public Schools, AR…30
Jefferson County Public Schools, CO…47
Jefferson Parish Public School System, LA…32
Lawrence Public Schools, MA…12
Midland Independent School District, TX…38
Modesto City Schools, CA…41
Napa Valley Unified School District, CA…44
Richland School District, WA…40
San Juan Unified School District, CA…46
Three Public School Districts: IN, MA, MI—English Language Learners…50
Three Public School Districts: IN, MA, MI—Students With Disabilities…52

Research Design

Randomized Controlled Trial (Gold)

Murrieta Valley Unified School District, CA…42
Saginaw Public Schools, MI…18

Scholastic Research Publications

Research Updates

Ann Arbor Public Schools, MI…16
Central Indiana School District, IN…10
Lawrence Public Schools, MA…12
Midland Independent School District, TX…38
Murrieta Valley Unified School District, CA…42
Napa Valley Unified School District, CA…44
Northeastern Public School District, FL…28
Saginaw Public Schools, MI…18
Three Public School Districts: IN, MA, MI—English Language Learners…50
Three Public School Districts: IN, MA, MI—Students With Disabilities…52

No part of this publication may be reproduced in whole or in part, or stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without written permission of the publisher. For information regarding permission, write to Scholastic Inc., 557 Broadway, New York, NY 10012.

Copyright © 2014 by Scholastic Inc.

All rights reserved. Published by Scholastic Inc. Printed in the U.S.A.

SCHOLASTIC, READ 180, RBOOK, POWERED BY SAM, LBOOK, SYSTEM44, and associated logos are trademarks and/or registered trademarks of Scholastic Inc. LEXILE and LEXILE FRAMEWORK are registered trademarks of MetaMetrics, Inc. IPAD is a registered trademark of Apple Inc. Other company names, brand names, and product names are the property and trademarks of their respective owners.

	6.3b	3) Provide evidence of alignment of the school's curriculum to mission, vision and philosophy
The Schools mission and vision is tightly aligned to Ohio's Model Curricula which was developed to ensure college and career readiness, 21st century preparedness and global citizenship. Individualized instruction steeped in technology and based on mastery of the standards furthers this alignment.		

6.3c Curriculum Alignment

The curriculum that a school provides must be aligned with Ohio's New Learning Standards for English/Language Arts, Math, Science, Social Studies and other content areas provided in the school. With strong evidence and great detail, each of the items below should be addressed.

Curriculum Alignment with Ohio's New Learning Standards	**6.3c**	**1) Provide evidence of the curriculum's alignment to Ohio's New Learning Standards.**

Consistent with the School's mission, vision, and educational philosophy, the School program will implement the Ohio Model Curriculum, aligned with Ohio's Revised Academic Content Standards based on the Common Core State Standards. This state-aligned, empirically-proven curriculum, coupled with a Highly Qualified Staff and a project-based learning model, will empower students to take charge of their own education.

	6.3c	**2) Provide a detailed description of the development process for curriculum maps and pacing guides used in your school.**

Using Ohio Model Curricula frameworks, teachers will have guidance on what to teach and when to teach specific content. Instructional materials are reviewed each year by a committee of experienced teachers and the Director of Curriculum to assure alignment with Common Core and Model Curricula. Pacing guides will be developed to match Model Curricula framework. Curriculum Resource evaluation and review is conducted annually by a committee of experienced teachers and administrators headed by the COO. Student assessment data is used to evaluate resource effectiveness. Scales, maps and pacing guides are reviewed annually and adjustments are made as appropriate.

Curriculum evaluation and review is conducted annually by a committee of experienced teachers headed by the COO using the following process; Building a Common Core Based Curriculum © 2014 Solution Tree Press • solution-tree.com

1. Become familiar with the organization of the CCSS. Print each unpacked standard skill on a 1" × 2" adhesive mailing label.
2. Place each standard skill label on a 3" × 3" color-coded sticky note. Designate one color per domain or strand. For example, all of the Reading: Literature skills can be on yellow notes, all of the Reading: Information Text skills can be on pink sticky notes, and so on.
3. Create timeframe charts for each grade level or course—for example, quarter one, quarter two, quarter three, and quarter four—as well as a "parking lot" chart. Beginning with the high-priority skills, work in grade-level teams to determine the order in which specific skills are optimally taught and assessed. Take into consideration how skills progress and build on one another. As you work, place sticky notes on the appropriate timeframe chart. If you can't decide where to place a particular skill in the timeframe, put on the parking lot chart for further discussion.
4. Provide ample time for debate as team members identify where they believe 85 percent of students will master the specific skills. The sticky

notes are easily moved, clustered, and, in some cases, modified to include additional notes based on collaborative teacher discussions. These changes, which occur for the following reasons, should be made directly on the sticky note:

a. The standard or skill is to be repeated (taught and reassessed in later bi-quarters or quarters). Be sure to write on the sticky note exactly when it will be repeated.
b. The standard or skill needs further analysis or unpacking.
c. The standard or skill needs further clarification.
d. Additional information needs to be added to increase the rigor of the skill.
e. The priority identification needs to be changed; perhaps a skill should have its prioritization removed or upgraded.

5. Once the skills are paced, sketch out how to group skills into conceptual chunks to begin the foundation for unit design and individual maps. The large charts will serve as your workspace for establishing the focus and pacing of the CCSS concepts and skills by grade level.

Guidelines for Unpacking and Analyzing Standards

1. Make sure each skill statement is a complete skill statement on its own. Do not stray from the language written in the standards.
2. Underline the action verb in the CCSS skill statements, as this verb will dictate the level of rigor the standard requires. Are there any questions regarding the expected level of rigor?
3. You can include anecdotal or clarifying information following the standard skill statement. If you include this type of information, follow this format: Notes: Example:
4. Determine if the specific standard skills are clear as written or if unpacking is needed.
    a. If unpacking is needed, add a, b, and c or other types of designators to the dot notation to represent the separation of skills.
    b. Be cautious of over-unpacking (breaking the standard down into many small skills that no longer reflect how the standard would realistically be taught and assessed) or under-unpacking (keeping the standard too large and cumbersome to be realistically taught or assessed during one lesson).
5. Be clear in your understanding of how this standard would be taught and assessed.

	6.3c	3) Explain what specific Information is to be included in model unit and lesson plan template and rationale.

The components that all units and lessons plans should have are as follows:

- Standards and measurable objectives
- Access prior knowledge
- Input – Direct Instruction and Differentiation

- Modeling
- Structured Practice
- Guided Practice
- Independent Practice
- Closure – Repetition of Objectives

This format includes researched based practice from Marzano Research, Direct Interactive Instruction and Madeline Hunter.

The teaching staff will work over the summer and during their planning period to develop unit and lesson plans using the approved template. The lesson plans will include differentiation techniques, tier 2 and tier 3 activities, support of SWD and ELLs, the lesson plans will be reviewed by the administrator weekly and available for review upon request. It should be noted that these lesson plans are a guide for instruction but are often revised as a result of formative assessment that occurs on a daily basis.

6.3d Instructional Delivery Methods and Resources/Materials

Instructional methods and resources are the ways and tools used to deliver the curriculum. *What strategies or techniques will be used to engage students in learning? What instructional resources and materials will the teachers and students be using, including technology?* With strong evidence and great detail, each of the following items should be addressed.

Instructional Delivery Methods	**6.3d**	**1) Explain in detail the instructional delivery methods, strategies, and/or techniques (i.e., high yield instructional practices, project based learning, blended learning, etc.) that will be used to provide daily instruction in your school.**

The plan described in our Educational Model address all of the research above providing a literacy rich program focused on individualized instruction, Inquiry-Based Learning and authentic assessment. The extended school day and school year will assist students who are two or more grade levels behind. Using the inquiry process student learning will be individualized and differentiated.

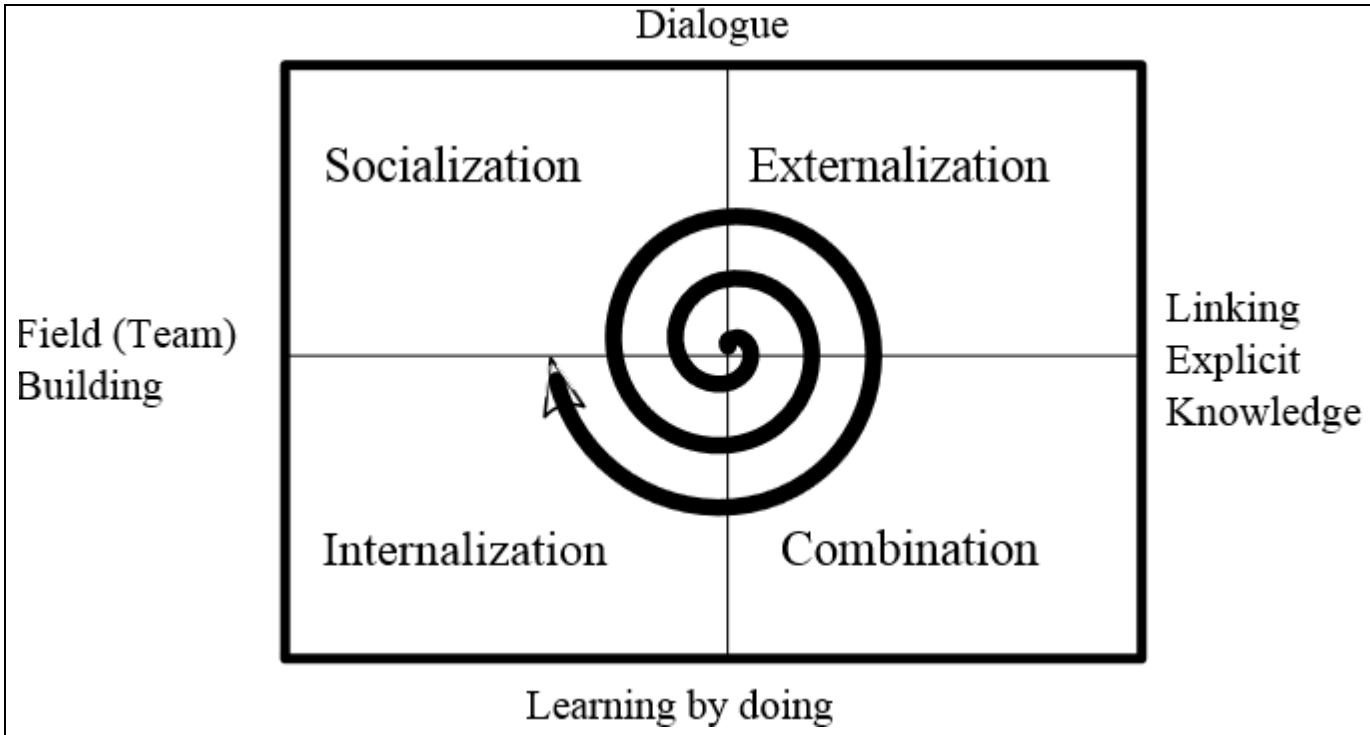
Students will use a variety of ways to learn the content dependent on the age, grade and need of the child. Teachers will use Robert Marzano's research in classroom instruction and student assessment to guide their lesson planning and to inform their lesson design. Constructivism will be used as a paradigm or worldview and ascertains that learning is an active, constructive process. The learner is an information constructor. People actively construct or create their own subjective representations of objective reality. New information is linked to prior knowledge, thus mental representations are subjective. Two of the key concepts within the constructivism learning theory are accommodation and assimilation. Assimilating occurs when a child begins to incorporate new experiences into their old experiences. This creates a situation in which a child develops a new outlook, learns from prior misunderstandings, and participates in self-reflection ultimately altering their perceptions. Accommodation, on the other hand, is reframing the world and new experiences into

the mental capacity already present. Individuals conceive a particular fashion in which the world operates. When things do not operate within that context, they must accommodate and reframing the expectations with the outcomes. (Marzano Classroom Instruction that Works)

The role of the teacher is very important within the constructivism learning theory. Instead of giving a lecture, the teachers in this theory function as facilitators whose role is to aid the student as they strive to come to their own understanding. This takes away focus from the teacher and lecture and puts it on the student and their learning. The resources and lesson plans that must be initiated for this learning theory take a very different approach from traditional learning. Instead of telling, the teacher must begin asking. Instead of answering questions that only align with the curriculum, the facilitator in this case must make it so that students come to the conclusions on their own instead of being told. Also, teachers are continually in conversation with the students, creating the learning experience that is open to new directions depending upon the needs of the student as the learning progresses. Teachers following Piaget's theory of constructivism must challenge the students by making them effective critical thinkers and not being merely a "teacher" but also a mentor, a consultant, and a coach. This theory allows students to drive their own educational experience. (Bruner, J. (1980). Actual Minds, Possible Worlds. Harvard University Press)

The Mastery-Based Education and Inquiry Based Learning Model will be utilized to implement the constructivist theory and will address the needs of students whose learning styles and socialization skills do- not fit comfortably in the conventional classroom. This instructional model will engage the population the School serves increasing student retention, creating successful students and engaging them in real life, 21st century learning.

Project Based Learning allows students go through an extended process of inquiry in response to a complex question, problem, or challenge constructing their learning and internalizing concepts. Rigorous projects help students learn key academic content and practice 21st century skills such as collaboration, communication and critical thinking. The academic experience is seen as a progression, where students build upon their skills from one grade level to the next.



The Knowledge Spiral as described in "The Knowledge-Creating Company - How Japanese Companies Create the Dynamics of Innovation" (Nonaka, Takeuchi, New York Oxford 1995)

In Kindergarten, the School's philosophy is that teaching will be more than teaching facts and skills; teaching will encompass teaching children about learning itself, and giving them the mental tools that will enable them to learn on their own. Children will use learning plans that will allow them to construct the work they will accomplish in their independent activity centers, where they are to create a work product and be accountable for their own work constantly reflecting on their own learning and evaluating their progress. Teachers provide, context, guide student learning, and ensure they have completed the activity necessary to master the standards.

Grades 1-3 will build upon the skills learned in Kindergarten through the implementation of Project Based Learning combined with a well defined literacy framework that incorporates intervention and enrichment and is aligned to the common core standards using best practice for early literacy that combines guided reading with writing across the content. The program will emphasize the foundational skills required to be successful academically along with an enriching environment for students to demonstrate mastery of their learning objectives. In Project Based Learning, students go through an

extended process of inquiry in response to a complex question, problem, or challenge. Rigorous projects help students learn key academic content and practice 21st Century Skills such as collaboration, communication and critical thinking. Balanced Literacy incorporates all reading approaches realizing that students need to use numerous devices in order to become proficient readers. It provides and improves the skills of reading, writing, and thinking, speaking and listening for all students. A Balanced Literacy program not only balances the reading philosophies, it also balances reading and writing instruction. In our literacy program, students read in order to write and write in order to read. Science, art, music and social studies will be presented through cross disciplinary units guided by the inquiry process.

In grades 4-5, Project Based Learning will continue to be utilized, building upon the basic skills developed in the primary grades. An increased dependence on technology will require all students to have a solid foundation in the 21st Century skills. An emphasis on design and problem solving in the classroom will allow students to use cross-disciplinary tools for discovery and for developing solutions to problems that are open-ended (allowing for interpretive steps, rather than highly structured patterns). The teacher will provide students with an understanding of the relationships of cross-curricular areas as they are used in the real world beyond the classroom walls. Instead of separating content into individual curriculum “silos,” the School will provide the students with the integrative tools of investigation and analysis. Consequently, the classroom shifts students away from learning isolated facts, to experience-based inquiry with major opportunities for independent learning. Using design as a framework for instruction has been heralded as a means to advance academic abilities, creativity, and learning. Teachers will require students to participate in solving (age-appropriate) problems that encourage original research.

In grades 6-8, students will experience Project Based Learning with full curricular integration. This classroom environment is entered with a culminating academic past of experiences that will move these students to the next level. These students have gone through all phases from K-5 that will truly enhance and provide students with all the necessary skills to become successful 21st century learners that will perform proficient or above on state assessments regardless of their socio economic backgrounds. This environment has high expectations of learning and collaboration. Students who need intervention in reading will be given a double dose of reading instruction using scholastics Read 180 and Expert 21 to bring them up to grade level. Cross curricular integration of content will be continued.

Students will use a variety of ways to learn the content dependent on the age, grade and need of the child. The school will use Marzano’s research in classroom instruction and student assessment to guide their lesson planning and inacol standards to inform their lesson design bleding technology into every aspect of the content delivery. The school will use Constructivism as a paradigm or worldview posits that learning is an active, constructive process. The learner is an information constructor. People actively construct or create their own subjective representations of objective reality. New information is linked to prior knowledge, thus mental representations are subjective. Teachers following Piaget's theory of constructivism must challenge the student by making them effective critical thinkers and not being merely a "teacher" but also a mentor, a consultant, and a coach.

The School employs a standards-based curriculum enhanced with teacher created lessons. According to the US Department of Education (www.ed.gov/sbe2012), Standards-based education is a process for planning, delivering, monitoring and improving academic programs in which clearly defined academic content standards provide the basis for content in instruction and assessment. Standards help ensure students learn what is important,

rather than allow textbooks to dictate classroom practice. Additionally, student learning is the focus - aiming for a high and deep level of student understanding that goes beyond traditional textbook-based or lesson-based instruction.

A standards-based system:

- Measures its success based on student learning (the achievement of standards) rather than compliance with rules and regulations.
- Aligns policies, initiatives, curriculum, instruction, and assessments with clearly defined academic standards.
- Consistently communicates and uses standards to focus on ways to ensure success for all students.
- Uses assessment to inform instruction.
- Standards-based systems increase student achievement.
- Learning is constant time is variable
- Teachers know what the standards are and choose classroom activities and teaching strategies that enable students to achieve the standards.
- Students know the standards, too, and can see scoring guides that embody them. The students can use them to complete their work.
- Parents know them and can help students by seeing that their homework aligns with the standards.
- Administrators know what is necessary to attain the standards and provide professional development, resources and materials to ensure that students are able to reach the prescribed standards.

Students are further engaged through project-based learning. Students are presented with real world problems and issues and called upon to use all of their existing skills and knowledge to find possible solutions to the problems or a variety of resolutions to an issue. Students are free to explore and discover situations and solutions using any tool that is available to them and will rely on textbooks, computers, various forms of media, and each other to acquire the critical thinking skills that they will need in the future. It is an effective method to differentiate instruction in a full inclusion classroom of students with different abilities. The classroom is no longer a structured setting where students will be sitting and listening to instruction. Children are free to move around as their projects dictate and movement is a key component as the students participate in various forms of hands on learning. For example students are exposed to math manipulatives to allow them to see problems in a new way.

Classrooms are set up in centers where students can work either by themselves or in cooperative groups. Students' mastery of a subject is accentuated as they teach each other. Groups of students can work on different aspects of a problem and then work to explain to each other how the solutions were derived. Peers mentor and share ideas and problem solving techniques. The schools are truly striving to prepare the leaders of the 21st Century.

Project-based learning functions as a bridge between using English in class and using English in real-life situations outside of class (Fried-Booth, 1997). It does this by placing learners in situations that require authentic use of language in order to communicate (e.g. working in teams) (Stein, 1995). When

learners work in pairs or in teams, they find they need communication skills to plan, organize, negotiate, make their points, and arrive at consensus about issues such as which tasks to perform and who will be responsible for each task.

Project-based learning is a model in collaborative learning. Within the group, work integral to successful projects, individual interests, strengths and preferred ways of learning (reading, writing, listening, speaking or modeling) are fully utilized, engages and motivates each individual, and strengthens the work of the team as a whole (Lawrence, 1997). In this way, students at risk, those with disabilities, and those with low levels of language proficiency develop 21st century skills while improving their understanding of academic content.

The overall purpose of literacy instruction is to provide students with a differentiated instructional program which will support the reading and writing skill development of each individual.

However, teaching comprehension of text is one of the five essential elements of the balanced literacy approach to reading instruction. The teacher begins every lesson by activating students' prior knowledge (schema) through discussion and continues this throughout the lesson to help students make connections to other books as well as their own experiences.

Children are taught to use comprehension strategies including:

- Sequencing
- Relating background knowledge
- Making inferences
- Comparing and contrasting
- Summarizing
- Synthesizing
- Problem-solving
- Distinguishing between fact and opinion
- Finding the main idea and supporting details

During the Reading and Writing Workshop teachers use scaffolded instruction as follows:

- Teacher modeling or showing kids what a good reader does when reading a text, thinking aloud about the mental processes used to construct meaning while reading a book aloud to the class.
- Guided practice gradually gives the students more responsibility with the teacher stepping in to help as needed. Students practice a

comprehension strategy during discussion in a large group or in smaller groups with peers.

▪ Independent practice where children begin to work alone while reading books by themselves, conferencing individually or in small groups with the teacher to make sure they are using a comprehension strategy correctly.

▪ Application of the strategy is achieved when the students can correctly apply comprehension strategies to different kinds of texts and are no longer just practicing but are making connections between and can demonstrate understanding through writing or discussion.

Throughout this process, students' progress from having a great deal of teacher support to being independent learners. The teacher support is removed gradually as the students acquire the strategies needed to understand the text by themselves.

Similarly Math instruction will be individualized and differentiated; Do the math will be integrated into the My Math Resource using the Math Workshop model described below.

Math Workshop Model

Number Study
Time to explore and practice
how numbers work

Content Lesson (My Math)
Whole group differentiated lesson
addressing grade level standards
through problem solving
• Introduction
• Exploration
• Summarization

High Teacher Support

Small-Group Support (Do the Math)
• Students grouped by need for a given strategy
• Reinforce/reiterate content lesson
• Intervention (e.g., *Do The Math*)

Workstations Independent, partner/small group activities (choice, just-right levels, routines and extensions)
• Problem Solving and/or Math Writing
• Activities/Games/Exploration
• Technology Integration
• Practice

Low Teacher Support

Conferencing
(teacher talking one-on-one with students)
Student interview to identify conceptual understanding and misconceptions

	6.3d	2) Provide evidence of the research base for these delivery methods, strategies, and/or techniques.

Included in response in 6.3c

Resources and Materials	**6.3d**	**3) Explain the selection, approval (including board) and change process for instructional resources and materials to be used by teachers and students, including technology.**

The EMO's curriculum team evaluates the relevance and effectiveness of the existing curriculum based upon achievement and performance data, staff reports and the identification of gaps in ability to support the core standards. The team researches other curriculum resources that can fill the gaps and help the School achieve better performance. When curriculum pieces that meet the criteria are identified, a pilot program is conducted with select staff at select locations. The staff and students piloting the curriculum provide feedback on its efficacy. If the curriculum team believes that the piloted curriculum fits student and staff needs moving forward, information regarding the curriculum and the pilot program is presented to the School's governing board. With board approval, and subsequent sponsor approval, the curriculum is then selected. Curriculum pieces that are not successful, based on pilot criteria, are not selected for presentation, and nothing else is done with them.

Technology changes are based upon technology needs in relation to the curriculum software, communication requisites and assessment requirements. If the School's technology does not effectively meet those requirements, the EMO develops a process for upgrading or modifying the technology to meet the identified needs. The EMO continually monitors the state of the School's bandwidth, connectivity, software and hardware, making adjustments where needed.

6.3d Continuous Improvement and Professional Growth **Schools must improve instructional practices and student performance on a continual basis. With strong evidence and great detail, each of the following items should be addressed**.		
Continuous Improvement	**6.3d**	**1) Describe the continuous improvement plan cycle to be implemented by identified critical roles/teams (i.e., CSLT, TBTs, etc.) with shared accountability for:** **a) collecting, monitoring and sharing multiple measures of student achievement and progress,** **b) reviewing and revising curriculum, including maps, pacing guides, model unit,** **c) evaluating the effectiveness of and identifying needs related to instructional strategies, resources and materials, including technology.** **d) evaluating the effectiveness of the school's leadership structure (CSLT, TBTs, etc.).**

The School embraces the Ohio Improvement Process ("OIP") and Teacher Based Team ("TBT") represents all of the stakeholders to create and monitor school improvement goals. The team meets twice a month to review academic and operational issues and progress toward goals, reviewing data and evaluating student progress. The members of this team include teachers, staff, administration, and may include representatives of the sponsor, representatives from the state support team and outside coaches. Systematic processes engage each member of the organization in an ongoing cycle of:

- Gathering evidence of current levels of student learning
- Developing strategies and ideas to build on strengths and address weaknesses in that learning
- Implementing those strategies and ideas
- Analyzing the impact of the changes to discover what was effective and what was not
- Applying new knowledge in the next cycle of continuous improvement

The goal is not simply to learn a new strategy, but instead to create conditions for perpetual learning—an environment in which innovation and experimentation are viewed not as tasks to be accomplished or projects to be completed but as ways of conducting day-to-day business—forever. Job embedded coaching, formative feedback from walkthroughs and individualized professional development plans create a system of life long learning and fosters professional growth. Student data is also evaluated to inform coaching visits and provide growth opportunities. Using the Marzano High Reliability Schools Model and The Scholastic Framework For Walk-throughs the OTES process is enriched. Participation in this process is not reserved for those designated as leaders; rather, it is a responsibility of every member of the organization. Schools Leaders first complete walk-throughs under the advisement of Marzano and Scholastic's team. The results of the walk through are discussed and calibrated ensuring that the leaders are formatively not punitively assessing the classroom teacher. Feedback is immediate and meaningful. Teachers are provided with support through modeling and coaching and are then reassessed. Teachers who are strong are then used to conduct peer walk-throughs and review lessons and units. This feedback is also immediate. For staff who need further development co-teaching and performance improvement plans become an option.

All of the members of the School's Team realize that all of their efforts in these areas—a focus on learning, collaborative teams, collective inquiry, action

orientation, and continuous improvement—must be assessed on the basis of results rather than intentions. Unless initiatives are subjected to ongoing assessment on the basis of tangible results, they represent random grouping in the dark rather than purposeful improvement. As Peter Senge and colleagues conclude, "The rationale for any strategy for building a learning organization revolves around the premise that such organizations will produce dramatically improved results."

This focus on results leads each team to develop and pursue measurable improvement goals that are aligned to school goals for learning. It also drives teams to create a series of common formative assessments that are administered to students multiple times throughout the year to gather ongoing evidence of student learning. Team members review the results from these assessments in an effort to identify and address program concerns (areas of learning where many students are experiencing difficulty). They also examine the results to discover strengths and weaknesses in their individual teaching in order to learn from one another. Most importantly, the assessments are used to identify students who need additional time and support for learning. Frequent common formative assessments represent one of the most powerful tools.

The School uses Teacher-Based Teams who perform a peer review of units, lessons, assessments and scales. This team uses the scales and curriculum maps to ensure overall alignment of the curriculum to facilitate the progress of all students toward mastery of standards. Student data is reviewed for trends in mastered and non-mastered standards, barriers to student success and the identification of staff development needs.

The School's administrative team meets weekly with the Executive Director of School Improvement to discuss issues that impact the day-to-day operation of the School, plan for upcoming school events, testing and reporting, work with the enrollment team to ensure smooth transition and onboarding, and update the Principal about the efforts of their respective areas of supervision.

Ohio Teacher Evaluation System (OTES)	**6.3d**	**2) Confirm implementation of the Ohio Teacher Evaluation System (OTES) or an approved/aligned alternative Teacher Evaluation System.**

The School will continue to use the Ohio Teacher Evaluation System ("OTES") as initiated in the 2013-2014 school year. The Administrators will be trained to use OTES to evaluate the teachers. The School will follow the attached ODE's Implementation Document.

Ohio Principal Evaluation System (OPES)	**6.3d**	**3) Confirm implementation of Ohio Principal Evaluation system and Ohio Superintendent Evaluation system (if applicable) or an approved/aligned alternative principal evaluation system.**

The School will continue to use the Ohio Principal Evaluation System ("OPES") as initiated in the 2013-2014 school year. The Executive Director of School Improvement will use OPES to evaluate the Administrators as will several other district personnel.

LPDC and Resident Educator	**6.3d**	**4) Discuss development and implementation of Local Professional Development Committee, including bylaws, committee membership, roles and responsibilities, processes and procedures, Individual Professional Development Plan (IPDP) template, etc.** **5) Discuss implementation of Ohio's Resident Educator Program in the school. (i.e., mentoring process, meetings, monitoring of work completed, etc.)**

2015-2016 St. Aloysius Sponsorship Contract Education Plan Attachment

The School will employ the DuFour Model of A Professional Learning Community, which is a collaboration of teachers, administrators, parents, and students who work together to seek out best practices, test them in the classroom, continuously improve processes, and focus on results.

Characteristics of a Professional Learning Community:

- Shared mission, vision, values, and goals
- Collaborative teams
- Collective inquiry
- Action orientation/experimentation
- Commitment to continuous improvement
- Results orientation

Resident Educator Program:

Teachers with a 5-year Professional License and 5 years of teaching experience with recent classroom experience within the last 5 years will be trained as Resident Educator mentors.

Teachers with a two-year Provisional License that has been renewed two or more times and 5 years teaching experience with recent classroom experience within the last 5 years will be trained as Resident Educator mentors.

The2015-2016 Resident Educator Mentor stipend for all divisions (Academies, Life Skills and OHDELA) will be as follows These will increase by 25.00 per year:

RE-1	**RE-2**	**RE-3 not taking the RESA**	**RESA**
$350 per RE mentored	$200 per RE mentored	$200 per RE mentored	$350 for being a RESA Facilitator – not per RESA candidate.
Administrators may not be mentors for any staff for whom			

they have any supervisory responsibility. **Administrators and Assistant Administrators receive no stipend for RE's mentored.**			

The Academies Local Professional Development Committee:

Each of The Academies is part of The Academies LPDC Consortium (LPDC).

The role of the LPCD is to oversee the renewal of professional licenses. All teachers and administrators must present required Professional Development Plans (IPDPs), credentials and documentation to the committee, which checks for verification.

Each of The Academies teaching staff elects a teacher representative and an alternative representative to the LPDC. In addition, Academy principals elect two principal representatives to serve on the committee. An additional member is appointed by The Academies' superintendent to serve on the committee. Members are selected annually. Teacher representatives may continue to serve for consecutive terms so long as their building staff approves.

The Committee selects a Chairperson, Vice-Chairperson and Secretary from its membership. The Chairperson and Vice-Chairperson each serves a term of 2 years. The Secretary serves a term of one year.

The 2014-2015 Academies LPDC Consortium consists of members representing the following schools:

- Broadway Academy
- Chapelside Cleveland Academy
- East Academy
- Garfield Academy

- Lincoln Park Academy
- HOPE Academy Northcoast Campus
- HOPE Academy Northwest Campus
- Pearl Academy and Pearl Academy Lakewood
- Riverside Academy
- Southside Academy
- University Academy
- West Park Academy
- Woodland Academy

The Committee Chair establishes the meeting schedule held September through June. Typically, regularly scheduled meetings are held in September, January or February, and May during regular school hours. Additional meetings may be scheduled as needed.

Committee Members:

- Serve as reviewers of Professional Development Plans (IPDPs) for license renewals and suggest adjustments to professional growth plans for license renewals as needed.
- Assist in communicating with licensed staff in their buildings about the operation of the LPDC, including giving Committee updates to the staff following LPDC meetings (distribution and display of meeting minutes).
- Communicate with teachers about their IPDPs, committee approval and suggested adjustments as needed.
- Review requests for pre-approval of professional development units and college credit units that a teacher submits toward license renewals.

The Committee Chairperson:

- Establishes the annual meeting calendar, sets meeting agenda and presides at all LPDC meetings.
- Ensures that the LPDC and IPDP processes and procedures are followed.
- Serves as the IPDP and license appeals process contact and liaison.
- Ensures confidentiality of information

· Facilitates the review of Committee By-Laws and lists of approved professional development units and college credits units pre-approved for license renewals, as needed, to assure By-Laws and pre-approved units are up-to-date.

The Committee Vice-Chairperson:

· Fills in for the duties of the Committee Chairperson in the event of the Chairperson's absence

The Committee Secretary:

· Works with the Committee Members at the direction of the Chairperson to ensure that LPDC and IPDP processes and communication are followed

· Records meeting minutes and distributes them to Committee Members

· Maintains an up-to-date listing of Committee Members names, school buildings, email addresses and telephone numbers.

Resident Educator

The number of teaching staff involved in the Resident Educator Program varies from year to year. The number of Resident Educators who are Resident Educatory Summative Assessment (RESA) candidates varies from year to year.

The number of certified mentors and RESA facilitators varies from year to year. Teachers who hold 5-year professional licenses or 2-year Provisional Licenses that have been renewed for 2 or more years and who have five years teaching experience and recent classroom experience within the last five years qualify to be certified as Resident Educator Mentors.

Mentors and RESA Facilitators are assigned Resident Educators and RESA Candidates as appropriate for their schedules. Mentors can work with one or more Resident Educators depending on the Resident Educator's Year in the program and the Mentor's schedule. The role of the Mentor differs for Year 1 to Years 2-4 Resident Educators. RESA Facilitators typically work with up to 10 RESA candidates.

For the 2014-2015 school year, schools sponsored by St. Aloysius had 24 Resident Educators working with 14 mentors/facilitators. Note: Each year the number of candidates who successfully complete the Resident Educator year varies from the Resident Educators registered due to staff turnover, the candidate's ability to complete the tasks and processes for the Resident Educator year, and the candidate's decision to not complete the Resident Educator year for personal reasons.

2015-2016 St. Aloysius Sponsorship Contract Education Plan Attachment

Professional Development Plan	6.3d	6) Discuss process for development of a differentiated professional development plan informed by student data, curriculum needs, OTES, OPES, IPDPs, Resident Educator Program, etc.

The LPDC and Administrator will use a variety of data and review teacher submitted artifacts to support the individual needs of the teacher. Student data, walk through data, and self reflection will all be used. Student data, Admin Walk through and observation data and staff reflection will drive individualized professional development planning. This data will be reviewed with teachers and monthly, quarterly and annual goals for growth will be developed and monitored by the admin. A combination of one on one whole group web based and job embedded coaching using the same I do we do you do model that we use with our students. The length and intensity of the coaching is dependent on the data collection described above. The focus for year one and year two will focus on refletive teaching and literacy and math instruction. Reflective teaching means looking at what you do in the classroom, thinking about why you do it, and thinking about if it works - a process of self-observation and self-evaluation. The coaches from Marzano's Lab will use the data collected from teacher surveys, classroom observation, student data and lesson plans to individualize the professional development. The Schoolwill partner with members of the Scholastic Achievement Partners (SAP) team, allowing SAP consultants to provide professional learning and support for iRead, System 44 Next Generation, READ 180 Next Generation, and Expert 21, observe classes in action, deliver model lessons, and facilitate seminars and other professional learning sessions. The goal will be to further educate teachers and leaders about effective reading skills, with a special emphasis on improving instruction and implementing the literacy framework, and using student data to determine PD need. A professional development path will include in-person foundational professional learning, as well as in-classroom support which can be differentiated per building based on need.

Each teacher will use the Ohio IPDP plan template focusing on 3-5 goals for your professional development learning. Within each goal, include three distinct aspects: (1) intention to engage in learning; (2) focus for learning; and (3) rationale for & application of learning. Indicate which Ohio Educator Standard(s) each goal reflects. (See sample goal below.) Sample Goal: I will increase my knowledge of strategies to manage groups of students in order to improve classroom discipline. Educator Standards: Teacher Standard #1, Teachers understand student learning & development and respect the diversity of the students they teach. Teacher Standard #5, Teachers create learning environments that promote high levels of learning & achievement for all students.

6.3e Prevention and Intervention Policy

***A Comprehensive System of Learning Support Guidelines, an Ohio State Board of Education approved document,* provides direction for foundation and intervention services to students to assist with the development of necessary systems to meet the unique needs of students. Appropriate implementation of the guidelines will result in schools meeting or exceeding ORC 3313.6012 requirements to (1) provide diagnostic assessment procedures, (2) provide intervention services based on the results of the diagnostics, (3) collect data regularly, and (4) use the data to evaluate the effectiveness of the interventions.**

Prevention and Intervention Plan	**6.3e**	**1) Describe the school's educational services policy, plan and procedures to provide early detection and intervention with students experiencing learning and other problems, and address the needs of ALL students (i.e., limited English proficient, gifted, Third Grade Reading Guarantee). Plan must include intervention for all students not found proficient or "Not on Track" for any of the following assessments:** **a) Ohio's Next Generation of Assessments;** **b) Ohio Graduation Test;** **c) Third Grade Reading Guarantee Diagnostic Assessments** **d) Kindergarten Readiness Assessment (KRA);** **e) or the current assessment system required by ODE.**

The school will use KRA, SRI, a mutually agreed upon assessment that meets the requirements of the ODE such as NWEA MAP, PARCC and EOC exams to inform the RTI team's work and will be recorded on a series of forms. These forms and processes are attached to this response. The EMO will contract with Learn-It systems to provide related services and Interventions Specialists. Charter schools have a higher population of students with disabilities and it is anticipated that this school will have a greater than 20% population of students who require services.

Identification of Students with Disabilities

When students enroll in the School, information will be obtained from the parent/guardian, student, or school of last attendance regarding prior placement in a special education program. IEPs will be reviewed upon enrollment and updated to be in compliance with the provisions of Ohio's state standards.

The Intervention Specialist(s) and the School's Administrator will be responsible for the general supervision of the identification, location, and evaluation activities/services for students that are identified as, or suspected of, being disabled and for the provision of a Free and Appropriate Public Education ("FAPE") to Exceptional Education Students attending the School.

The Response to Intervention, IEP and 504 teams will consist of the Intervention Specialist, Psychologist, General Education Teacher, the student with

special needs and the student's parents or guardians. The team will work together to develop an education plan for all students providing leveled supports and interventions as appropriate.

The School will implement Response to Intervention ("RtI") protocol for any student at risk for poor learning outcomes. All staff will be trained on RtI, if they have not had training, and continually trained to stay current with RtI. Training will include monitoring student progress, evidence-based interventions available to staff, and how to adjust intensity and nature of interventions depending on student's response. Tier one classroom interventions for any student will be completed in the general education classroom by the teacher using adaptations and accommodations to the standard curriculum.

Students who indicate a need for interventions beyond what was tried by the classroom teacher in level one and who do not have a diagnosed disability will be referred to the team who, using the RtI protocol, will put level two interventions into place. The team determines timelines for monitoring RtI. If the interventions in place are not decreasing the student's achievement gap, the student is evaluated by a multidisciplinary team to determine if they have a special need that would call for level three interventions requiring an IEP or 504 service plan. If at any time a student is not meeting academic expectations, any staff member can call on the support of the RTI Team and begin a series of interventions critical to student success.

Pursuant to federal and state regulations, in particular the Least Restrictive Environment Mandate ("LRE"), all students work in the general education classroom with highly qualified staff for all or part of their day. According to the IEP specifications, students will also be given the opportunity to work in small groups or one-on-one with a qualified special education teacher either in a resource room or within the general education setting. Students have a continuum of specialized services and curriculum. The continuum begins with full general education immersion and ends where appropriate for the individual student, up to all academic time in a resource room with all specialized curriculum. A large variety of curriculum is available for scaffolding student understanding in order to access the general education curriculum as appropriate as part of FAPE. Qualified special education teachers monitor student progress, regularly sending reports to parents on a schedule determined by the IEP. The special education staff works with the general education staff to provide accommodations and modifications to meet specific student needs. The specific responsibilities are determined in the body of the IEP.

Educational Approach and Curriculum for Students with Disabilities

The School will utilize an inclusive model by providing for appropriate assessment, program design, modifications or accommodations, and the utilization of Intervention Specialists, tutors, and other related service personnel as required and determined appropriate by the IEP committee. Tutors, related services providers and other staff will work under the direction of the Intervention Specialist. The staffing of Intervention Specialists will be determined based on the number of enrolled students with an active IEP less than 16. Since law states that students must be provided with access to the general education curriculum whenever possible, the program for students with disabilities will start out using the core curriculum. Modifications and accommodations will be used as needed. If this curriculum with adjustments is still too difficult for the student with disabilities, supplemental curriculum such as which have lower reading levels and break content down into smaller chunks with more support, will be utilized. All curricula is aligned to state and national standards.

Students who do not have success with the stated strategies may work directly with the Intervention Specialist and/or aide in individual and small group settings. Alternative programs and textbooks will be utilized so that each student has the opportunity to successfully access the regular curriculum. In cases where the foregoing solutions are not working and a greater disability is suspected, the IEP will be modified, making necessary accommodations to permit students with disabilities to access learning opportunities on the same basis as general education students.

Ongoing Assessments for Students with Disabilities

Students with disabilities will be assessed on an ongoing basis. The curriculum is developed to include regular assessments to determine student mastery. If a student does not exhibit mastery, the Intervention Specialist will work with the classroom teacher to modify the curriculum and/or pace of delivery within the general lab setting. All classroom teachers will be provided with the appropriate IEPs and staff support to address the identified goals.

Students with IEPs indicating they will be using an alternative assessment will be provided these assessments under the same guidelines as other students with disabilities in the state of Ohio in compliance with state's standards.

Commitment to Serving the Needs of Special Education Students

The School will provide support for the needs of students with disabilities to ensure their success in the general student population's learning environment. This support will be integrated with the classroom. The School will provide accommodations/modifications as necessary to permit access to technology-based learning and the related services designated on the student's IEP. The modifications/adaptations will include, but are not limited to:

• Adapted curriculum assignments;

• Test modifications;

• Computer pacing and remediation; and

• Adaptive computer devices.

English Language Learners ("ELL") / Limited English Proficient Students ("LEP")

LEP/ELL students will be identified according to the guidelines and procedures specified by the Guidelines for the Identification and Assessment of Limited English Proficient Students/English Language Learners, Ohio Department of Education, March 2012

Details can be found at: http://education.ohio.gov/getattachment/Topics/Other-Resources/Limited-English-Proficiency/ELL-Guidelines/Guidelines-for-the-Identification-and-Assessment-o/Guidelines-for-the-Identification-and-Assessment-of-Limited-English-Proficient-Students-March-2012.pdf.aspx

The School will utilize the Home Language Survey developed by the Department of Education to identify students whose primary or home language is other than English ("PHLOTE") according to ODE guidelines. Once students have met the PHLOTE criteria ("failed the PHLOTE"), the School will contract with PSI services to evaluate the student's level of English proficiency and to develop an appropriate service plan, which can occur both in a general

education setting and/or other settings. The plans may include the participation of an LEP/ELL teacher and/or contracted services for initial native language instruction, and a phasing-in of English instruction.

Materials utilized may include computer-aided language instruction and materials provided through PSI services, the Lau Resource Center and Ohio Teachers of English to Speakers of Other Languages ("TESOL"). TESOL also provides professional development for LEP/ELL teachers. Providers of LEP/ELL services and general education teachers will regularly communicate to assure any necessary accommodations in instruction and/or testing are provided.

Students identified as LEP/ELL must participate in annual Ohio Test of English Language Acquisition ("OTELA") testing to determine their level of English proficiency. To exit the LEP/ELL program, students will need to demonstrate the ability to understand, speak, read and write the English language at a level in which they are able to

1. achieve successfully in classrooms where the language of instruction is in English;

2. meaningfully participate in academic assessments in English; and

3. participate fully in society in the United States.

A student has attained the required English proficiency to be exited from the LEP/ELL program when (s)he obtains a composite score of 5 on the OTELA or obtains a composite score of 4 on the OTELA, completes a trial period of mainstream instruction and obtains a composite score of 4 or above on the OTELA during the trial period of mainstream instruction. According to ODE special conditions, students cannot be exited from an ESL program before grade 3.

Parents will be informed of the student's LEP/ELL status and program first through a parent notification letter in either English or the parent's native language, detailing the results of the English language assessment, explaining the need for LEP/ELL services, program participation and exit requirements, and providing the parent with program options. Parents will be informed regularly of the student's progress and OTELA results, and will be informed when the student has met the criteria for exiting the LEP/ELL program.

The effectiveness of the LEP/ELL program and services will be evaluated each year via Ohio's Annual Measurable Achievement Objectives and Ohio's Revised Title III Accountability Plan.

Gifted Students

The learning needs of gifted students often differ from those of other students and should be addressed through differentiation, a modification of curriculum and instruction based on the assessed achievement and interests of individual students.

To provide appropriate and challenging educational experiences for gifted students, differentiation may include:

• acceleration of instruction;

- in-depth study;
- a high degree of complexity;
- advanced content; and/or
- variety in content and form.

The School will support differentiation through its curriculum resource that allows for acceleration, in-depth study and a variety on content and assessment. Access to anywhere, anytime learning allows gifted students to experience their education on their own terms allowing them to explore advanced content and take a deeper dive not being hindered by the needs of their classmates.

6.4a Goals and Performance Standards

ACADEMIC GOALS are the result or achievement toward which effort is directed. Goals and Performance Standards must be:

1) **SMART – Specific, Measurable, Achievable, Relevant, and Timely;**
2) **aligned to the vision, mission, philosophy and curriculum of your school, and;**
3) **include a description of the following:**
    a) **expected outcomes;**
    b) **data to be used;**
    c) **how and when the data will be collected;**
    d) **timelines and processes to be used to report the data, and;**
    e) **how the data will be monitored, evaluated and used to improve instruction;**
4) **focused on impacting student success**

NON-ACADEMIC GOALS are the result or achievement toward which effort is directed. Goals and Performance Standards must be:

1) **SMART - Specific, Measurable, Achievable, Relevant, Timely;**
2) **aligned to the vision, mission, philosophy and curriculum of the school;**
3) **include a description of the following:**
    a) **expected outcomes;**
    b) **data to be used;**
    c) **how and when the data will be collected;**
    d) **timelines and processes to be used to report the data, and;**
    e) **how the data will be monitored, evaluated and used to improve instruction;**
4) **focused on impacting student success**
5) **Non-Academic goals could include, but are not limited to:**
    a) **Attendance;**
    b) **Discipline;**
    c) **Graduation Rates;**
    d) **Parent/Community Involvement;**
    e) **Resource Allocation driven to student achievement (time, money, people), and;**
    f) **Leadership Practices**

Goals and Performance Standards: *Academic SMART Goal - Reading*	**6.4a**	**Provide one (1) academic goal focused on reading aligned to the vision, mission, and philosophy of your school.**

SMART Goal – Reading: Grades K and 1. Sixty percent (60%) of students in grades K and 1 who meet the Ohio Department of Education Where Kids Count criteria will show annual growth over baseline KRA and Diagnostic Measures so that end-of-year measures indicate that student has met grade level

requirements.

SMART Goal – Reading: Grade 2. Sixty percent (60%) of students in grade 2 who meet the ODE Where Kids Count criteria will meet at least one (1) year of academic growth as determined by observed means gains measured by the nationally normed assessment NWEA MAP (or similarly adopted adaptive assessment).

SMART Goal – Reading: Grade 3. Sixty percent (60%) of students in grade 2 who meet the ODE Where Kids Count criteria will meet at least one (1) year of academic growth as determined by observed means gains measured by the nationally normed assessment NWEA MAP (or similarly adopted adaptive assessment). Seventy-five (75%) of students who meet the ODE Where Kids Count criteria will attain a proficiency rating either on the Fall or Spring State Assessment.

SMART Goal – Reading: Grades 4-8. Sixty percent (60%) of students in grades 4-8 who meet the ODE Where Kids Count criteria will meet at least one (1) year of academic growth as determined by observed means gains measures by the nationally normed assessment NWEA MAP (or similarly adopted adaptive assessment) OR meet ODE Value-Added measures of one-year growth, OR show greater that 50% probability of passing the OAA assessment for the next academic year. Seventy-five (75%) of students who meet the ODE Where Kids Count criteria will attain a proficiency rating on the annual state assessment

Goals and Performance Standards: *Academic SMART Goal - Mathematics*	**6.4a**	**Provide one (1) <u>academic goal</u> focused on mathematics aligned to the vision, mission and philosophy of your school.**

SMART Goal – Math: Grade K. Sixty percent (60%) of students in grade K who meet the ODE Where Kids Count criteria show end-of-year "at grade-level" growth (1) as measured by the ODE Diagnostic Measures or through a comparable diagnostic measurement tool.

SMART Goal – Math: Grade 1. Sixty percent (60%) of students in grade 1 who meet the ODE Where Kids Count criteria will show annual improvement over baseline Math Diagnostic Measures so that end-of-year measures indicate that student has met grade level requirements or has shown at least 1-year growth.

SMART Goal – Math: Grades 2 and 3 Seventy five percent (75%) of students in grades 2 and 3 who meet the ODE Where Kids Count criteria will meet at least one (1) year of academic growth as determined by observed means gains as measured by the nationally normed assessment . Sixty-five (65%) of Grade 3 students who meet the ODE Where Kids Count criteria will attain a proficiency rating on the annual State Assessment.

SMART Goal – Math: Grades 4-8. Seventy- Five percent (75%) of students in grades 4-8 who meet the ODE Where Kids Count criteria will meet at least one (1) year of academic growth as determined by observed means gains as measured by the nationally normed assessment NWEA MAP (or similarly adopted adaptive assessment) OR meet ODE Value-Added measures of on-year growth, OR show greater that 50% probability of passing the OAA assessment for the next academic year. Sixty (60%) of students who meet the ODE Where Kids Count criteria will attain a proficiency rating on the annual State Assessment.

Goals and Performance Standards: *Non-*	**6.4a**	**Provide one (1) <u>non-academic goal</u> focused on expectations or conditions such as student subgroup attendance, parent-community involvement, or, if applicable, post-secondary enrollment, graduation rate,**

Academic SMART Goal		**industry-recognized credential aligned to the vision, mission, philosophy of your school.**

Non-Academic Goals include:

• Attendance at a minimum of 93% as measured by the Local Report Card.

• Annual Parent Satisfaction surveys will result in at least seventy-five (75%) of parents indicating satisfaction with The School and its educational program.

• Annual Student Satisfaction surveys will result in at least at least seventy-five (75%) of students indicating satisfaction with their experiences at the school.

St. Aloysius

Accountability - ATTACHMENT 6.4

4th Grade – 8th Grade

(A school that offers any grades four through eight but no grade higher than nine)

Please note this is applicable to ALL grades, however this reflects the highest grade served.

- No special technical assistance or intervention will occur for a school meeting the following criteria:
  - Receiving a "C" or better in the following measures and components on the Ohio Interactive Local Report Card (iLRC) Power User Reports, or any subsequent report enacted to replace or supplement the iLRC Power User Reports, hereafter known as the "Graded Measurers" listed here:

Local Report Card Measures and Components	**1. Overall Local Report Card Grade** - *coming in 2016* ***2.*** **All Achievement Grades -** *Performance Index (PI) and Indicators Met* **3. Gap Closing Grade -** *Annual Measurable Objectives (AMO's*) **4. K-3 Literacy Grade** **5. Value Added Overall Grade**

  - Meeting all contractual measures agreed upon in the community school contract as listed here:

Contractual Measures	***6.*** **Standardized Test Results** -*The standardized assessment listed within the community school contract should demonstrate on average, 1 years' worth of growth for 80% of students tested in reading and math using the Ohio's Where Kids Count Rules.* **7. Faithfulness to the Community School Contract** - *The school must be faithful to the community school contract as a condition for renewal (See page 2 of this document for clarifications.)*

Faithfulness to the Community School Contract Outlined:

- **The School must be faithful to the community school contract as a condition for renewal. The Sponsor will review the following during its renewal analysis of the School:**

A. Additional Performance Measures, including but not limited to, the following:

- Academic Performance based upon the goals set forth in the Charter; and
- Operational Performance; and
- Graduation Rates (if applicable); and
- Student Attendance; and
- Post-Secondary Enrollment (if applicable).

B. The School's Financial Viability, including but not limited to, the following:

- Timely Submission of Financial Documentation to the Sponsor; and
- Adequate Debt to Asset Ratio; and
- Acceptable Enrollment Variance; and
- School has maintained Timely Payments on all Loans (if applicable); and
- If the School is not managed by a management company, the School maintains an Adequate Amount of Unrestricted Cash; and
- The School's Positive/Negative Cash Flow; and

C. The School's Operational Performance, including but not limited to, the following:

- Timely submission of CSLT Meeting Forms; and
- Timely submission of Academic Coach Resumes (if applicable); and
- Timely hiring of an Academic Coach after credentials are approved by the Sponsor (if applicable); and
- Timely submission of the Management Company Evaluation (if applicable); and
- Attendance at Sponsor provided workshops/trainings; and
- Timely submission of Accountability Attachment 6.4b Interventions Reporting Template (if applicable); and
- Adequate and timely communication with the Sponsor regarding any/all changes to the Community School Contract; and
- Monitoring the implementations of Attachment 6.4 by the Governing Authority at regularly scheduled Board Meetings; and
- Performance on Compliance Visits and Annual Audits; and
- Number and magnitude of Corrective Action Plans.

Accountability Attachment 6.4 Document Support and Criteria:

- The following chart is consistent with the Sponsor's philosophy that community schools should have at least 5 years to develop their program and demonstrate success. The "actions" noted in the following chart are rooted in research-based practices and philosophies that utilize data-supported decision making proven to increase student achievement and close achievement gaps.
- The intent of the "actions" in the following chart is to clearly delineate the commitment of both the Sponsor and the School to work in one accord to promote greater student achievement and success. The Sponsor suggests that every school strive to improve each year through continued efforts in professional development and teacher training.
- The School's Baseline Year will be the first year in which the School receives a letter grade of "D" or "F" in any of the measures and components listed above. Sponsor interventions under this section will cease in any year in which the school receives a letter grade of "C" or higher for ***two consecutive years in all of the measures and components*** listed above. For example, a school will continue to implement the "actions" of the previous school year if/when the school receives a letter grade of "C" in all measures and components following the implementation of that year's "actions," until the school has two consecutive years of receiving a letter grade of "C" in all measures stated above. Furthermore, should a school receive a "D" or "F" after Sponsor interventions have ceased, the school will restart first year actions.
- If the school's previous Accountability Attachment 6.4 required specific interventions, the school must implement the actions listed in the successive year as stated within this document. This Attachment 6.4 supersedes all previous versions and interventions.
- Failure of the School to complete any of the requirements as listed in Accountability Attachment 6.4 may result in the Sponsor placing the School on probation or in suspension. In addition, failure of the School to timely submit any data required by the Community School Contract and/or this Attachment may result in the Sponsor placing the School on probation or in suspension.
- Notwithstanding any other provision of this document, for the 2015-2016 school year and any school year in which the State provides a safe harbor, the Sponsor agrees that the School will remain in the same year of Interventions as was designated for the 2014-2015 school year.

First Year Actions

4th Grade – 8th Grade, or a school that offers any grades four through eight

Criteria: School receiving a letter grade of "D" or "F" on identified Local Report Card Measures and Components ***and*** not meeting agreed upon Contractual Measures as listed of page 1 of this document:

The Sponsor Will:	The School Will:
A. Offer technical assistance for Ohio Leadership Advisory Council (OLAC) training modules and the Ohio Improvement Process (OIP).	A. Require School Leader to complete Ohio Leadership Advisory Council (OLAC) online self-assessment and recommended OIP modules.
B. Require the School to develop, review or revise an OIP Focused Plan for the following school year to address the academic needs of the School. Review and offer feedback on the OIP Focused Plan.	B. Develop or review and revise the required OIP Focused Plan, through a Community School Leadership Team (CSLT) that includes parents and Board members before the start of school for the following year and submit for Sponsor feedback.
C. Require the School to implement the developed, reviewed, or revised OIP Focused Plan for the following school year to address the academic needs of the School.	C. The School Leader will report to the Governing Authority on the developed OIP Focused Plan and its implementation at each regularly scheduled Board meeting.
D. Offer technical assistance for the development of a school professional development plan.	D. Obtain training and certification in the Ohio Evaluation System that includes the Ohio Teacher Evaluation System (OTES) and the Ohio Principal Evaluation System (OPES) and develop a plan for implementation that includes staff training, Governing Authority reporting, and Board approved policies for implementation, monitoring and evaluation.
	E. Develop and implement a school professional development plan inclusive of: a. Student Learning Objectives (SLO's) b. Literacy
	F. Identify a Value-Added Leader (VAL) for the school and ensure the VAL attends all appropriate trainings to effectively implement the requirements of a VAL; and
	G. Commit to the active use of all forms of student data with the use of a Data Coach, Data Team, or the Community School Leadership Team (CSLT).
	H. Meet any other requirements as outlined in legislation or by ODE and submit any required reporting to ODE and the Sponsor.
	I. Abide by all consequences as outlined in No Child Left Behind or any subsequent applicable legislation enacted to replace or supplement No Child Left Behind.

Second Year Actions

4th Grade – 8th Grade, or a school that offers any grades four through eight

Criteria: School receiving a letter grade of "D" or "F" on identified Local Report Card Measures and Components ***and*** not meeting agreed upon Contractual Measures as listed of page 1 of this document for a ***second*** consecutive year:

The Sponsor Will:	The School Will:
A. Offer technical assistance towards improving academic instruction and student achievement.	A. The School will continue all First Year Actions.
B. Review and offer feedback on the OIP Focused Plan if needed.	B. Submit OIP Focused Plan to the Sponsor for feedback and guidance. If the attendance rate of 93% was not attained after developing and implementing an attendance plan, the school must develop and implement new strategies that will assist in meeting the requirements.
C. Offer technical assistance with OLAC modules, development of Teacher Based Teams (TBT's) and the TBT 5 Step Protocol.	C. Implement Teacher Based Teams (TBT's) using OLAC Modules while instituting the TBT 5 Step Protocol; and
D. Establish Academic Coach minimum qualifications for review and approval of candidates.	D. Hire an Academic Coach following Sponsor requirements and tools *(See Academic Coach credentials and job responsibilitie*s). The School will submit Academic Coach credentials for Sponsor approval and confirm hiring of an Academic Coach.
E. Continue to offer technical assistance for the development and implementation of a school professional development plan.	E. Establish schedules and implement strategies that provide increased collaboration and learning time for teachers that is protected from internal or external interference or interruptions.
	F. Develop and implement an annual professional development plan that is aligned with the school's comprehensive instructional program, Ohio's New Learning Standards and Next Generation Assessments in Ohio. The plan must be designed with school staff to ensure their capacity to facilitate effective teaching and learning and to successfully implement school improvement strategies as outlined in the OIP Focused Plan. A review of Individual Professional Development Plans (IPDP's), data from the Decision Framework, local assessments, teacher evaluations and the OIP Focused Plan must be completed as part of the development of the annual professional development plan. A completed plan must include: *i. Formative Instructional Practice (FIP) training* *ii. Completion of FIP modules (Battelle For Kids)* *iii. Plan for identifying and closing achievement gaps among subgroups* – (Applies only If the school receives a "D" or "F" on the Gap Closing (AMO's) component of the Local Report Card)
	G. Require the School Leader to participate in Sponsor provided technical assistance to improve instructional leadership. The Governing Authority will require updates from the School Leader at regularly scheduled Board meetings on the implementation of the OIP Focused Plan, TBT's meetings, Academic Coach progress, and the implementation and

	impact of the professional development plan.
	H. Implement and monitor the Ohio Evaluation System, including Ohio Teacher Evaluation System (OTES) and Ohio Principal Evaluation System (OPES). The School Leader/Evaluator is to report to the Governing Authority on OTES evaluator timeline activities (i.e. completion of formal and informal observations). Board reporting is to be a *minimum* of twice per year (i.e. completion of Formal Observation 1 and Formal Observation 2). The Governing Authority or its designee will ensure the implementation and monitoring of OPES for School Leaders.

Third Year Actions	
4th Grade – 8th Grade, or a school that offers any grades four through eight	
Criteria: School receiving a letter grade of "D" or "F" on identified Local Report Card Measures and Components ***and*** not meeting agreed upon Contractual Measures as listed of page 1 of this document for a ***third*** consecutive year:	
The Sponsor Will:	**The School Will:**
A. Offer technical assistance to assist in improving academic instruction and student achievement.	A. The School will continue First Year Actions and Second Year Actions.
	B. Replace staff relevant to failure; and/or
	C. Reconfigure the organizational structure of the school or adopt a new operational structure.

Fourth Year Actions

4th Grade – 8th Grade, or a school that offers any grades four through eight

Criteria: School receiving a letter grade of "D" or "F" on identified Local Report Card Measures and Components ***and*** not meeting agreed upon Contractual Measures as listed of page 1 of this document for a ***fourth*** consecutive year:

If the School is not required to close by the Ohio Revised Code, the Sponsor may:	The School Will:
A. Take over the operations of the school; and/or	A. Close at the conclusion of the school year if the School meets the requirements for closure as found in the Ohio Revised Code.
B. Work with the Board to replace the operator of the school; and/or	B. If the School does not close as required by the Ohio Revised Code, it will continue all First Year, Second Year, and Third Year Actions.
C. Place the school in Academic Probation[2] status and outline specific requirements for the School; and	C. Meet all requirements as outlined by the Sponsor before the Academic Probation[2] status is lifted.
D. Continue to offer technical assistance towards improving academic instruction and student achievement.	D. Meet all requirements for closure as outlined by the Ohio Revised Code.

2= Academic Probation status denotes that the Sponsor has considered the school's specific circumstances surrounding not meeting the minimum requirements stated in Attachment 6.4, and has prescribed steps to assist the school in meeting those requirements. The Sponsor will consider the options listed in Attachment 6.4 as possible interventions, but will consider other options if deemed appropriate considering the school's specific circumstances. The Sponsor cannot be held responsible if the academic intervention steps do not result in a "C" or better on measures, components or overall grade, as the Sponsor will act in good faith to assist in ensuring the school is academically successful while honoring and respecting the School Governing Authority's autonomy.

6.5 Assessment Plan

The Assessment Plan should enable the school to make an accurate reference as to what students should know and be able to do. It should align to the desired learning outcomes of the curriculum.

Nationally Normed Assessment	**6.5**	**1) St. Aloysius requires its sponsored schools to identify and utilize at least one nationally normed, ODE approved standardized testing tool. It is mandatory that the assessment be administered a minimum of twice a year and the administration should be identified on the school calendar. Which Nationally normed Assessment will be used? Discuss rationale for assessment selection and the relationship to Student Growth Measures (OTES and OPES). Nationally normed assessment data and a comprehensive written analysis will be due to the sponsor by June 30th of each year.**

Various assessments will be used to measure each student's progress toward the school's scholastic goals and whether a particular methodology is working. NWEA MAP, a nationally-normed assessment that is aligned to Common Core Standards, will be given to all students who are in grade three through grade eight to assess reading and mathematics. This assessment will provide teachers with a set of baseline data to inform instruction. The students will be tested twelve weeks later and then again in the spring to provide teachers and parents with a roadmap to instruction that identifies student gaps in learning and need for intervention as well as areas in which students can be accelerated. For each of the students, using a comparison of the fall versus spring results, an in-year growth measure can be determined based on whether he/she met or exceeded his/her statistical expectancy in reading and mathematics. This information will be vital to the school leadership as they develop professional development plans, make programmatic changes, and plan for school growth. The test is aligned to Ohio standards and will be a valuable tool as teachers assist students on their journey to standards attainment and proficiency on state assessments.

The School uses a variety of assessments to drive data driven instruction. The use of a guaranteed and viable curriculum that is mapped and uses proficiency scales to measure student mastery of standards will be used to monitor student progress. NWEA MAP, a nationally-normed assessment that is aligned to Common Core Standards will be given to all students who are in grades K through eight (K-8) to assess reading and mathematics. This assessment will be administered in the fall, winter and spring annually.

PARCC Assessment will be administered annually to students who are in grades 3-8 to determine whether the student is on pace and educationally developing at grade level as determined by the State of Ohio.

KRA: Kindergarten Readiness Assessment: The new kindergarten readiness assessment will replace the KRA-L. The new assessment includes ways for teachers to measure a child's school readiness. Ohio's Early Learning and Development Standards (birth to kindergarten entry) are the basis for the new assessment. It has six components: social skills (including social and emotional development, and approaches toward learning), mathematics, science, social studies, language and literacy, and physical well-being and motor development. All kindergarten children will take the assessment.

Diagnostic Assessments: The primary purpose of Ohio's diagnostic assessments, which are aligned to Ohio's academic standards, is to provide a tool for teachers in checking the progress of students toward meeting grade-level indicators.

The language and literacy portion of the new kindergarten readiness assessment will meet the reading diagnostic assessment requirement of the Third Grade Reading Guarantee. To meet the diagnostic requirement, teachers must complete at least the Language and Literacy portion no later than Sept. 30. Diagnostic Assessments in reading, writing, and mathematics are administered to all K-2 transferred students and writing for grade 3 transferred students if each applicable Diagnostic Assessments were not administered in the student's previous district or school.

All of the results of these assessments will be critically analyzed by the student's teacher to determine where (what academic areas and subsections of those areas) a child is succeeding academically and where that child needs further education or remediation. Furthermore, the test results will be cataloged in a database so that each parent, student and teacher can instantaneously have up-to-date access to all testing results for the student. By providing all stakeholders with this test data, formative assessment will become a natural exercise allowing the entire team to become invested in the process and providing a springboard for instruction. In addition to the analysis of individual student results, the school administration will analyze school-wide trends to identify gaps in overall student learning. The academic program may require adjustments in the area of curriculum or professional development if the data points to these areas. To supplement the nationally-recognized, norm-referenced and state-mandated assessments set forth above, student assessment will also take place using the District Common Assessments which are administered to all students in grade K-8. Teachers will be trained to use the data to individualize instruction, set goals and facilitate parent involvement.

Ohio's Next Generation of Assessments	**6.5**	**(2) Ohio's Next Generation of Assessments must be included in the school's assessment plan and be included on the school calendar. Confirm use of Ohio's Next Generation of Assessments. Discuss plans for implementation.**

Included in above response

Local Assessments	**6.5**	**(3) Identify any local formative and summative assessments that will be utilized. Discuss rationale for and implementation of assessments.**

In the School, in addition to the traditional testing, it will be important for the student to produce the correct answers. However, in constructivist teaching, the process of gaining knowledge is viewed as being just as important as the product. Thus, assessment will be based not only on tests, but also on observation of the student, the student's work, and the student's points of view. Some assessment strategies include:

• Oral discussions. The teacher presents students with a "focus" question and allows an open discussion on the topic.

• KWL(H) Chart (what we know, what we want to know, what we have learned, how we know it). This technique can be used throughout the course of study for a particular topic, but is also a good assessment technique as it shows the teacher the progress of the student throughout the course of study.

• Mind Mapping. In this activity, students list and categorize the concepts and ideas relating to a topic.

• Hands-on activities. These encourage students to manipulate their environments or a particular learning tool. Teachers can use a checklist and observation to assess student success with the particular material.

• Portfolio Development. Involves the student and teacher in selecting examples of the student's best work. These types of portfolios can be graded until the end of a term. In this instance, the teacher typically has published a rubric and students collect their own work for inclusion.

The teacher then grades this work based on the rubric and scales.

All curricula being implemented have assessment provisions embedded as part of their programs. These on-going assessments will inform instruction so that teachers are able to assess the extent of student learning and the success of their teaching. Adding yet more information to this base of knowledge about students, will be teacher-created short cycle assessments providing formative assessment feedback. All of these assessments will ensure that teachers have the necessary data to determine student growth and plot the course to the mastery of standards. Mastery will be based on a set of scales that are developed using Marzano's research referencing a rubric aligned to each standard in the Common Core. All scales are based on the following assumptions.

4 - In addition to exhibiting level 3 performance, the student's responses demonstrate in-depth inferences and applications that go beyond what was taught in class.

3 - The student's responses demonstrate no major errors or omissions regarding any of the information and/or processes

2 - The student's responses indicate major errors or omissions regarding the more complex ideas and processes; however they do not indicate major errors or omissions relative to the simpler details and processes

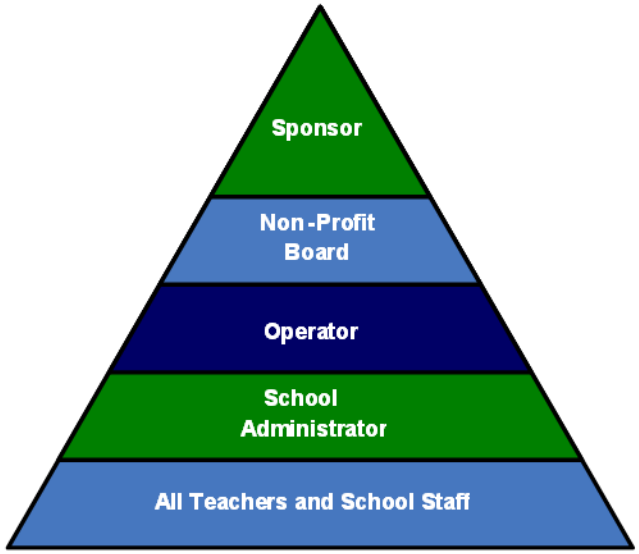
1 - The student provides responses that indicate a distinct lack of understanding of the knowledge. However, with help, the student demonstrates partial understanding of some of the knowledge.

0 - The student provides little or no response. Even with help the student does not exhibit a partial understanding of the knowledge.

8.1 Employment

Personnel and understanding of roles and are responsibilities are critical for successful school operation.

Organizational Chart	**8.1**	**1) Provide the school's organizational chart with clear identification of all positions including fiscal officer, EMIS and Management Company (if applicable).**



The following is a list of the types of positions that will be needed to staff the school. Certain positions will vary in number in relation to the student enrollment, and others may come about via contracted services:

- Administrator
- Assistant Administrator (if enrollment exceeds 300 students)
- Secretary
- Fiscal Officer
- Enrollment Secretary/EMIS Data
- Teachers

• Instructional Aides • Intervention Specialists • Specials Teachers (Art, Music, and Physical Education) • Health Aide/Nurse • Psychologist • Speech Therapist • Custodian • Food Service Staff • Security		
Roles and Responsibilities	**8.1**	**2) Describe the roles and responsibilities of the school staff that align to the organizational chart and mission, vision, and philosophy of the school: a) administrative, b) teaching, c) specialized, d) contracted services (i.e., speech and language pathologist, school psychologist, etc.), e) other.**
See attachments		

EXHIBIT A

JOB DESCRIPTION

Job Title:	Administrator	**Reports To:**	Director
Department:	Administrative	**FLSA Status:**	Exempt
Effective Date:	July 1, 2015	**Division:**	Academies

Description

Assists the Regional Director of Academies by administering the assigned school in conformity with the philosophy and policies adopted by White Hat Management; the rules of the governing Board, State Board of Education, the provisions of law, and sound administrative practice. Directly supervises all personnel assigned to building. Areas of responsibility include Operations, Personnel, Curricular & Co-Curricular Programs, Student Services & Supplementary Programs, Physical Plant, Finance, Pupils, Parents/ Guardians, and Community Outreach. The Administrator, by necessity, may delegate the exercise of his/her authority without relief from responsibility for actions taken under such delegation.

Responsibilities

- Understand and abide by the policies, directives, and guidelines as stated in the administrative manual, as well as administering policy changes from year to year.
- Agree to accept, administer, and support all policies and procedures set forth by the Management Company.
- Facilitate the implementation of the Standards Based Curriculum, reviewing lesson plans weekly and conducting walk-throughs
- Assume responsibility for student achievement within the assigned building.
- Foster and support student recruitment and retention, retaining 85% of students annually and maintaining an enrollment within 95% of capacity.
- Work with all matters related to student transportation.
- Serve as the Instructional Leader in the building facilitating the PLC
- Interview and recommend personnel for employment without discrimination on the basis of age, color, national origin or gender.
- Hold daily and/or weekly meetings with Administration Team members to maintain open communication.
- Plan and conduct student and parent/guardian orientations.
- Oversee school operations regarding academics, food service, custodial, co-curricular and extracurricular as related to assigned school.
- Oversee maintenance of school census, attendance data, and other reporting requirements as mandated by the state.
- Understand and properly address all elements associated with Academy state report card.
- Understand and properly address all areas directly related to Adequate Yearly Progress (AYP)
- Understand and address all compliance items as they relate to the Sponsor agreement
- Know all aspects of required tests develop staff and student awareness programs and other programs designed to prepare students for success.
- Maintain school-wide PBiS process with emphasis on appropriate class conduct and behavior.
- Coordinate special projects, such as peer mentoring, service learning and community involvement
- Oversee national school lunch program, ensure application distribution, collection, approval and verifications as applicable.
- Monitor and maintain school security.
- Coordinate all staff assignments as applicable.
- Complete all accountability reports and oversee all student enrollment reports to the state; ensure compliance in all areas.
- Coordinate periodic building safety checks with staff.
- Coordinate related vocational programs as applicable.
- Coordinate school technology efforts and make recommendations for improvement.
- Assist with updating parent/student manual.
- Work with Regional Manager to coordinate professional development, teacher based teams and staff in-service.
- Coordinate all phases of summer educational opportunities as applicable.
- Coordinate all phases of before and after school programs as applicable.

Job Title:	Administrator	**Reports To:**	Director
Department:	Administrative	**FLSA Status:**	Exempt
Effective Date:	July 1, 2015	**Division:**	Academies

- Coordinate implementation of the Ohio Improvement Process
- Coordinate educational activities when teachers and other instructional staff are absent.
- Maintain building level budgets, Imprest credit card account and spending for reporting to White Hat Management, and make recommendations as such.
- Supervise activities regarding field trips.
- Ensure facility requisitions for building maintenance are properly processed.
- Oversee building utilization, maintenance and upkeep in coordination with the facilities team and custodial staff.
- Develop student leadership program
- Develop and maintain student and staff recognition program.
- Coordinate activities with community groups.
- Work with parent/guardian support groups as related to your school.
- Coordinate all phases of State Test prep, remediation and tutoring programs.
- Attend meetings related to Special Education services (i.e. IEP, MFE/ETR and IAT).
- Coordinate Response to Intervention (RTI).
- Coordinate, decide on and properly record time off for all staff.
- Conduct monthly fire drills, tornado drills and lockdown drills.
- Create a positive school environment.
- Evaluate classified and certified staff according to policies and procedures.
- Motivate and effectively communicate with staff.
- Maintain confidentiality concerning all student and staff information, and in all professional matters.
- As necessary, serve as landlord's onsite property representative.
- Perform all other job duties as assigned.

Position Requirements

Bachelor's Degree minimum, Master's or higher preferred; at least 3 years in a supervisory or management role; ability to lead staff and effectively communicate his/her vision for the school; proficient in computer applications, including MS Office Suite, e-mail, and internet applications; excellent verbal and written communication skills; strong ability to gather, analyze, and interpret student data to make sound educational decisions; exhibit flexibility with regard to decision-making, daily challenges, and job duties; has strong sense of integrity; has a "team player" attitude; ability to work in a diverse educational community setting; understand the community and student demographics; understand state proficiency testing as well as state teaching standards; satisfactory completion of federal and state required criminal history check and health tests; and physical ability to lift up to 25 pounds

Knowledge, Skills, Abilities and Personal Characteristics

- Experience in the field of Elementary School Curriculum and Instruction Methods
- Ability to handle confidential information responsibly and exhibit sound judgment while maintaining that confidentiality
- Reliable, dependable, and trustworthy work ethic; a strong sense of integrity
- Ability to manage difficult or emotional students, staff, parents, and community members
- Ability to communicate with students, parents, and board, sponsor, and community members
- Ability to make sound judgments after all available information has been gathered or communicated
- A mature attitude and insight into matters affecting school, self and/or company welfare
- Leadership and building management ability
- Excellent written and oral communication skills
- Ability to work well under pressure, and effectively prioritize and execute tasks to meet deadlines consistently
- Ability to be an active listener and critical thinker
- Ability to motivate, develop, and direct people

EXHIBIT A

JOB DESCRIPTION

Job Title:	Administrator	**Reports To:**	Director
Department:	Administrative	**FLSA Status:**	Exempt
Effective Date:	July 1, 2015	**Division:**	Academies

Work Conditions

- Management and interaction with students, staff, parents, and boards, sponsors, and community members
- Ability to travel
- Standing for extended periods of time, sitting occasionally
- On Call availability
- Ability to move around the building during school/work hours
- Dexterity to operate a computer keyboard, mouse, and to handle other computer and other technology related components

This position description is not intended to be a complete list of all responsibilities, duties or skills required for the job. It is subject to review and change at any time, with or without notice, in accordance with the needs of the Company. Because no position description can detail all of the duties and responsibilities that may be required from time to time in the performance of a job, any duties and responsibilities that may be inherent in a job, reasonably required for its performance, or required due to the changing nature of the job shall also be considered part of the job holder's responsibility.

EMPLOYEE ACKNOWLEDGMENT

I have read this position description and discussed it with my supervisor.

_____ _____

Employee Date

EXHIBIT A

JOB DESCRIPTION

Job Title:	Assistant Administrator	**Reports To:**	Administrator
Department:	Administrative	**FLSA Status:**	Exempt
Effective Date:	July 1, 2015	**Division:**	Academies

Description

Assists the building Administrator by administering the assigned job duties in conformity with the philosophy and policies adopted by White Hat Management, HOPE Academies, the rules of the governing Board, State Board of Education, the provisions of law, directives of the building Administrator and sound administrative practice. Areas of job responsibility include: Student Code of Conduct, staff management, curriculum programs, student supplemental service initiatives, parent/guardian relations, and community engagement.

Responsibilities

- Ensures ongoing communication between the school and parents/guardians, especially when student behaviors and/or attitudes are having a negative impact on academic performance, student behavior and social interactions
- Maintains a positive and solution-focused outlook, with the ultimate goal of improving student achievement and relationships by providing assistance, resources, implementation of PBiS and support to students, parents/guardians, and their families
- Works with the school Administrator and faculty to organize school activities related to parent/guardian education and positive student behavior
- Works with and supports designated consultants, agencies, organizations, departments, groups, and/or service providers
- Makes home visits as needed to assess the family/life environment of the student
- Represents the school in parent organizations and/or groups
- Ensures that proper documentation, with signature(s), is in place if disclosing confidential information to parties other than a student's parent/guardian or school personnel
- Understands, accepts, and abides by the school's philosophy and mission statement in all his/her school activities
- Maintains confidentiality concerning all student information and in any professional matters
- Maintains thorough and accurate records and documentation in all matters
- Interacts and works professionally and cooperatively with others to fulfill duties and responsibilities
- Attends meetings, conferences, and workshops as needed to expand knowledge and enhance performance
- Performs all other job duties as assigned

Position Requirements

Bachelor's degree in Social Work, Counseling, Education, or other related discipline; currently valid Ohio Principal, Teacher, School Counselor, or Social Work license; experience in an educational or social services supervisory role; excellent oral and written communication skills; computer literacy; effective organizational skills with the ability to perform multiple tasks; clear FBI and BCI check; able to meet educational standards as applicable and other relevant criteria as determined by White Hat Management; and physical ability to lift up to 25 pounds.

EXHIBIT A

JOB DESCRIPTION

Job Title:	Assistant Administrator	**Reports To:**	Administrator
Department:	Administrative	**FLSA Status:**	Exempt
Effective Date:	July 1, 2015	**Division:**	Academies

Knowledge, Skills, Abilities and Personal Characteristics

- Experience in the field of Elementary School Curriculum and Instruction Methods
- Ability to handle confidential information responsibly and exhibit sound judgment while maintaining that confidentiality
- Reliable, dependable, and trustworthy work ethic; a strong sense of integrity
- Ability to manage difficult or emotional students, staff, parents, and community members
- Ability to communicate with students, parents, and board, sponsor, and community members
- Ability to make sound judgments after all available information has been gathered or communicated
- A mature attitude and insight into matters affecting school, self and/or company welfare
- Leadership and building management ability
- Excellent written and oral communication skills
- Ability to work well under pressure, and effectively prioritize and execute tasks to meet deadlines consistently
- Ability to be an active listener and critical thinker
- Ability to motivate, develop, and direct people

Work Conditions

- Management and interaction with students, staff, parents, and boards, sponsors, and community members
- Ability to travel
- Standing for extended periods of time, sitting occasionally
- On Call availability
- Ability to move around the building during school/work hours
- Dexterity to operate a computer keyboard, mouse, and to handle other computer and other technology related components

This position description is not intended to be a complete list of all responsibilities, duties or skills required for the job. It is subject to review and change at any time, with or without notice, in accordance with the needs of the Company. Because no position description can detail all of the duties and responsibilities that may be required from time to time in the performance of a job, any duties and responsibilities that may be inherent in a job, reasonably required for its performance, or required due to the changing nature of the job shall also be considered part of the job holder's responsibility.

EMPLOYEE ACKNOWLEDGMENT

I have read this position description and discussed it with my supervisor.

_____ _____

Employee Date

EXHIBIT A

JOB DESCRIPTION

Job Title:	Custodian	**Reports To:**	School Administrator
Department:	Operational	**FLSA Status:**	Non-Exempt
Effective Date:	July 1, 2015	**Division:**	Academies

Description
Maintains the cleanliness and safety of the facility, Notifying the appropriate parties when building needs and concerns arise.

Responsibilities

- Keeps the Academy and grounds safe, secure, and clean at all times
- Perform all routine cleaning, housekeeping, and basic maintenance for the school as prescribed by the custodial duty listing. This can include but is not limited to trash removal, cleaning and wiping down of blackboards, hand railings, doors, and other surfaces as needed, changing light bulbs, vacuuming and mopping floors, cleaning windows, cleaning and disinfecting student and staff restrooms, assisting with cleaning the food service area, painting and performing other cleaning/housekeeping/maintenance duties as assigned
- Sets up and take down lunch tables in the multi-purpose room as required
- Performs basic electrical, plumbing, and carpentry repairs as needed
- Maintains the external appearance of the building including the parking lot, playground, sidewalks, steps, and lawn
- Performs snow removal activities as needed, including shoveling, snow-blowing, and salting walkways and steps
- Buffs and waxes all floors as needed
- Prepares the school for special events such as meetings, open houses, etc.
- Ensures school ground electronic security systems/emergency systems are working properly
- Informs Administrator of any damage or wear and tear to school property so that a replacement/refurbishment plan can be initiated
- Willingness to accept training and apply learned skills
- Properly maintains all school tools, supplies, and machinery that are used in day-to-day operations
- Reports to the school on extraordinary event days such as snow days, staff holidays, or other events such as no electric, no water, etc. to inspect the building and ensure the safety and soundness of the building and grounds
- Coordinates custodial duties with WHM Facilities Department and/or building Administrator
- Performs all other job duties as required by the Administrator/Facility Department or needs of the school
- Must be a self-starter and have the ability to follow-up
- Ability to communicate effectively with staff, students, and administration
- Must be responsible and trustworthy
- Must be able to complete all daily tasks with minimal supervision
- Must dress appropriately to perform required tasks
- Performs all other job duties as assigned

Position Requirements
High School diploma or equivalent; ability to perform physical work in hot, cold, windy, rainy, snowy, foggy, humid, dry, sunny, or other weather conditions; to lift and/or move up to 75 pounds; ability to use outdoor and indoor cleaning equipment; knowledge of cleaning up and disposal of hazardous and bio-hazardous materials; basic knowledge of and ability to perform simple electrical and plumbing repairs; basic knowledge of Microsoft Office products; satisfactory completion of an FBI, BCI and TB Test

EXHIBIT A

JOB DESCRIPTION

Job Title:	Custodian	**Reports To:**	School Administrator
Department:	Operational	**FLSA Status:**	Non-Exempt
Effective Date:	July 1, 2015	**Division:**	Academies

Knowledge, Skills, Abilities and Personal Characteristics

- Ability to handle confidential information responsibly and exhibit sound judgment while maintaining that confidentiality
- Reliable, dependable, and trustworthy work ethic; a strong sense of integrity
- Ability to manage difficult or emotional students
- Ability to communicate with students, parents, and board, sponsor, and community members
- Ability to make sound judgments after all available information has been gathered or communicated
- A mature attitude and insight into matters affecting school, self and/or company welfare
- Leadership and classroom management ability
- Excellent written and oral communication skills
- Ability to work well under pressure, and effectively prioritize and execute tasks to meet deadlines consistently
- Ability to be an active listener and critical thinker
- Ability to motivate, develop, and direct people

Work Conditions

- Instruction and interaction with students, parents, and administration during all operating hours of the school day
- Standing for extended periods of time
- Sitting occasionally
- Ability to move around the school during school/work hours
- Dexterity to operate a computer keyboard, mouse, and to handle other computer and other technology related components

This position description is not intended to be a complete list of all responsibilities, duties or skills required for the job. It is subject to review and change at any time, with or without notice, in accordance with the needs of the Company. Because no position description can detail all of the duties and responsibilities that may be required from time to time in the performance of a job, any duties and responsibilities that may be inherent in a job, reasonably required for its performance, or required due to the changing nature of the job shall also be considered part of the job holder's responsibility.

EMPLOYEE ACKNOWLEDGMENT

I have read this position description and discussed it with my supervisor.

_____ _____

Employee Date

EXHIBIT A

JOB DESCRIPTION

Job Title:	EMIS/Enrollment Coordinator	**Reports To:**	School Administrator
Department:	Administrative	**FLSA Status:**	Non-Exempt
Effective Date:	July 1, 2015	**Division:**	Academies

Description
Updates and maintains all student information systems, and coordinate and directs all enrollment processes in conjunction with the building Administrator.

Responsibilities
- Enter all student information in all applicable White Hat Management and State Department of Education databases accurately
- Enter and submit all school data for student count dates as applicable
- Resolve student data errors by communicating with local public school district quickly and accurately
- Prepare for and participate in FTE Reviews and other State and Sponsor audits
- Resolve data issues that arise from internal corporate or state audits
- Reporting accurate and complete special education information into appropriate databases and communicating with the Special Education Department about student statuses
- Provide daily, weekly, and monthly reports along with continuous feedback to the building Administrator and White Hat Management
- Maintain knowledge of state reporting requirements
- Follow-up with families regarding records and documentation
- Updates and maintains student files and transcripts and serve as the school's registrar
- Attend all professional development offered by the district regarding updating and maintaining information to the district's data base
- Treat everyone with respect and exhibit empathy with students
- Collect and manage fees as directed
- Must be organized, have the ability to follow-up, and meet deadlines
- Ability to communicate with management, parents and students
- Demonstrates support for students of the Academy
- Must be professional, respectful and courteous in communication with parents, students, and staff
- Must be responsible, a self-starter, require minimal supervision
- Set an example with punctuality and in performing all duties in an exemplary manner
- Works in a professional and cooperative manner with others to achieve the goals of the school
- Act in accordance to the directives and assignments given by the Administrator
- Develops and actively leads in student recruitment, enrollment, and retention activities as directed by the Administrator
- Performs all other job duties as assigned

Position Requirements
High School diploma or equivalent; advanced computer skills- must be proficient in Microsoft Excel and Word, and Web-based applications; accurate and accountable data-entry skills; experience with the student information system (SIS, CSADM, and SSID preferred); satisfactory completion of an FBI, BCI and TB test; able to meet educational standards as applicable and other relevant criteria as determined by White Hat Management; and physical ability to lift up to 25 pounds.

Job Title:	EMIS/Enrollment Coordinator	**Reports To:**	School Administrator
Department:	Administrative	**FLSA Status:**	Non-Exempt
Effective Date:	July 1, 2015	**Division:**	Academies

Knowledge, Skills, Abilities and Personal Characteristics

- Ability to handle confidential information responsibly and exhibit sound judgment while maintaining that confidentiality
- Reliable, dependable, and trustworthy work ethic; a strong sense of integrity
- Ability to manage difficult or emotional students
- Ability to communicate with students, parents, and board, sponsor, and community members
- Ability to make sound judgments after all available information has been gathered or communicated
- A mature attitude and insight into matters affecting school, self and/or company welfare
- Leadership and classroom management ability
- Excellent written and oral communication skills
- Ability to work well under pressure, and effectively prioritize and execute tasks to meet deadlines consistently
- Ability to be an active listener and critical thinker
- Ability to motivate, develop, and direct people
- Be accurate and accountable with strong attention to detail

Work Conditions

- Instruction and interaction with students, parents, and administration during all operating hours of the school day
- Standing for extended periods of time
- Sitting occasionally
- Ability to move around the school during school/work hours
- Dexterity to operate a computer keyboard, mouse, and to handle other computer and other technology related components

This position description is not intended to be a complete list of all responsibilities, duties or skills required for the job. It is subject to review and change at any time, with or without notice, in accordance with the needs of the Company. Because no position description can detail all of the duties and responsibilities that may be required from time to time in the performance of a job, any duties and responsibilities that may be inherent in a job, reasonably required for its performance, or required due to the changing nature of the job shall also be considered part of the job holder's responsibility.

EMPLOYEE ACKNOWLEDGMENT

I have read this position description and discussed it with my supervisor.

_____ _____

Employee Date

EXHIBIT A

JOB DESCRIPTION

Job Title:	Instructional Aide	**Reports To:**	School Administrator
Department:	Instructional	**FLSA Status:**	Non-Exempt
Effective Date:	August 1, 2015	**Division:**	Academies

Description

Works to assist the Teacher with the classroom activities on a day to day basis. Helps to promote positive student behaviors in both academics and extra-curricular activities. Performs supervisory duties to ensure student safety and to promote a positive school climate. Assists the building Administrator and Teachers by administering the assigned duties in conformity with the philosophy and policies adopted by White Hat Management, the Academies, the rules of the governing Board, State Board of Education, the provisions of law, directives of the building Administrator and sound administrative practice.

Responsibilities

- Understands, accepts, and abides by the Academy's philosophy and mission statement in all his/her activities
- Supports lessons taught by the teacher to individual students or groups of students as assigned by the teacher or Administrator (or designee)
- Follows Instructional Plans as assigned by the teacher
- Performs clerical duties, including but not limited to grading papers and making copies
- Supports the discipline policy in and out of the classroom.
- Performs all duties as assigned, including but not limited to field trips, morning duty, dismissal duty, and lunch duty
- School Activities — the Instructional Aide may be required to attend and/or participate in such other activities as directed by the Administrator such as: parent-faculty nights, faculty meetings (before or after school hours), assemblies, commencement exercises, fundraisers, chaperoning student activities, provide guidance for students, participate on faculty committees, study and help resolve Academy problems, and participate in the preparation of courses of study -- such activity demonstrates valuable support for the Academy at large
- Works cooperatively with the teacher, tutor, and special education teacher
- Assists the teacher in the use of classroom technology
  Helps maintain the cleanliness of the classroom, lunchroom and other school areas
- Helps plan classroom activities as directed by the teacher
- Supports the teacher in all student and parent relations
- Exhibits punctuality and displays professional behavior
- Follows the dress code as stated in the employee manual
- Works cooperatively with others to achieve duties and responsibilities
- Acts in accordance to the directives of the teacher and the Administrator (or designee)
- Has read and has agreed to abide by the policies, directives, and guidelines as stated in all Academy manuals pertinent to the position
- Actively assists in student recruitment, enrollment and retention activities as directed by the Administrator
- Performs all other job duties as assigned

Position Requirements

Associate degree or higher, or 2 years of college coursework, or passage of the Para Professional's Exam; proficiency in Microsoft Office Software; excellent verbal and written communication skills; satisfactory completion of an FBI, BCI and TB Test; able to meet educational standards as applicable and other relevant criteria as determined by White Hat Management; and physical ability to lift up to 25 pounds; and have the ability to travel as needed.

EXHIBIT A

JOB DESCRIPTION

Job Title:	Instructional Aide	**Reports To:**	School Administrator
Department:	Instructional	**FLSA Status:**	Non-Exempt
Effective Date:	August 1, 2015	**Division:**	Academies

Knowledge, Skills, Abilities and Personal Characteristics

- Ability to handle confidential information responsibly and exhibit sound judgment while maintaining that confidentiality
- Reliable, dependable, and trustworthy work ethic; a strong sense of integrity
- Ability to manage difficult or emotional students
- Ability to communicate with parents
- Ability to make sound judgments after all available information has been gathered or communicated
- A mature attitude and insight into matters affecting school, self and/or company welfare
- Leadership and classroom management ability
- Excellent written and oral communication skills
- Ability to work well under pressure, and effectively prioritize and execute tasks to meet deadlines consistently
- Ability to be an active listener and critical thinker
- Ability to motivate, develop, and direct people

Work Conditions

- Instruction and interaction with students, parents, and administration
- Standing for extended periods of time
- Sitting occasionally
- Ability to move around the school
- Dexterity to operate a computer keyboard, mouse, and to handle other computer and other technology related components

This position description is not intended to be a complete list of all responsibilities, duties or skills required for the job. It is subject to review and change at any time, with or without notice, in accordance with the needs of the Company. Because no position description can detail all of the duties and responsibilities that may be required from time to time in the performance of a job, any duties and responsibilities that may be inherent in a job, reasonably required for its performance, or required due to the changing nature of the job shall also be considered part of the job holder's responsibility.

EMPLOYEE ACKNOWLEDGMENT

I have read this position description and discussed it with my supervisor.

_____ _____

Employee Date

EXHIBIT A

JOB DESCRIPTION

Job Title:	Purchasing/Personnel Sec.	**Reports To:**	School Administrator
Department:	Administrative	**FLSA Status:**	Non-Exempt
Effective Date:	July 1, 2015	**Division:**	Academies

Description

Manages all office functions, assist staff with all personnel and human resource needs, and fulfill all clerical needs of the building administrator. The Purchasing agent with ordering supplies and tracking deliveries for staff and office personnel as directed and approved by the building Administrator.

Responsibilities

- Understands, accepts, and abides by the Academies' Philosophy and Mission Statement in all of his/her school activities.
- Assisting in all aspects of maintaining a professional front office, including but not limited to, fielding and directing incoming phone calls to the appropriate staff member, filing, copying and faxing of sensitive information, communicating with social service agencies, other school districts and/or various agencies, logging student attendance data, and acting as Registrar
- Maintaining school personnel files, answering basic employee questions regarding benefits, time off, employment policies/procedures, etc.
- Monitors PTO time for all staff and provides a daily report of staff activities to the Adminstrator
- Receive all guests entering the school building including signing for and delivering all UPS and FedEx shipments
- Distributing new employee packets and ensuring they are complete before sending to the corporate office for processing
- Assisting the school Administrator by typing memos, reports, or other needed information
- Communicates with the HR department regarding personnel matters
- Acting as a contact for arranging various administrative support activities (e.g. equipment repairs, technology support, setting up facilities for meetings and assigning janitorial duties)
- Sources office and school supplies by following guidelines as outlined by the companies purchasing policy
- Monitors mail room supplies and postage, process all outgoing mail, affix postage and transport to mailbox
- Answer incoming calls for the school, take messages and ensure that requests for action or information are relayed to the appropriate staff member
- Set an example with punctuality and in performing all duties in an exemplary manner
- Works in a professional and cooperative manner with others to achieve the goals of the school
- Act in accordance to the directives and assignments given by the Administrator
- Actively assists in student recruitment, enrollment, and retention activities as directed by the Administrator
- Performs all other job duties as assigned

Position Requirements

High School Diploma or equivalent; proficiency in Microsoft Office software; ability to maintain confidential information; successful completion of BCI, FBI and TB check; able to meet educational standards as applicable and other relevant criteria as determined by White Hat Management; and physical ability to lift up to 25 pounds.

Job Title:	Purchasing/Personnel Sec.	**Reports To:**	School Administrator
Department:	Administrative	**FLSA Status:**	Non-Exempt
Effective Date:	July 1, 2015	**Division:**	Academies

Knowledge, Skills, Abilities and Personal Characteristics

- Ability to handle confidential information responsibly and exhibit sound judgment while maintaining that confidentiality
- Reliable, dependable, and trustworthy work ethic; a strong sense of integrity
- Ability to manage difficult or emotional students
- Ability to communicate with students, parents, and board, sponsor, and community members
- Ability to make sound judgments after all available information has been gathered or communicated
- A mature attitude and insight into matters affecting school, self and/or company welfare
- Leadership and classroom management ability
- Excellent written and oral communication skills
- Ability to work well under pressure, and effectively prioritize and execute tasks to meet deadlines consistently
- Ability to be an active listener and critical thinker
- Ability to motivate, develop, and direct people

Work Conditions

- Instruction and interaction with students, parents, and administration during all operating hours of the school day
- Standing for extended periods of time
- Sitting occasionally
- Ability to move around the school during school/work hours
- Dexterity to operate a computer keyboard, mouse, and to handle other computer and other technology related components

This position description is not intended to be a complete list of all responsibilities, duties or skills required for the job. It is subject to review and change at any time, with or without notice, in accordance with the needs of the Company. Because no position description can detail all of the duties and responsibilities that may be required from time to time in the performance of a job, any duties and responsibilities that may be inherent in a job, reasonably required for its performance, or required due to the changing nature of the job shall also be considered part of the job holder's responsibility.

EMPLOYEE ACKNOWLEDGMENT

I have read this position description and discussed it with my supervisor.

_____ _____

Employee Date

EXHIBIT A

JOB DESCRIPTION

Job Title:	Building Secretary	**Reports To:**	School Administrator
Department:	Administrative	**FLSA Status:**	Non-Exempt
Effective Date:	July 1, 2015	**Division:**	Academies

Description

Manages office functions, assists staff with needs and fulfills all clerical needs for the building administrator. May assist as needed with staff needs and ordering supplies as directed and approved by the building administrator.

Responsibilities

- Understands, accepts and abides by the Academies Philosophy and Mission Statement in all of his/her employee responsibilities and duties
- Assists in all aspects of maintaining a professional front office, including but not limited to, fielding and directing incoming phone calls to the appropriate staff member, filing, copying and faxing of sensitive information, logging student attendance data and acting as Registrar.
- Acts in a professional manner at all times including reporting to work on time each day and adhering to WHM professional dress expectations as outlined in the WHM Employee Policy and Procedure Manual
- Maintains strict confidentiality regarding all student, family, and staff information.
- Answers incoming calls for the school, takes messages, and ensures that all messages are directed to the appropriate staff member in a timely manner.
- Receives all guests entering the building with a friendly and welcoming demeanor.
- Signs for and delivers all UPS ad FedEx shipments to the appropriate staff member.
- Communicates with other agencies such as social services and other school districts, as directed by the site administrator.
- Maintains accurate school personnel files and can respond correctly to basic employee questions regarding benefits, time-off, and other employee related policies/procedures, etc.
- Records staff PTO time and provides a daily report of staff absences to the Site Administrator
- Types Memos, reports, and other needed information as directed by the Site Administrator.
- Acts as the contact for arranging various administrative support activities (e.g. equipment repairs, technology support, setting up facilities for meetings and requesting janitorial duties i.e. emergency clean-ups, etc.)
- Communicates with the WHM Human Resources department regarding personnel matters
- Manages daily mail responsibilities including processing outgoing mail, delivering incoming mail and monitors postal machine usage.
- Acts in accordance to the directives and assignments given by the Site Administrator
- Performs all other job duties as assigned

Position Requirements

High School Diploma or equivalent; proficiency in Microsoft Office software; ability to maintain confidential information; successful completion of BCI, FBI background check; able to meet educational standards as applicable and other relevant criteria as determined by White Hat Management; and physical ability to lift up to 25 pounds.

Job Title:	Building Secretary	**Reports To:**	School Administrator
Department:	Administrative	**FLSA Status:**	Non-Exempt
Effective Date:	July 1, 2015	**Division:**	Academies

Knowledge, Skills, Abilities and Personal Characteristics

- Ability to handle confidential information responsibly and exhibit sound judgment while maintaining that confidentiality
- Reliable, dependable, and trustworthy work ethic; a strong sense of integrity
- Ability to manage difficult or emotional students
- Ability to communicate with students, parents, board, sponsor, and community members
- Ability to make sound judgments after all available information has been gathered or communicated
- A mature attitude and insight into matters affecting school, self and/or company welfare
- Leadership and classroom management ability
- Excellent written and oral communication skills
- Ability to work well under pressure, and effectively prioritize and execute tasks to meet deadlines consistently
- Ability to be an active listener and critical thinker
- Ability to motivate, develop, and direct people

Work Conditions

- Instruction and interaction with students, parents, and administration during all operating hours of the school day
- Standing for extended periods of time
- Sitting occasionally
- Ability to move around the school during school/work hours
- Dexterity to operate a computer keyboard, mouse, and to handle other computer and other technology related components

This position description is not intended to be a complete list of all responsibilities, duties or skills required for the job. It is subject to review and change at any time, with or without notice, in accordance with the needs of the Company. Because no position description can detail all of the duties and responsibilities that may be required from time to time in the performance of a job, any duties and responsibilities that may be inherent in a job, reasonably required for its performance, or required due to the changing nature of the job shall also be considered part of the job holder's responsibility.

EMPLOYEE ACKNOWLEDGMENT

I have read this position description and discussed it with my supervisor.

_____ _____

Employee Date

EXHIBIT A

JOB DESCRIPTION

Job Title:	Teacher	**Reports To:**	School Administrator
Department:	Instructional	**FLSA Status:**	Exempt
Effective Date:	July 1, 2015	**Division:**	Academies

Description

Facilitate superior student education through effective classroom management, lesson planning, effective communication, and cooperation and teamwork with building administration, peers, parents, and other stakeholders; assist the Administrator by implementing the philosophy and policies adopted by the company, the rules of the governing Board and the State Board of Education, state, federal, and local law, and the directives of the Administrator.

Responsibilities

- Understands, accepts, abides by, and implements the school's philosophy and mission statement in all his/her school activities
- Models tolerance, global awareness, reflective practice, and the behavior we expect from our students
- Prepares instructional lesson plans aligned to applicable standards
- Teaches all subjects following the School's course of study or as assigned
- Uses the textbooks and other resources provided for each subject
- Administers standardized tests as directed
- Keeps accurate records on each student such as: grade books and report cards, lesson plans, attendance records, and behavior/discipline records
- Maintains confidentiality concerning all student information and any professional matters
- Works with staff to improve student learning and achievement
- Uses sound classroom management techniques
- Collaborates with colleagues demonstrating a model of "connected educators" and develops positive working relationships with students, parents, school personnel and the public
- Follows all corporate and school policies and procedures
- Participates in professional development workshops/programs
- Maintains status of Highly Qualified Teacher per federal definition
- Uses computers and other technology provided by the company to assist and support students in their learning
- Adapts and enriches the curriculum using multiple strategies and online tools in imaginative ways to actively engage students in their learning
- Develops classroom experiences that teach students not only facts but how to apply what they learn to solve real world problems
- Guides students to develop the broader competencies increasingly important for success in an ever more complex and demanding world
- Provides ample opportunities to all students to develop in activities outside the classroom such as student organizations, physical activities, and service learning
- Possess the knowledge to learn data and delivery systems necessary for the content, resources, and systems to create, manage, and assess engaging and relevant student learning experiences and support students in their learning experiences both inside and outside the school Attends and/ or participates in school activities as directed by the Administrator including but not limited to faculty meetings (before or after school hours), open houses, and commencement exercises; chaperoning student activities; providing guidance for students; assisting and participating in learning communities; studying and helping to resolve school problems; and participating in the preparation of courses of study
- Actively assists in student recruitment and retention activities as directed by the Administrator
- Performs all other job duties as required

EXHIBIT A

JOB DESCRIPTION

Job Title:	Teacher	**Reports To:**	School Administrator
Department:	Instructional	**FLSA Status:**	Exempt
Effective Date:	July 1, 2015	**Division:**	Academies

Position Requirements

Bachelors degree; certification/licensure in appropriate teaching area; NCLB Highly Qualified Teacher (HQT) status in teaching assignment; excellent oral and written communication skills; proficient in computer applications, including MS Word, Excel, Power Point, as well as internet, online educational resources, and Smart Board/Promethean Board technology; effective organizational skills with the ability to perform multiple tasks; satisfactory completion of a BCI, FBI,TB test (where applicable) and drug testing; physical ability to lift up to 25 pounds; and the ability to travel as needed.

Knowledge, Skills, Abilities and Personal Characteristics

- Ability to handle confidential information responsibly and exhibit sound judgment while maintaining that confidentiality
- Reliable, dependable, and trustworthy work ethic; a strong sense of integrity
- Ability to manage difficult or emotional students
- Ability to communicate with parents
- Ability to make sound judgments after all available information has been gathered or communicated
- A mature attitude and insight into matters affecting school, self and/or company welfare
- Leadership and classroom management ability
- Excellent written and oral communication skills
- Ability to work well under pressure, and effectively prioritize and execute tasks to meet deadlines consistently
- Ability to be an active listener and critical thinker
- Ability to motivate, develop, and direct people

Work Conditions

- Instruction and interaction with students, parents, and administration
- Standing for extended periods of time
- Sitting occasionally
- Ability to move around the classroom
- Dexterity to operate a computer keyboard, mouse, and to handle other computer and other technology related components

This position description is not intended to be a complete list of all responsibilities, duties or skills required for the job. It is subject to review and change at any time, with or without notice, in accordance with the needs of the Company. Because no position description can detail all of the duties and responsibilities that may be required from time to time in the performance of a job, any duties and responsibilities that may be inherent in a job, reasonably required for its performance, or required due to the changing nature of the job shall also be considered part of the job holder's responsibility.

EMPLOYEE ACKNOWLEDGMENT

I have read this position description and discussed it with my supervisor.

_____ _____

Employee Date

Date

Fiscal Officer

Job Description

Weekly/Monthly Activities:

1) Provide a licensed and bonded representative to serve as the Board of Directors' fiscal officer in accordance with the Ohio Revised Code and the Board of Directors' charter agreement. The firm will also utilize an assistant to the fiscal officer who will be called on occasion to present information and represent the fiscal officer.

2) Present financial reports at the Board meetings and provide monthly financial reports to the School Sponsor

3) Manage cash as an authorized bank account user and pay the school's bills.

4) Record funds received by the school. Make any necessary deposits.

5) Review and approve bank reconciliations on a monthly basis, verifying balances are reconciled to the general ledger and present the same to the Board of Directors at regular meetings.

6) Maintain appropriate depreciation schedules for capitalized assets.

7) Communicate with the Ohio Department of Education and the Auditor of the State of Ohio, among other funding agencies and to assist in the execution of fund transfers.

8) Approve cash draw down requests for all federal and state grants made to the School. Forward all related grants communications to the schools "Grants Coordinator" to help resolve potential information requests.

9) Monitor investment policies established by the Board.

10) Prepare accounting adjustments and provide oversight of the School's record keeping and accounting.

11) Respond to requests/questions from board, legal counsel, sponsors.

Annual Activities

1) Budgets/budget revisions (Semi-Annual).

2) Forecasts/forecast revisions (Semi-Annual).

3) Assist in revision of policies.

4) Prepare & Submit required ODE financial reporting through EMIS (Period H.)

5) Prepare for annual audits, prepare full GAAP financial statements, coordinate and act as the liaison between the Board of Directors, School, and Auditor of State of Ohio during the annual audit process.

6) Assist in special audits as necessary (if needed, at rates and terms to be agreed upon when needed).

7) In the event of school closure, be primarily responsible for all closing procedures related to the finances of the school.

8) Approve CCIP applications as submitted by the Schools “Grants Coordinator”.

9) Approve the Final Expenditure Report in CCIP.

Learn It

Job Title:	Intervention Specialist	**Reports To:**	SPED Supervisor
Department:	LITS	**FLSA Status:**	Exempt
Effective Date:	August 1, 2013		

Description

Position might be part-time or full-time. Teachers must have a Special Education K-12 Cross Categorical teaching certificate. Programs will provide reading, mathematics, and writing to students with special needs. The subject areas and times of instruction will vary depending on the requirements of the school system and the needs of the school population. Intervention Specialists work with children who have cognitive, emotional, learning, and/or physical disabilities.

Responsibilities

- Administer pre-and-post assessments to students, write and track progress reports, and complete all other Learn It Systems required reporting
- Create and maintain student files and other administrative duties as needed
- Provide a safe and positive learning environment for all students
- Continually communicate with school personnel and parents to deliver a high quality program
- Provides an educational program for students as defined in the students Individualized Education Program (I.E.P.).
- Works cooperatively with regular classroom teachers, interpreting the abilities and disabilities of these students, assisting in classroom intervention strategies, modifying general education curricular as necessary, and assisting the student with regular class assignments.
- Communicates regularly with parents and professional staff regarding the educational, social, and personal needs of students
- Participates as a member of the RTI team
- Develops and implements an Individualized Educational Program of each child, complimentary to his/her educational strengths and needs as defined through a multi-factored evaluation and I.E.P. process, and Regular Education Curriculum.
- Completes necessary reports and record keeping as required by state and federal guidelines
- Participates in professional growth activities through staff development, in-service, workshops, and higher education
- Ability to work, collaborate and guide paraprofessionals as requested
- Other duties as assigned by the Program Supervisor or his/her designee

Position Requirements

- Active and valid Special Education K-12 Cross Categorical teaching certificate issued by the appropriate State Department of Education
- Bachelor's degree minimum
- Teaching experience with elementary, middle, and/or high school students
- Experience working with students with special needs

Learn It

Job Title:	Intervention Specialist	**Reports To:**	SPED Supervisor
Department:	LITS	**FLSA Status:**	Exempt
Effective Date:	August 1, 2013		

Knowledge, Skills, Abilities and Personal Characteristics

- Computer proficiency required
- Ability to provide a high level of customer service to principals, classroom teachers, and parents
- Excellent oral and written communication skills
- Effective communication in both oral and written

Work Conditions

- Must be able to lift 30 pounds
- Work location is in a school building where employee will need to be able to go up and down stairs
- Frequent standing
- Hand dexterity for typing and entering data into a computer
- Arms raise above head

This position description is not intended to be a complete list of all responsibilities, duties or skills required for the job and is subject to review and change at any time, with or without notice, in accordance with the needs of the Company. Since no position description can detail all the duties and responsibilities that may be required from time to time in the performance of a job, duties and responsibilities that may be inherent in a job, reasonably required for its performance, or required due to the changing nature of the job shall also be considered part of the job holder's responsibility.

EMPLOYEE ACKNOWLEDGMENT

I have read this position description and discussed it with my supervisor.

_____ _____

Employee Date

_____ _____

Supervisor Date

Learn It

Job Title:	Physical Therapist	**Reports To:**	SPED Supervisor
Department:	LIS	**FLSA Status:**	Non-exempt
Effective Date:	August 1, 2013		

Description

Position might be part-time or full-time. The purpose of this position is to provide services to students who are eligible for Physical Therapy intervention services. The physical therapist may also provide assessment if requested, in accordance with state or district requirements.

Responsibilities

- Physical therapy intervention for students utilizing exercises and developmentally appropriate equipment to strengthen muscle tone and increase flexibility, based on the goals and objectives included in the student's IEP/ISP.
- Monitor student progress
- Test and evaluate students (if requested) to determine their need, or continuing need, for physical therapy
- Consult with classroom teachers regarding physical therapy plans for each student to assure that physical therapy intervention is targeted to address the student's educational needs, and incorporated into the classroom as appropriate and possible.
- Communicate with parents on a regular basis to assure that they are informed with regard to student progress, and that interventions are incorporated into home activities as appropriate and possible.
- Creates solutions to challenges for individual students, which are based in research and sound professional judgment.
- Make referrals to community resources as needed.
- Complete paperwork in a timely and well-organized manner.
- Other duties as assigned.

Position Requirements

- Doctor of Physical Therapy degree. May consider the Master of Physical therapy and Master of Science in Physical Therapy degree.
- Appropriate state licenses and certificates
- Experience with elementary, middle, and/or high school students
- Experience working with students with special needs

Knowledge, Skills, Abilities and Personal Characteristics

- Computer proficiency required
- Ability to provide a high level of customer service to principals, classroom teachers, and parents
- Excellent oral and written communication skills
- Effective communication in both oral and written
- Math and reasoning ability
- Must possess thorough knowledge of diagnostic instruments and intervention strategies
- Excellent time management and organization

Job Title:	Physical Therapist	**Reports To:**	SPED Supervisor
Department:	LIS	**FLSA Status:**	Non-exempt
Effective Date:	August 1, 2013		

- Ability to work independently

Work Conditions

- Must be able to lift 30 pounds
- Work location is in a school building where employee will need to be able to go up and down stairs
- Frequent standing
- Hand dexterity for typing and entering data into a computer
- Arms raise above head

This position description is not intended to be a complete list of all responsibilities, duties or skills required for the job and is subject to review and change at any time, with or without notice, in accordance with the needs of the Company. Since no position description can detail all the duties and responsibilities that may be required from time to time in the performance of a job, duties and responsibilities that may be inherent in a job, reasonably required for its performance, or required due to the changing nature of the job shall also be considered part of the job holder's responsibility.

EMPLOYEE ACKNOWLEDGMENT

I have read this position description and discussed it with my supervisor.

_____ _____

Employee Date

_____ _____

Supervisor Date

Job Title:	School Psychologist	**Reports To:**	Program Manager/Supervisor
Department:	LIS	**FLSA Status:**	Non-exempt
Effective Date:	May 7, 2013	**Department:**	LIS

Description
May be full time or part time. These services are designed in conjunction with school staff and Learn It Systems management to meet academic and personal goals for students of a specific contract and program.

Responsibilities
- Work one-on-one or in small groups as outlined in the student's Individualized Education Program, providing classroom guidance and counseling with students as indicated on their IEP
- Perform and report psychological evaluations including comprehensive assessments
- Familiarity with the range of assessment techniques that fall outside of the traditional evaluation methods
- Consult with teachers regarding student behavior and academic achievement
- Serve as a member of the multi-disciplinary team in student assessment and placement
- Interpreting evaluations
- Assuring that students are placed in the least restrictive environment
- Counseling may focus on a variety of areas including academic, emotional, behavioral, or developmental issues to promote student growth, engagement, and performance
- Consult and develop rapport with parents, classroom teachers, school principal and other school personnel on a regular basis
- May provide parent support groups and communicating by any means possible
- May train staff and students on disabilities, disorders, medication, clinical in nature and other professional development
- Conduct observations of students, FBA/BIP plans with district, clinical lenses/clinical case reviews.
- Act as case manager for students at school sites
- May provide consultation and/or direct academic intervention for students prior to referral for evaluation services

Position Requirements
- Master's degree in School Psychology
- School based experience preferred
- Prior experience working with at risk and students preferred

Knowledge, Skills, Abilities and Personal Characteristics
- Strong clinical skills regarding Special Education (e.g. Compliance, Law, Evaluations, Disabilities, IEPs), DSM-IV Disorders, Psychometric evaluations/interpretations, Behavior Modification (Cognitive Behavior Therapies, Applied Behavior Analysis techniques, Counseling).
- An understanding of the K-12 education environment and relationships
- Demonstrated ability to succeed in a highly accountable environment to include report maintenance and record keeping
- Ability to build rapport within the local community resources and school staff
- Ability to provide a high level of customer service to principals, classroom teachers, and parents

Job Title:	School Psychologist	**Reports To:**	Program Manager/Supervisor
Department:	LIS	**FLSA Status:**	Non-exempt
Effective Date:	May 7, 2013	**Department:**	LIS

- Strong administrative and computer skills and the ability to handle multiple priorities
- Organized and detailed oriented
- Professional appearance and attitude at all times
- Must be able to adhere to a consistent schedule
- Effective communication in both oral and written
- Collaborate and able to receive to feedback, mentoring and direction from peers and supervisors
- Maintain a professional and clinical perspective at all times, able to not internalize or personalize (e.g. emotionally) in regards certain student behaviors or mannerisms that occur

Work Conditions

- Must be able to lift 30 pounds
- Work location is in a school building where employee will need to be able to go up and down stairs
- Frequent standing
- Hand dexterity for typing and entering data into a computer

This position description is not intended to be a complete list of all responsibilities, duties or skills required for the job and is subject to review and change at any time, with or without notice, in accordance with the needs of the Company. Since no position description can detail all the duties and responsibilities that may be required from time to time in the performance of a job, duties and responsibilities that may be inherent in a job, reasonably required for its performance, or required due to the changing nature of the job shall also be considered part of the job holder's responsibility.

EMPLOYEE ACKNOWLEDGMENT

I have read this position description and discussed it with my supervisor.

_____ _____

Employee Date

_____ _____

Supervisor Date

Learn It

Job Title:	Speech-Language Pathologist	**Reports To:**	SPED Supervisor
Department:	LIS	**FLSA Status:**	Non-exempt
Effective Date:	August 1, 2013		

Description

Position might be part-time or full-time. Specializes in diagnosis and treatment of speech language disorders, and engages in scientific study of human communication by performing the following duties. Services may be delivered through direct in school programs or through telepractice virtual services.

Responsibilities

- Screens referred students to determine need for further evaluation and/or need for classroom accommodations. Create and maintain student files and other administrative duties as needed
- Diagnoses and identifies students with articulation, voice, fluency (stuttering) and/or language delays and disorders using standardized, norm referenced and criterion referenced test instruments to include determining type and severity of disorder.
- Develops speech language treatment plans as part of the Individual Education Plan; to include determining goals, objectives, methods, materials, frequency, duration, and modifications to regular classroom.
- Designs, implements, and develops activities and original instructional aids which are relevant, enhance the effectiveness of teaching, and address treatment plans to include determining appropriate number of activities, scheduling activities, and making group and individual plans.
- Consults and provides ideas to teachers and parents regarding speech and language development and disorders to include determining the needs of the child.
- Provides direct therapy and instruction to students to include analyzing, reviewing, and revising student progress and communicating with teachers and parents.
- Prepares paperwork, progress notes, and reports within state and federal guidelines and including relevant information.
- Develops a variety of teaching and instructional strategies by maintaining current knowledge of standards and current practices in the field through reading books and periodicals; consulting with colleagues, and attending conferences.
- Maintains various files and/or records for the purpose of providing written support and required documentation.
- Collaborates with educational staff to determine which interventions are working, to communicate evaluation results, and to discuss and develop departmental goals and issues.

Position Requirements

- Master's degree from an accredited institution in the area of Speech-Language Pathology.
- Appropriate state licenses and certificates
- Experience with elementary, middle, and/or high school students
- Experience working with students with special needs

Learn It

Job Title:	Speech-Language Pathologist	**Reports To:**	SPED Supervisor
Department:	LIS	**FLSA Status:**	Non-exempt
Effective Date:	August 1, 2013		

Knowledge, Skills, Abilities and Personal Characteristics

- Computer proficiency required
- Ability to provide a high level of customer service to principals, classroom teachers, and parents
- Excellent oral and written communication skills
- Effective communication in both oral and written
- Math and reasoning ability
- Must possess thorough knowledge of diagnostic instruments and intervention strategies
- Excellent time management and organization
- Ability to work independently

Work Conditions

- Must be able to lift 30 pounds
- Work location is in a school building where employee will need to be able to go up and down stairs
- Frequent standing
- Hand dexterity for typing and entering data into a computer
- Arms raise above head

This position description is not intended to be a complete list of all responsibilities, duties or skills required for the job and is subject to review and change at any time, with or without notice, in accordance with the needs of the Company. Since no position description can detail all the duties and responsibilities that may be required from time to time in the performance of a job, duties and responsibilities that may be inherent in a job, reasonably required for its performance, or required due to the changing nature of the job shall also be considered part of the job holder's responsibility.

EMPLOYEE ACKNOWLEDGMENT

I have read this position description and discussed it with my supervisor.

_____ _____

Employee Date

_____ _____

Supervisor Date

Learn It

Job Title:	One-on-One Instructional Aide	**Reports To:**	Program Supervisor
Department:	LITS	**FLSA Status:**	Non-exempt
Effective Date:	November 20, 2013	**Division:**	White Hat Management

Description:
The One-on-One Instructional Aide supports special education teachers in providing a high quality, personalized education program for students.

Responsibilities:

- Educating individual students (one-on-one) who are on IEP's under the direction of the supervising Intervention Specialist
- Monitor independent student work
- Conferring and planning with teachers related to IEP objectives and/or modifications, and providing documentation
- Follows classroom schedules
- Assist both the special education and regular education teacher with implementation of daily lesson plans
- Preparation of the classroom environment for learning activities
- Participating in professional activities & meetings
- Working with audio-visual equipment, computers and/or assistive technology as related to IEP/accommodations & modifications
- Be knowledgeable on all assigned student programs
- Attend training to develop relevant knowledge and skills
- Assist students with bus arrival and departure
- Provide assistance with behavior management, physical management and social skills
- Work with teacher(s) to modify and create instructional materials
- Work together as a team with teacher(s) and other support staff
- Assist students with self-care needs, which may include, eating and personal hygiene and toileting
- Facilitate communication between students, staff and family members
- Maintain accurate records monitoring student progress
- Monitor activities to ensure safety of student, classmates and other staff
- Accompany students on field trips
- Willingness to be trained in the areas of: seizure protocol, administering medications, asthma/allergy care, and other areas as needed
- Work on days when the student they are assigned is absent is required
- Other duties may be assigned

Qualifications:

- Minimum of a High School Diploma or Equivalent
- Paraprofessional License
- Reliable transportation
- At least one year of experience working with special education students
- Must be able to perform academic work at the level of assignment (K-8)
- CPI training or willingness to be trained desired

Learn It

Job Title:	One-on-One Instructional Aide	**Reports To:**	Program Supervisor
Department:	LITS	**FLSA Status:**	Non-exempt
Effective Date:	November 20, 2013	**Division:**	White Hat Management

Knowledge, Skills, Abilities and Personal Characteristics:

- Acts in accordance with the professional code of ethics
- Demonstrates professionalism and contributes to a positive work environment
- Ability to work with parents and customers in regards to sensitive matters and handle confidential information and feedback from customers professionally
- Maintain a professional and clinical perspective at all times, able to not internalize or personalize (e.g emotionally) in regards to certain student behaviors or mannerisms that occur
- Organizes tasks and manages time effectively
- Skillfully manages individual, group, and organizational interactions
- Effectively uses verbal, nonverbal, writing, and listening skills
- Averts problem situations and intervenes to resolve conflicts
- Exhibits consistency, resourcefulness, and resilience
- Exercises self-control and perseverance when dealing with students
- Completes paperwork accurately. Verifies and correctly enters data
- Maintains an acceptable attendance record and is punctual
- Basic computer skills (MS Word, Web Navigation, etc.)

Working Conditions:

- Duties may require bending, crouching, kneeling, reaching, and standing
- Duties may require lifting, carrying, and moving work-related supplies/equipment
- Must be able to lift 20 pounds
- Work location is in a school building where employee will need to be able to go up and down stairs
- Frequent standing and sitting
- Hand dexterity for typing and entering data into a computer

This position description is not intended to be a complete list of all responsibilities, duties or skills required for the job and is subject to review and change at any time, with or without notice, in accordance with the needs of the Company. Since no position description can detail all the duties and responsibilities that may be required from time to time in the performance of a job, duties and responsibilities that may be inherent in a job, reasonably required for its performance, or required due to the changing nature of the job shall also be considered part of the job holder's responsibility.

EMPLOYEE ACKNOWLEDGMENT

I have read this position description and discussed it with my supervisor.

_____ _____

Employee Date

_____ _____

Supervisor Date

Recruitment and Retention Plan	**8.1**	**3) Describe the plan to recruit and retain highly qualified personnel.**

The Operator utilizes a number of teacher and staff recruitment techniques to source for viable candidates for these positions. Some of the more common methods of recruitment include posting vacancies on our company website; posting vacancies on department of education websites and other employment websites such as monster.com, careerbuilder.com, and LinkedIn.com; running print media classified ads; attending college job fairs and posting to college career center websites; utilizing employee referrals and previous interviewees; and candidate walk-ins and other miscellaneous sources.
The Human Resources Department screens all resumes to determine employment eligibility either at our schools or at White Hat Management. Applicants that do not meet minimum qualifications are not forwarded to hiring managers, and are maintained for potential future use. Applicants that do meet employment requirements are sent to each hiring manager, and it then becomes the responsibility of the hiring manager to schedule and conduct an interview. Requirements by position vary, but general requirements include passage of a BCI/FBI fingerprint check, passage of a reference check, and ability to meet the educational/credential and physical requirements of the position, as mandated by federal and state laws and school charter/sponsor stipulations.
Policies for interviewing for all positions remain the same regardless of position. However, there are separate interview questions for each position in the school that allow the hiring manager to determine which candidate is most appropriate for a position. Job content interview questions vary depending on the position, but there are some that are asked of all applicants (misdemeanor/felony convictions, salary requirements, availability, etc.). For teaching positions, there is also a performance-based portion of the interview process which must be completed.
During the interview process, the interviewer(s) is/are trained to take notes only on information that is related to the job for which the candidate is interviewing. Reference checks are then completed to verify a candidate's background and work history for anyone the hiring manager is considering for the position. Hiring managers then fax an "interview packet" containing the candidate's resume, educational credentials, interview notes, letters of reference, college transcripts, and the reference checks to the Human Resources Department for review.
The Human Resources Department then verifies that all steps were followed correctly in the interview process, and if so, approval is given to the hiring manager to extend an offer of employment.
The strategies utilized to retain highly qualified teachers and other staff members include extensive mentoring programs for entry-level teachers, professional development activities throughout the year for staff, tuition reimbursement both for college courses taken as well as licensing exams (Praxis II, NTE, etc.), a generous benefits plan, paid time off, a strong focus on promoting from within, a safe and secure work environment, a competitive salary, and working for a purpose-driven organization.

Student/Teacher Ratios	**8.1**	**4) State the student/teacher ratio for the school.**

25:1

Staffing Plan for Projected Enrollment	**8.1**	**5) Describe staffing plan based on projected enrollment. Differentiate between certified teaching, para-teaching, and non-licensed staff.**

2015-2016 St. Aloysius Sponsorship Contract Education Plan Attachment

The School's staffing plan will be based on student enrollment numbers. In addition to the Highly Qualified Teaching staff the school will maintain a 16:1 ratio for Students with Disabilities to Intervention Specialists. ESL teachers, One on One Aides, Occupational, Speech and Physical Therapists will be hired according to IEP requirements. The school will utilize Instructional Aides to augment the teaching staff providing in class support for students who are struggling to master standards. The school will also employ art and music teachers. The school secretary and student data specialist will manage the data/state reporting and enrollment process. The Administrator will serve as the Instructional and Operational Leader in the building. The Assistant Administrator supports the Administrator. Custodians, Security Guards and Food Service staff round out the staffing model. These positions are all supported by the staff at the ESP.

ATTACHMENT 8.3

STAFF DISMISSAL PROCEDURE

Disposition of Employees if Contract is Terminated

A. Dismissal procedures for staff and the plan for disposition of employees

- The Executive Team will ensure there is a clear and written timeline for the school closing
- Ensure the STRS and SERS contributions are current
- Clarify COBRA benefits and notify staff when medical benefits will end
- Remind the faculty of their obligation to teach up to the date of closing or otherwise
- Ensure that each faculty's LPDC information is current and available the teachers, and provide sponsor contact person information to all staff
- The ESP will provide displaced staff with a list of openings across the organization allowing them to transfer to those positions maintaining seniority and benefits as soon as the last day of school is completed

WHITE HAT
MANAGEMENT

"Compensation & Benefits Package at a Glance"

Welcome to the White Hat Management Family. We are very excited that you have agreed to join our family of dedicated professionals. We are committed to our Mission Statement to Educate, Innovate, Inspire, and Love. We are also committed to our goal of making White Hat Management one of the **100 Great Places to Work**.

Payroll Information:

Payday is on the 15th and last working day of each month. If the 15th falls on a Saturday or Sunday, payday is the Friday before.

Retirement Programs:

***Ohio Employees:**

	Employee:	Employer:
STRS	**11%**	**14%**
SERS	**10%**	**14%**

*** Colorado Employees:**

8%	**17.45%**

Insurance Enrollment Eligibility:

Employees working at least 30 hours a week are eligible to participate in our benefits plans after 30 days of employment. Elected benefits are active the 31st day of employment.

Life and AD&D Insurance:

$25,000 employer paid coverage

Supplemental Life Insurance:

Employees can purchase supplemental life insurance:

Employee Option:	$25K, $50K, $100K, $150K and $200K
Spouse Option:	50% of employee coverage up to $50,000
Children Option:	10% of employee coverage up to $10,000

Medical, Dental - Aetna: **www.aetna.com**

Vision, Life & Disability - Lincoln Financial Group: **www.lfg.com**

WHITE HAT
MANAGEMENT

2015 EMPLOYEE INSURANCE PREMIUMS

	Single		Employee + Spouse		Employee + Child		Family	
	Monthly	**Per pay**	Monthly	**Per pay**	Monthly	**Per pay**	Monthly	**Per pay**
Medical Core HSA	$152.34	**$76.17**	$417.62	**$208.81**	$417.62	**$208.81**	$417.62	**$208.81**
Medical Buy Down HSA	$66.26	**$33.13**	$185.20	**$92.60**	$185.20	**$92.60**	$185.20	**$92.60**
Medical PPO	$158.00	**$79.00**	$445.04	**$222.52**	$445.04	**$222.52**	$445.04	**$222.52**
Dental	$7.52	**$3.76**	$16.86	**$8.43**	$16.12	**$8.06**	$25.30	**$12.65**
Vision	$1.30	**$0.65**	$1.66	**$0.83**	$1.94	**$0.97**	$2.04	**$1.02**

Health Savings Accounts (HSA) are offered for the Core HSA & the Buy Down HSA plans with employer contributions. White Hat Management will make contributions into HSA's on a per pay basis in the amount of $41.67 for single coverage and $83.34 for family coverage.

Flexible Spending Account (FSA) is also available. FSA's allow you to pay for your family's out of pocket medical and dependent care expenses with pretax income. Amounts you put into your FSA plan are deducted before federal, state and social security taxes are withheld. The Health Care FSA maximum is $2,550 and the Dependent Care FSA is $5,000.

Short Term & Long Term Disability:
A ***Voluntary Short Term Disability*** plan is offered through Lincoln Financial Group. This plan is used as a form of pay in the event of an accident or illness that requires the employees to be off work 8 or more consecutive days. The employee pays 100% of the cost of the premium. The minimum weekly benefit is $100 in any increments of $50. The maximum weekly benefit payable is $750 not to exceed 60% of your total monthly earnings.

A ***Voluntary Long Term Disability*** plan is offered through Lincoln Financial Group. This plan is used as a form of pay in the event of a long term illness. This benefit would start after an employee has been off more than 13 weeks. The employee pays 100% of the cost of the premium. The minimum monthly benefit is greater of $400 or 10% of the benefit with a maximum of $2,500 not to exceed 50% of your monthly salary. (You can enroll for Long Term Disability even if you waived Short Term Disability)

Paid Time Off: Please refer to your School Calendar and PTO policy.

Tuition Reimbursement and Professional Development:
Full-time employees are eligible to participate in the Tuition Reimbursement program and Professional Development. The maximum reimbursement per school year (August 1st through July 31st), per employee will be $2,250.00.

FY15 - October 2014 submission
IRN No. 012684 **County: Cuyahoga**

Broadway Academy
Statement of Receipt, Disbursements, and Changes in Fund Cash Balances
For the Fiscal Years Ended June 30, 2012 through 2014, Actual and
the Fiscal Years Ending June 30, 2015 through 2019, Forecasted

Submitted: 10/29/2014

	Actual			Forecasted				
	Fiscal Year 2012	Fiscal Year 2013	Fiscal Year 2014	Fiscal Year 2015	Fiscal Year 2016	Fiscal Year 2017	Fiscal Year 2018	Fiscal Year 2019
Operating Receipts								
State Foundation Payments (3110, 3211)	$1,908,213.00	$2,592,342.00	$2,759,142.00	$2,504,927.00	$2,648,192.00	$2,778,523.00	$2,915,371.00	$3,059,061.00
Charges for Services (1500)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Fees (1600, 1700)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Other (1830, 1840, 1850, 1860, 1870, 1890)	$0.00	$0.00	$17,792.00	$18,000.00	$18,900.00	$19,845.00	$20,837.00	$21,879.00
Total Operating Receipts	$1,908,213.00	$2,592,342.00	$2,776,934.00	$2,522,927.00	$2,667,092.00	$2,798,368.00	$2,936,208.00	$3,080,940.00
Operating Disbursements								
100 Salaries and Wages	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
200 Employee Retirement and Insurance Benefits	$0.00			$0.00	$0.00	$0.00	$0.00	$0.00
400 Purchas Services	$2,389,105.00	$3,297,423.00	$3,353,886.00	$3,074,278.00	$3,198,013.00	$3,311,878.00	$3,434,783.00	$3,566,912.00
500 Supplies and Materials	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
600 Capital Outlay -New	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
700 Capital Outlay - Replacement	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
800 Other	$0.00							
Total Operating Disbursements	$2,389,105.00	$3,297,423.00	$3,353,886.00	$3,074,278.00	$3,198,013.00	$3,311,878.00	$3,434,783.00	$3,566,912.00
Excess of Operating Receipts Over (Under) Operating Disbursements	-$480,892.00	-$705,081.00	-$576,952.00	-$551,351.00	-$530,921.00	-$513,510.00	-$498,575.00	-$485,972.00

Submitted: 10/29/2014

	Actual			Forecasted				
	Fiscal Year 2012	Fiscal Year 2013	Fiscal Year 2014	Fiscal Year 2015	Fiscal Year 2016	Fiscal Year 2017	Fiscal Year 2018	Fiscal Year 2019
Nonoperating Receipts/(Disbursements)								
Federal Grants (all 4000 except fund 532)	$491,272.00	$705,907.00	$611,573.00	$559,965.00	$542,468.00	$527,736.00	$515,615.00	$505,969.00
Federal Fiscal Stabilization Funds (SFSF)	0	0	0	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx
Ed Jobs	0	xxxxxx	0	0	xxxxxx	xxxxxx	xxxxxx	xxxxxx
State Grants (3200, except 3211)	$0.00							
Donations (1820)	$0.00	$301.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Interest Income (1400)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Debt Proceeds (1900)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Debt Principal Retirement	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Interest and Fiscal Charges	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Transfers - In	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Transfers - Out	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Total Nonoperating Revenues/(Expenses)	$491,272.00	$706,208.00	$611,573.00	$559,965.00	$542,468.00	$527,736.00	$515,615.00	$505,969.00
Excess of Operating and Nonoperating Receipts Over/(Under) Operating and Nonoperating Disbursements	$10,380.00	$1,127.00	$34,621.00	$8,614.00	$11,547.00	$14,226.00	$17,040.00	$19,997.00
Fund Cash Balance Beginning of Fiscal Year	$0.00	$10,380.00	$11,507.00	$46,128.00	$54,742.00	$66,289.00	$80,515.00	$97,555.00
Fund Cash Balance End of Fiscal Year	$10,380.00	$11,507.00	$46,128.00	$54,742.00	$66,289.00	$80,515.00	$97,555.00	$117,552.00
Disclosure Items for State Fiscal Stabilization Funds								
Personal Services SFSF			xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx
Employees Retirement/Insurance Benefits SFSF			xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx
Purchased Services SFSF			xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx
Supplies and Materials SFSF			xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx
Capital Outlay SFSF			xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx
Total Expenditures - SDFSF	$0	$0	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx

Submitted: 10/29/2014

Actual			Forecasted				
Fiscal Year 2012	Fiscal Year 2013	Fiscal Year 2014	Fiscal Year 2015	Fiscal Year 2016	Fiscal Year 2017	Fiscal Year 2018	Fiscal Year 2019

Assumptions:

State Aid is based on an FTE count of 348 for the first, with a 5% increase each additional year.

Most revenues increase in correlation to the increase in enrollment each year. Most expenses remain constant unless there is an agreement in place.

The base per pupil amount used is $5,800.

Title I and IDEA-B are predicted to decrease by 8% each year.

Management fees are budgeted to be 95% of total operating revenues; and sponsor fees are budgeted at 3% of state aid.