

Summary of Striving Readers Projects

Implementation and Evaluation of Targeted Interventions for
Struggling Readers and Whole School Interventions for All
Readers: Years 1 & 2

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Summary of Striving Readers Projects: Targeted Interventions for Struggling Readers

Table 1: Overall Elements of the Intervention Models

Model/Developer	Use of Technology	Reading Materials	Formative Assessments
Chicago Public Schools, IL			
<i>Chicago Striving Readers English Language Arts Curriculum and Achieving Maximum Potential (AMP) After-School Program</i>			
<p><i>Chicago Striving Readers Program</i>, a tiered approach: Tier 2 (struggling readers who could reach grade level with focused classroom support); Tier 3 (struggling readers who require long-term intensive support/customized instruction). All tiers receive whole-school intervention model of reading comprehension-focused literacy strategies. Tiers 2/3 receive targeted intervention model of differentiated instruction/scaffolding/support in classroom. Developed by program implementers in collaboration with Donna Ogle of National-Louis University.</p> <p><i>Achieving Maximum Potential program, (AMP)</i>: Tier 3 students also receive 4 hrs/week of AMP, an intensive after-school literacy program to build vocabulary, fluency, word identification and comprehension skills, background knowledge through interactive/diagnostic computer software.</p> <p>Developed by T. Shanahan of the University of Illinois at Chicago; Pearson Education, Inc.</p>	<p>By the end of Year 2, most of the technology component was integrated into the classroom instruction. Each classroom has: a listening center where students can access models of fluency, record themselves reading, monitor own fluency levels, and listen to audio books; and a media center with 3 computers and printer to support special intervention software and group or individual research; and 10 Alpha Smarts (hand-held computers) for note-taking, brainstorming, preparing graphic organizers, and taking spelling tests.</p> <p>AMP program also uses diagnostic-based computer software.</p>	<p>All 6-8 classroom and school libraries receive authentic, genre-rich, multileveled and cultural responsive reading materials, guided by students' reading abilities and interests.</p> <p>Multileveled materials are designed to be high-interest and integrated with technology and audio resources. "Text set" units, developed with collaboration of Donna Ogle and National Louis University staff, feature a variety of informational non-fiction texts at different reading levels and with varied text structures and organizational features.</p>	<p>Screening, diagnostic, and progress-monitoring tools that are intended to lead to adjustment of instruction.</p> <p>Stanford Learning First benchmark assessments, informal classroom assessments, comprehension rubrics, fluency snapshots, spelling inventories, teacher observation and checklists, student self-assessment, student interviews and students' interest inventories.</p>

Model/Developer	Use of Technology	Reading Materials	Formative Assessments
Danville School District, KY			
<i>Learning Strategies Curriculum</i>			
<p><i>Learning Strategies Curriculum</i> focuses on strategies to help students derive information from texts (Acquisition), identify and remember important information (Storage), and develop writing or academic competence (Expression). Also focuses on meta-cognitive skills underlying learning, generalization, motivation.</p> <p>Developed by the University of Kansas Center for Research on Learning, as one component of the Strategic Interventions Model (SIM) (Tralli, Colombo, Deshler, & Schumaker, 1996).</p>	<p>Each classroom has a tablet PC to serve as a method of delivery system to whole or small group. Some classrooms use tablet for Visual Imagery Strategy. Some classrooms use a listening center where students can access models of fluency, record themselves while reading, monitor their own fluency levels, and listen to audio books based on individual needs. Some classrooms use blogging or software supports for pre-requisite skills needed prior to strategy instruction.</p>	<p>Reading library materials with content written specifically for and designed to be of high interest to adolescents by including connections to their everyday experiences. Provide teachers with lists/choices at various reading levels that support literary and informational/subject texts and genres.</p> <p>Use of springboard novels, picture books, and articles to support standards integration and build background for comprehension strategies.</p>	<p>Informal reading diagnostics using the Ekwall/Shanker Reading Inventory fourth edition.</p> <p>Use of frequent grade level and instructional level curriculum based measures for reading and writing.</p>
Memphis City Schools, TN			
<i>Read 180 Enterprise Edition</i>			
<p><i>Read 180 Enterprise Edition</i>, a reading curriculum that aims to directly address individual needs of struggling adolescent readers through adaptive and instructional software, teacher-directed instruction, and independent or modeled reading of literature that is intended to be of high interest.</p> <p>Developed by Scholastic, Inc.</p> <p>http://teacher.scholastic.com/products/read180/</p>	<p>Adaptive, interactive instructional software (rBook, rBook flex--Read, Write, React books) for instruction in decoding and word recognition, spelling, fluency, vocabulary and comprehension; audio- books, paperbacks, and Anchor Videos, related to textbook readings, to build knowledge, spark discussion. Students use software at least 3 times a week, 15 minutes per session.</p>	<p>READ 180 materials written specifically for adolescents. Stories contain content intended to be of interest to adolescents and connected to their everyday experiences.</p>	<p>Weekly and monthly assessment protocols on writing, vocabulary, comprehension, using READ 180 Topic Software.</p> <p>Diagnostic testing using Scholastic Reading Inventory 3 times a year.</p> <p>Scholastic Achievement Manager (SAM), software that provides feedback to teacher from student assessments.</p>

Model/Developer	Use of Technology	Reading Materials	Formative Assessments
Newark Public Schools, NJ			
<i>Read 180 Enterprise Edition</i>			
<p><i>Read 180 Enterprise Edition</i>, a reading curriculum that aims to directly address individual needs of struggling adolescent readers through adaptive and instructional software, teacher-directed instruction, and independent or modeled reading of literature that is intended to be of high interest.</p> <p>Developed by Scholastic, Inc. http://teacher.scholastic.com/products/read180/</p>	<p>Adaptive, interactive instructional software (rBook, rBook flex--Read, Write, React books) for instruction in decoding and word recognition, spelling, fluency, vocabulary and comprehension; audio- books, paperbacks, and Anchor Videos, related to textbook readings, to build knowledge, spark discussion. Students use software at least 3 times a week, 15 minutes per session.</p>	<p>READ 180 materials written specifically for adolescents. Stories contain content intended to be of interest to adolescents and connected to their everyday experiences.</p>	<p>Daily assessment protocols on writing, vocabulary, comprehension.</p> <p>Diagnostic testing using Scholastic Reading Inventory-SRI.</p> <p>Scholastic Management Suite (SMS) and Scholastic Achievement Manager (SAM), software to provide feedback to teachers from assessment tools.</p>
Ohio Department of Youth Services (students in juvenile correction facilities)			
<i>Read 180 Enterprise Edition</i>			
<p><i>Read 180 Enterprise Edition</i>, a reading curriculum that aims to directly address individual needs of struggling adolescent readers through adaptive and instructional software, teacher-directed instruction, and independent or modeled reading of literature that is intended to be of high interest.</p> <p>Developed by Scholastic, Inc. http://teacher.scholastic.com/products/read180/</p>	<p>Adaptive, interactive instructional software (rBook, rBook flex--Read, Write, React books) for instruction in decoding and word recognition, spelling, fluency, vocabulary and comprehension; audio- books, paperbacks, and Anchor Videos, related to textbook readings, to build knowledge, spark discussion. Students use software 5 times a week, 20 minutes per session.</p>	<p>READ 180 materials written specifically for adolescents. Stories contain content intended to be of interest to adolescents and connected to their everyday experiences.</p>	<p>Periodic diagnostic assessment of comprehension, vocabulary, writing, using READ 180 Topic Software.</p> <p>Quarterly progress monitoring using Stanford Reading Inventory-SRI.</p>
Portland School District, OR			
<i>Xtreme Reading Strategic Instruction Model</i>			
<p><i>Xtreme Reading Strategic Instruction Model</i>, a curriculum aimed at teaching explicit strategy instruction for word recognition, reading fluency and comprehension among struggling adolescent readers. Focuses on 7 reading strategies:</p>	<p>No explicit strategy to incorporate the use of technology.</p>	<p>Selected trade books for teaching strategies. Reading library.</p>	<p>Pre & post assessments for each curriculum unit.</p> <p>Embedded fluency and comprehension checks.</p>

Model/Developer	Use of Technology	Reading Materials	Formative Assessments
<p>Vocabulary, LINCing, Word Mapping, Word Identification, Self-Questioning, Visual Imagery, Paraphrasing, and Inference.</p> <p>Developed by the University of Kansas, Center for Research on Learning.</p> <p>http://www.xtremereading.com/</p>			

San Diego Unified School District, CA

Strategies for Literacy Independence across the Curriculum

<p><i>Strategies for Literacy Independence across the Curriculum model (SLIC)</i>, a professional development-based model that presents students with a set of literacy strategies to enhance skills in reading and writing. Designed to teach students strategic reading behaviors such as cross-checking text features and running text to verify understanding, using contextual clues to understand new vocabulary, note-making/other forms of writing to organize text information from readings, and breaking writing prompts into component questions. Students are assumed to gradually build independence in using these through scaffolded instruction and independent reading and writing practice.</p> <p>Developed by T. McDonald & C. Thornley, Education Associates, New Zealand.</p>	<p>No explicit strategy to incorporate the use of technology.</p>	<p>Expository, narrative, and persuasive text, including textbooks, novels, short stories, magazines. Materials provided by developer or selected by teacher.</p>	<p>Periodic administrations (every 2-3 months) of a SLIC/BEAR literacy assessment tool, developed jointly by SLIC developers, San Diego Unified School District, and UC Berkeley/BEAR.</p>
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Model/Developer	Use of Technology	Reading Materials	Formative Assessments
Springfield and Chicopee Public Schools, MA			
<i>Read 180 Enterprise Edition</i>			
<p><i>Read 180 Enterprise Edition</i>, a reading curriculum that aims to directly address individual needs of struggling adolescent readers through adaptive and instructional software, teacher-directed instruction, and independent or modeled reading of literature that is intended to be of high interest.</p> <p>Developed by Scholastic, Inc. http://teacher.scholastic.com/products/read180/</p>	<p>Adaptive, interactive instructional software (rBook, rBook flex--Read, Write, React books) for instruction in decoding and word recognition, spelling, fluency, vocabulary and comprehension; audio- books, paperbacks, and Anchor Videos, related to textbook readings, to build knowledge, spark discussion.</p> <p>Students use software 5 times a week, 20 minutes per session.</p>	<p>READ 180 materials written specifically for adolescents. Stories contain content intended to be of interest to adolescents and connected to their everyday experiences. Books are Scholastic paperback, Bluford books (intended to be at appropriate reading levels).</p>	<p>Periodic assessment protocols on writing, vocabulary, comprehension, using READ 180 Topic Software, rSkills tests after specific workshops.</p> <p>Diagnostic testing using Scholastic Reading Inventory 3 times a year.</p> <p>Scholastic Achievement Manager (SAM), software that provides feedback to teacher from student assessments.</p>
<i>Xtreme Reading Strategic Instruction Model</i>			
<p><i>Xtreme Reading Strategic Instruction Model</i>, a curriculum aimed at teaching explicit strategy instruction for word recognition, reading fluency and comprehension among struggling adolescent readers. Focuses on 7 reading strategies: Vocabulary/LINCing, Word Mapping, Word Identification, Self-Questioning, Visual Imagery, Paraphrasing, and Inference.</p> <p>Developed by the University of Kansas, Center for Research on Learning. http://www.xtremereading.com/</p>	<p>Does not incorporate the use of technology.</p>	<p>Reading library. Lists of supplements or appropriate additions/choices.</p>	<p>End-of-unit assessments. Group Reading Assessment Diagnostic Evaluation (GRADE), 2 times per year.</p>
<p>Source: Striving Readers Year 2 Evaluation Reports (available at: http://www.ed.gov/programs/strivingreaders/performance.html)</p>			

Summary of Striving Readers Projects: Targeted Interventions for Struggling Readers

Table 2: Context for Implementation of the Models

Replacement of/ Supplement to Regular English Language Arts (ELA) Class	Total Number of Schools Implementing Intervention/Grade Levels	Total Number of Students Served in Intervention	Reading Level of Students Eligible for Intervention and Length of Eligibility	Eligibility of Special Education Students for the Intervention
Chicago Public Schools, IL				
<i>Chicago Striving Readers English Language Arts Curriculum and Achieving Maximum Potential (AMP) After-School Program</i>				
<p>Replacement and Supplement</p> <p>For Tiers 2/3, replaces regular ELA with small group work (20–30 minutes/day) (Grade 6 in large schools and Grades 6-8 in small schools).</p> <p>For Tier 3, supplements Tier 2 ELA intervention with Achieving Maximum Potential (AMP) intensive after-school program 240 minutes/week (Grade 6 only).</p>	<p><i>Year 1</i> 16 middle schools</p> <p><i>Year 2</i> 31 middle schools (16 from Year 1 & 15 new schools)</p>	<p><i>Year 1</i> 1093 Tier 2 and Tier 3 students in Grades 6,7,8</p> <p><i>Year 2</i> 2304 Tier 2 and Tier 3 students in Grades 6,7,8</p>	<p>For tiering, use previous year's SAT 10 scores or BRI.¹</p> <p>Tier 2: Students who score up to one year below grade level.</p> <p>Tier 3: Students who score more than one year below grade level.</p> <p>Struggling readers can receive targeted intervention for up to three years.</p>	<p>All special education students who are struggling readers are eligible.</p>

Replacement of/ Supplement to Regular English Language Arts (ELA) Class	Total Number of Schools Implementing Intervention/Grade Levels	Total Number of Students Served in Intervention	Reading Level of Students Eligible for Intervention and Length of Eligibility	Eligibility of Special Education Students for the Intervention
Danville School District, KY				
<i>Learning Strategies Curriculum</i>				
Supplement Replaces an elective (250–450 additional minutes/week for middle school; 250 - 420 additional minutes for high school).	10 middle schools 9 high schools 2 schools with grades 6–12	<i>Year 1</i> 442 students in Grades 6 & 9 <i>Year 2</i> 387 students in Grades 6 & 9	6 th and 9 th grade students who score at least 2 grades below grade level as measured on the GRADE. ⁱⁱ Struggling readers can receive targeted instruction for one year.	Some special education students excluded: <ul style="list-style-type: none"> • Students categorized as functionally mentally disabled • Students enrolled in special education for all core classes.
Memphis City Schools, TN				
<i>Read 180 Enterprise Edition</i>				
Supplement Replaces an elective (60–90 additional minutes/day).	8 middle schools	<i>Year 1</i> 698 students in Grades 6-8 <i>Year 2</i> 608 students in Grades 6-8	6 th through 8 th grade students who score in the bottom quartile on the TCAP. ⁱⁱⁱ Struggling readers can receive targeted intervention for up to two years.	All special education students who are struggling readers are eligible to enroll ^{iv} .
Newark Public Schools, NJ				
<i>Read 180 Enterprise Edition</i>				
Replacement Replaces regular ELA (90 minutes/day).	10 middle schools	<i>Year 1</i> 663 students in Grades 6-8 <i>Year 2</i> 648 students in Grades 6-8	6 th through 8 th grade students who score at least 1 standard deviation below the grade-standardized mean as measured by the reading subtest of the New Jersey ASK. ^v Struggling readers can receive targeted instruction for up to three years.	All special education students who are struggling readers are eligible.

Replacement of/ Supplement to Regular English Language Arts (ELA) Class	Total Number of Schools Implementing Intervention/Grade Levels	Total Number of Students Served in Intervention	Reading Level of Students Eligible for Intervention and Length of Eligibility	Eligibility of Special Education Students for the Intervention
Ohio Department of Youth Services (students in juvenile correction facilities)				
<i>Read 180 Enterprise Edition</i>				
Replacement and Supplement Replaces regular ELA (45 minutes/day). Supplement that replaces an elective (45 minutes/day).	7 youth detention facilities	609 students received 2 or more quarters of treatment over two year period in high school	Students who score below grade level in reading (a score of approximately 1000 Lexile points) on the SRI ^{vi} , but above “below basic” level (a Lexile score of 200 or less) at baseline. Struggling readers can receive targeted intervention for duration of their stay in correctional facility (averages 10 months).	All special education students who are struggling readers are eligible.
Portland School District, OR				
<i>Xtreme Reading Strategic Instruction Model</i>				
Replacement and Supplement Replaces regular ELA (grades 7-8). Supplement that replaces an elective (45 minutes/day) (grades 9–10).	<i>Year 1</i> 5 middle schools and 4 high schools <i>Year 2</i> 2 K-8 schools, 3 middle schools, and 4 high schools	<i>Year 1</i> 482 students (216 students in Grades 7, 8; 266 students in Grades 9,10) <i>Year 2</i> 154 students (62 students in Grades 7, 8; 92 students in Grades 9,10)	Students who score at least 2 years below grade level as measured by the total reading score on the OSAT or DRP. ^{vii} Struggling readers receive targeted instruction for one year.	Some special education students excluded: <ul style="list-style-type: none"> • Students whose IEP requirements prohibit them from being able to be scheduled for Xtreme classes

Replacement of/ Supplement to Regular English Language Arts (ELA) Class	Total Number of Schools Implementing Intervention/Grade Levels	Total Number of Students Served in Intervention	Reading Level of Students Eligible for Intervention and Length of Eligibility	Eligibility of Special Education Students for the Intervention
San Diego Unified School District, CA				
<i>Strategies for Literacy Independence across the Curriculum</i>				
Supplement Replaces an elective (approximately 53 minutes/day).	<i>Year 1</i> 2 high schools 3 middle schools <i>Year 2</i> 4 high schools 4 middle schools	<i>Year 1</i> 251 students in Grades 7 & 9 <i>Year 2</i> 705 students in Grades 7-10	Students who score at least 2 years below grade level on one of three tests (CST-ELA, DRP or CELDT). ^{viii} Struggling readers can receive targeted intervention for up to four years (7 th through 10 th grades).	Some special education students excluded: <ul style="list-style-type: none"> • Students in English classes/elementary special day class • ELLs with CELDT scores of “beginning” English speaker and projected to be enrolled <1 yr. • Students designated as deaf/hard of hearing.
Springfield and Chicopee Public Schools, MA				
<i>Read 180 Enterprise Edition</i>				
Supplement Replaces an elective (90 additional minutes/day).	5 high schools (3 in Springfield, 2 in Chicopee)	<i>Year 1</i> 72 students in Grade 9 ^{ix} <i>Year 2</i> 66 students in Grade 9 ^x	9 th grade students who score at least two grades below grade level in reading but not lower than a 4 th grade level on the SRI. Struggling readers can receive Read 180 targeted intervention for two years (up to three years at district discretion). However, only ninth grade students in their first year of the intervention are included in the evaluation of impacts.	Some special education students excluded: <ul style="list-style-type: none"> • Students whose IEP specifications prohibit them from being assigned to daily READ180 classes. • Students whose overall level of functionality precludes them from participating.

Replacement of/ Supplement to Regular English Language Arts (ELA) Class	Total Number of Schools Implementing Intervention/Grade Levels	Total Number of Students Served in Intervention	Reading Level of Students Eligible for Intervention and Length of Eligibility	Eligibility of Special Education Students for the Intervention
<i>Xtreme Reading Strategic Instruction Model</i>				
Supplement Replaces an elective (45 additional minutes/day).	5 high schools (3 in Springfield, 2 in Chicopee)	<i>Year 1</i> 70 students in Grade 9 ^{xi} <i>Year 2</i> 57 students in Grade 9 ^{xii}	9 th grade students reading at least two grades below grade level but not lower than a 4 th grade level based on the SRI. Struggling readers can receive Xtreme Reading targeted intervention for two years (up to three years at district discretion). However, only ninth grade students in their first year of the intervention are included in the evaluation of impacts.	Some special education students excluded: <ul style="list-style-type: none"> • Students whose IEP specifications prohibit them from being assigned to daily Xtreme Reading classes. • Students whose overall level of functionality precludes them from participating
Source: Striving Readers Year 2 Evaluation Reports (available at: http://www.ed.gov/programs/strivingreaders/performance.html)				

ⁱ BRI- Basic Reading Inventory

ⁱⁱ GRADE- Group Reading Assessment and Diagnostic Examination

ⁱⁱⁱ TCAP- Tennessee Comprehensive Assessment Program

^{iv} In Memphis, all special education students who are struggling readers are eligible to enroll at the discretion of MCS but are not included in impact analyses.

^v ASK- Assessment of Skills and Knowledge (NJ Standardized Assessment)

^{vi} SRI – Scholastic Reading Inventory

^{vii} OSAT- Oregon State Assessment Test ; DRP- Degrees of Reading Power

^{viii} CSP-ELA- CA Standards Test- English Language Arts; CELDT- CA English Language Development Test

^{ix} In year one, 10th and 11th grade students defined as struggling readers were randomly assigned to receive READ 180 or Xtreme Reading. In year one, 244 10th and 11th graders participated in the interventions. However, no control group was included at these grades per district requirements.

^x In year two, 10th and 11th grade students who continue to be defined as struggling readers continue to receive the targeted intervention to which they were randomly assigned in the prior year.

^{xi} In year one, 10th and 11th grade students defined as struggling readers were randomly assigned to receive READ 180 or Xtreme Reading. In year one, 244 10th and 11th graders participated in the interventions. However, no control group was included at these grades per district requirements.

^{xii} In year two, 10th and 11th grade students who continue to be defined as struggling readers continue to receive the targeted intervention to which they were randomly assigned in the prior year.

Summary of Striving Readers Projects: Targeted Interventions for Struggling Readers

Table 3: Elements of the Professional Development Models as Planned

Training Offered to Teachers New to the Intervention		Follow-Up Training Offered to Returning Teachers	
Group Training	In-Classroom Support	Group Training	In-Classroom Support
Chicago Public Schools, IL			
<i>Chicago Striving Readers English Language Arts Curriculum and Achieving Maximum Potential (AMP) After-School Program</i>			
<p>Year 1:</p> <p>Total = 54 hours/teacher</p> <ul style="list-style-type: none"> • 5 days at Summer Institute (30 hrs) • Quarterly follow-up training + Monthly Saturday Seminars (24 hrs) <p>Training by district staff</p> <p>Year 2:</p> <p>Total = 69 hours/teacher</p> <ul style="list-style-type: none"> • 5 days at Summer Institute (30 hrs) • Quarterly follow-up training (12 hours) • Monthly Saturday Seminars (15 hrs) • Technology training (12 hours in addition to 6 hours of technology focus in Saturday Seminars) <p>Training by GoKnow Software developers and district staff</p>	<p>Minimum of 135 hours of in-class mentoring/teacher and additional technical assistance as needed by district staff</p> <p>District Coordinators mentor classroom teachers and literacy intervention teachers in use of comprehension strategies and techniques, and other program components during classroom instruction, as needed and/or requested by teachers and/or school principal; at least 3 hours per week.</p>	<p>Total = 57 hours/teacher</p> <ul style="list-style-type: none"> • 3 days at Summer Institute (18 hrs) • Quarterly follow-up training (12 hrs) • Monthly Saturday Seminars (15 hrs) • Technology training (12 hours in addition to 6 hours of technology focus in Saturday Seminars) <p>Training by GoKnow Software developers and district staff</p>	<p>Same as initial training year</p>

Training Offered to Teachers New to the Intervention		Follow-Up Training Offered to Returning Teachers	
Group Training	In-Classroom Support	Group Training	In-Classroom Support
Danville School District, KY			
<i>Learning Strategies Curriculum</i>			
Total = 33 hours/teacher <ul style="list-style-type: none"> • 5 half-day workshops (3 hrs/workshop) • 6 half-day follow-up training workshops (3 hrs/session) Training by trainer certified by the developer.	Total = est. 12 hours/teacher <ul style="list-style-type: none"> • 9 site visits/teacher by CTL mentor coach (est. 1 hr/visit) • 3 coaching visits/teacher by LSC trainer (est. 3 hrs/visit) 	Total = 37 hours/teacher <ul style="list-style-type: none"> • 2 days of workshops (7 hrs/day) • 6 half-day follow-up training workshops (3 hrs/workshop) • Bimonthly distance learning sessions (estimated 1hr/session) Training by trainer certified by the developer.	Same as initial training year
Memphis City Schools, TN			
<i>Read 180 Enterprise Edition</i>			
Total = 24 hours/teacher <ul style="list-style-type: none"> • 1 day initial training and 1 day follow-up training (6 hrs/day) by developer • 6 networking meetings (1 hr/meeting) by developer • Scholastic online training "Best Practices for Reading Intervention" (6 hrs) <i>[added in 2nd year of implementation]</i> 	Total = 4.5 hours/teacher <ul style="list-style-type: none"> • Observation of class period with follow-up meeting 3 times/yr (1.5 hrs/ session), by developer and district staff <i>[added in 2nd year of implementation]</i> 	Total = 10 hours/teacher <ul style="list-style-type: none"> • 1 day follow-up training by developer (6 hrs) • 4 networking meetings (1 hr/meeting) by developer 	Same as support offered to teachers new to the intervention

Training Offered to Teachers New to the Intervention		Follow-Up Training Offered to Returning Teachers	
Group Training	In-Classroom Support	Group Training	In-Classroom Support
Newark Public Schools, NJ			
<i>Read 180 Enterprise Edition</i>			
Total = 15.5 hours/teacher <ul style="list-style-type: none"> • 2 days initial training (4 hrs/day) • 1 follow-up session (5.5 hrs) • 1 conference (2 hrs) Training by developer	Total = 4 visits/teacher and as needed <ul style="list-style-type: none"> • 4 in-class technical assistance sessions, by developer • Ongoing technical assistance by developer and district as needed 	Same as initial training year	Same as initial training year
Ohio Department of Youth Services (students in juvenile correction facilities)			
<i>Read 180 Enterprise Edition</i>			
Total = 20 hours/teacher <ul style="list-style-type: none"> • 2 days initial training (5 hrs/day) • Semi-annual follow up training sessions (5 hrs/session) Training by developer	Total = 2 visits/teacher <ul style="list-style-type: none"> • Semi-annual visits to each class by developer and/or Project Director. • Ongoing classroom support by literacy coach as needed 	Same as initial training year	Same as initial training year
Portland School District, OR			
<i>Xtreme Reading Strategic Instruction Model</i>			
Total = 67 hours/teacher <ul style="list-style-type: none"> • 5 days initial training (7.4 hrs/day) • 6 training workshops (5 hrs/workshop) Training by professional developers, Strategic Learning Center (SLC) of Seattle, Washington, hired as consultants to developer	Total = 12 hours/teacher <ul style="list-style-type: none"> • 8 in-class visits (1.5 hrs/visit) by SLC trainer 	Total = 39 hours/teacher <ul style="list-style-type: none"> • 10 monthly meetings (3.9 hrs/meeting) Training by consultants to developer (Strategic Learning Center (SLC) of Seattle, Washington)	Total = 4 hours/teacher <ul style="list-style-type: none"> • 4 in-class visits (1 hr/visit) by SLC trainer

Training Offered to Teachers New to the Intervention		Follow-Up Training Offered to Returning Teachers	
Group Training	In-Classroom Support	Group Training	In-Classroom Support
San Diego Unified School District, CA			
<i>Strategies for Literacy Independence across the Curriculum</i>			
Total = 200 hours/teacher <ul style="list-style-type: none"> • Introductory workshops (16 hrs) • 3 follow-up training workshops (8 hrs/workshop) • Monthly meetings with district staff to discuss implementation (3 hrs/month) • Four rounds of teacher discussions with program consultants (3–4 days/round) Training by developers and district staff	Total = 360 hours/teacher <ul style="list-style-type: none"> • In-class support by school literacy coaches (2 hrs/day; 1 hr observation, 1 hour planning) 	Same as initial training year	Same as initial training year
Springfield and Chicopee Public Schools, MA			
<i>Read 180 Enterprise Edition</i>			
Total = 42 hours/teacher <ul style="list-style-type: none"> • 2 initial training sessions (6 hrs/session) • 8 follow-up seminars (3 hrs/seminar) • Scholastic online training “Best Practices for Reading Intervention” (1 course, 7 online sessions, approximately 6 hrs) <i>[added in 2nd year of implementation]</i> Training by developer	Total = 18 hours/teacher <ul style="list-style-type: none"> • 9 in-class technical assistance visits by developer (1/month, 2 hrs/visit) 	None	As needed (up to monthly visits, 2 hrs/visit)

Training Offered to Teachers New to the Intervention		Follow-Up Training Offered to Returning Teachers	
Group Training	In-Classroom Support	Group Training	In-Classroom Support
<i>Xtreme Reading Strategic Instruction Model</i>			
Total = 42 hours/teacher <ul style="list-style-type: none"> • 3 days initial training (6 hrs/day) • 4 full-day quarterly workshops (6 hrs/day) Training by professional developers, Strategic Learning Center (SLC) of Seattle, Washington, hired as consultants to developer	Total = 18 hours/teacher <ul style="list-style-type: none"> • 9 in-class visits (1/month, 2 hrs/visit) by SLC trainer 	None	As needed (up to monthly visits, 2 hrs/visit)
Source: Striving Readers Year 2 Evaluation Reports (available at: http://www.ed.gov/programs/strivingreaders/performance.html)			

Summary of Striving Readers Projects: Targeted Interventions for Struggling Readers

Table 4: Fidelity of Implementation: Teacher and School Participation in Professional Development

Evaluator Rating of Fidelity of Implementation of Professional Development Activities Year 1 (2006-07)	Evaluator Rating of Fidelity of Implementation of Professional Development Activities Year 2 (2007-08)	Basis for Determining Level of Implementation
Chicago Public Schools, IL		
<i>Chicago Striving Readers English Language Arts Curriculum and Achieving Maximum Potential (AMP) After-School Program</i>		
Not calculated	3% of schools at high implementation 58% of schools at medium implementation	High = high attendance at 5 of 5 types of professional development offered Medium = high attendance at some types/moderate attendance at all types of professional development
Danville School District, KY		
<i>Learning Strategies Curriculum</i>		
<p><i>Middle schools</i> = 100% of teachers at high participation</p> <p><i>High schools</i> = 100% of teachers at high participation</p> <p><i>Schools with grades 6–12</i> = 100% of teachers at high participation</p> <p><i>All schools</i> = 100% of teachers at high participation</p>	<p><i>Middle schools</i> = 100% of teachers at high participation</p> <p><i>High schools</i> = 100% of teachers at high participation</p> <p><i>Schools with grades 6–12</i> = 100% of teachers at high participation</p> <p><i>All schools</i> = 100% of teachers at high participation</p>	<p>High participation (yr 1) = attended \geq 6 out of 7 days of training offered</p> <p>High participation (yr 2) = attended \geq 6 out of 7.5 days of training offered</p>

Evaluator Rating of Fidelity of Implementation of Professional Development Activities Year 1 (2006-07)	Evaluator Rating of Fidelity of Implementation of Professional Development Activities Year 2 (2007-08)	Basis for Determining Level of Implementation
Memphis City Schools, TN		
<i>Read 180 Enterprise Edition</i>		
16% of teachers at high participation 53% of teachers at adequate participation	21% of teachers at high participation 53% of teachers at adequate participation	<p>Year 1 ratings based on points for attendance at 2 types of PD sessions (total of 12 possible points) and for years of experience teaching READ 180 (total of 6 possible points)</p> <p>High = $\geq 56\%$ total possible points (≥ 10 of 18 possible points)</p> <p>Adequate = $\geq 39\%$ total possible points (7-9 of 18 possible points)</p> <p>Year 2 ratings based on attendance at 3 types of PD sessions (total of 11 possible points) and for years of experience teaching READ 180 (total of 3 possible points)</p> <p>High = $\geq 83\%$ total possible points (≥ 10 of 14 possible points)</p> <p>Adequate = $\geq 58\%$ total possible points (≥ 7 of 14 possible points)</p>
Newark Public Schools, NJ		
<i>Read 180 Enterprise Edition</i>		
56.5% of teachers at full participation 21.7% of teachers at adequate participation	8% of teachers at full participation 24.0% of teachers at adequate participation	<p>Full = attended all 4 group training days offered</p> <p>Adequate = attended 3 of 4 group training days offered</p>
Ohio Department of Youth Services (students in juvenile correction facilities)		
<i>Read 180 Enterprise Edition</i>		
100% of teachers at high participation	100% of teachers at high participation	High = attended all three types of professional development offered

Evaluator Rating of Fidelity of Implementation of Professional Development Activities Year 1 (2006-07)	Evaluator Rating of Fidelity of Implementation of Professional Development Activities Year 2 (2007-08)	Basis for Determining Level of Implementation
Portland School District, OR		
<i>Xtreme Reading Strategic Instruction Model</i>		
<p><i>Middle schools</i> 60% of schools at high implementation</p> <p><i>High schools</i> 25% of schools at high implementation</p> <p><i>All schools</i> 45% of schools at high implementation</p>	<p><i>Middle schools</i> 100% of schools at high implementation</p> <p><i>High schools</i> 75% of schools at high implementation</p> <p><i>All schools</i> 89% of schools at high implementation</p>	<p>High = attended \geq 75% of 2 types of professional development offered</p>
San Diego Unified School District, CA		
<i>Strategies for Literacy Independence across the Curriculum</i>		
<p><i>Implementation of teacher professional development</i> 60% of schools at high participation 40% of schools at medium participation</p> <p><i>Implementation of coach-to-teacher support</i> 60% of schools at high participation 40% of schools at medium participation</p>	<p><i>Implementation of teacher professional development</i> 0% of schools at high participation 13% of schools at medium participation</p> <p><i>Implementation of coach-to-teacher support</i> 13% of schools at high participation 88% of schools at medium participation</p> <p><i>Implementation of teacher professional development</i> <u>Middle schools</u> 0% of schools at high participation 0% of schools at medium participation</p> <p><u>High schools</u> 0% of schools at high participation 25% of schools at medium participation</p> <p><i>Implementation of coach-to-teacher support</i> <u>Middle schools</u> 0% of schools at high participation 100% of schools at medium participation</p> <p><u>High schools</u> 25% of schools at high participation 75% of schools at medium participation</p>	<p><i>Implementation of teacher professional development</i> High = attended > 160 of 200 hours of professional development offered Medium = attended 120–160 of 200 hours of professional development offered</p> <p><i>Implementation of coach-to-teacher support</i> High = received > 288 of 360 hours of coaching planned Medium = received 216–288 of 200 hours of coaching planned</p>

Evaluator Rating of Fidelity of Implementation of Professional Development Activities Year 1 (2006-07)	Evaluator Rating of Fidelity of Implementation of Professional Development Activities Year 2 (2007-08)	Basis for Determining Level of Implementation
Springfield and Chicopee Public Schools, MA		
<i>Read 180 Enterprise Edition</i>		
33% of teachers at adequate participation 33% of teachers at moderate participation	40% of teachers at adequate participation 60% of teachers at moderate participation	Adequate = participated in $\geq 75\%$ of professional development activities offered Moderate = participated in between 50% - 74% of professional development activities offered
<i>Xtreme Reading Strategic Instruction Model</i>		
40% of schools at adequate participation 40% of schools at moderate participation	80% of schools at adequate participation 80% of schools at adequate participation	Adequate = participated in $\geq 75\%$ of professional development activities offered Moderate = participated in between 50% - 74% of professional development activities offered
<i>Source: Striving Readers Year 2 Evaluation Reports (available at: http://www.ed.gov/programs/strivingreaders/performance.html)</i>		

Summary of Striving Readers Projects: Targeted Interventions for Struggling Readers

Table 5: Fidelity of Implementation: Use of Classroom Instruction Models

Evaluator Rating of Fidelity of Implementation of Classroom Instruction Models Year 1 (2006-07)	Evaluator Rating of Fidelity of Implementation of Classroom Instruction Models Year 2 (2007-08)	Basis for Determining Level of Implementation
Chicago Public Schools, IL		
<i>Chicago Striving Readers English Language Arts Curriculum and Achieving Maximum Potential (AMP) After-School Program</i>		
Not Available	0% of schools at high fidelity 84% of schools at medium fidelity	Overall fidelity of implementation includes: Teacher/LIT collaboration, direct instruction in comprehension, purposeful assessment & data driven instruction, materials. Based on classroom observations and teacher reports. Presence of each of 6 components rated on 10-pt scale; scores averaged to create total fidelity across components High fidelity = average score of 8–10 out of 10 Medium fidelity = average score of 5–8 out of 10
Danville School District, KY		
<i>Learning Strategies Curriculum</i>		
<p><i>Grade 6:</i> Overall implementation of LSC instruction did not reach high fidelity</p> <p>Overall implementation of LSC teacher attendance reached high fidelity</p> <p><i>Grade 9:</i> Overall implementation of LSC instruction reached high fidelity</p> <p>Overall implementation of LSC teacher attendance reached high fidelity</p>	<p><i>Grade 6:</i> Overall implementation of LSC instruction reached high fidelity</p> <p>Overall implementation of LSC teacher attendance did not reach high fidelity</p> <p><i>Grade 9:</i> Overall implementation of LSC instruction reached high fidelity</p> <p>Overall implementation of LSC teacher attendance did not reach high fidelity</p>	<p>Based on classroom observations and teacher reports.</p> <p>Adequate implementation = $\geq 70\%$ of class time spent on LSC instruction</p> <p>Adequate attendance = $\geq 90\%$ of school days</p>

<p align="center">Evaluator Rating of Fidelity of Implementation of Classroom Instruction Models Year 1 (2006-07)</p>	<p align="center">Evaluator Rating of Fidelity of Implementation of Classroom Instruction Models Year 2 (2007-08)</p>	<p align="center">Basis for Determining Level of Implementation</p>
<p>Memphis City Schools, TN</p>		
<p><i>Read 180 Enterprise Edition</i></p>		
<p>42% of classrooms at adequate implementation¹</p>	<p>58% of classrooms at adequate implementation</p>	<p>Based on classroom observations, teacher and student reports, data generated by SAM data management system and documents related to professional development</p> <p>Each component rated on a 4-point scale; scores averaged to create overall rating</p> <p>Adequate implementation = average score of 3–4 out of 4</p>
<p>Newark Public Schools, NJ</p>		
<p><i>Read 180 Enterprise Edition</i></p>		
<p><i>Fidelity of Student Assessments</i> 90.9% of classes at full fidelity 4.5% of classes at adequate fidelity</p> <p><i>Fidelity of Time on Instructional Software</i> 65.2% of classes at full fidelity 26.1% of classes at adequate fidelity</p>	<p><i>Fidelity of Student Assessments</i> 100% of classes at full fidelity</p> <p><i>Fidelity of Time on Instructional Software</i> 9.1% of classes at full fidelity 0% of classes at adequate fidelity</p>	<p>Based on administrative data and from READ 180 computerized data systems.</p> <p><i>Fidelity of Implementation of Student Assessments</i> High fidelity = \geq 75% of students with 3 or more SRI tests Adequate fidelity = 50–74% of students with 3 or more SRI tests</p> <p><i>Fidelity of Implementation of Student Time on Instructional Software</i> High fidelity = \geq 75% of students exposed to software 3 times/wk and 15 min/session Adequate fidelity = 50–74% of students exposed to software 3 times/wk and 15 min/session</p>

<p align="center">Evaluator Rating of Fidelity of Implementation of Classroom Instruction Models Year 1 (2006-07)</p>	<p align="center">Evaluator Rating of Fidelity of Implementation of Classroom Instruction Models Year 2 (2007-08)</p>	<p align="center">Basis for Determining Level of Implementation</p>
<p>Ohio Department of Youth Services (students in juvenile correction facilities)</p>		
<p><i>Read 180 Enterprise Edition</i></p>		
<p>14% of facilities at high implementation 71% of facilities at moderate implementation</p>	<p>43% of facilities at high implementation 43% of facilities at moderate implementation</p>	<p>Based on teacher logs recording daily time allocations per class, weekly observations by the project evaluators, and quarterly technical assistance and observation visits by a representative from Scholastic</p> <p>High implementation = 80 or more minutes of instruction</p> <p>Moderate implementation = 74–79 minutes of instruction</p>
<p>Portland School District, OR</p>		
<p><i>Xtreme Reading Strategic Instruction Model</i></p>		
<p>45% of schools at high fidelity 33% of schools at medium fidelity</p>	<p>25% of schools at high fidelity 38% of schools at medium fidelity</p>	<p>Teachers rated on % of expected activities completed during an Xtreme reading lesson. Based on classroom observation and teacher reports.</p> <p>High fidelity = fidelity on at least 90% of activities</p> <p>Medium fidelity= fidelity on 80–89% of activities</p>
<p>San Diego Unified School District, CA</p>		
<p><i>Strategies for Literacy Independence across the Curriculum</i></p>		
<p>No quantitative measures</p>	<p>0% of schools at high fidelity 100% of schools at medium fidelity</p>	<p>Overall fidelity score is sum of 5 equally weighted components of instruction: Coverage of curriculum, use of grade-level texts, scaffolding to independence, assessment of needs/differentiated instruction, metacognition. Based on classroom observation and teacher reports.</p> <p>High level of fidelity = average fidelity score = 2.5 out of 3 across 5 components</p> <p>Medium level of fidelity = average fidelity score 1.5–2.5 out of 3 across 5 components</p>

Evaluator Rating of Fidelity of Implementation of Classroom Instruction Models Year 1 (2006-07)	Evaluator Rating of Fidelity of Implementation of Classroom Instruction Models Year 2 (2007-08)	Basis for Determining Level of Implementation
Springfield and Chicopee Public Schools, MA		
<i>Read 180 Enterprise Edition</i>		
50% of teachers at adequate implementation 0% of teachers at moderate implementation	40% of teachers at adequate implementation 40% of teachers at moderate implementation	Overall fidelity rating includes: Instructional practices, dosage of the class, use of materials and/or technology, use of assessments to inform instruction Based on classroom observations, staff surveys Overall score is average of ratings on 4 components on binary scale (1 =adequate/ 0 = not adequate) Adequate fidelity = average score on adequacy $\geq 75\%$ Moderate fidelity = average score on adequacy 50–74%
<i>Xtreme Reading Strategic Instruction Model</i>		
60% of teachers at adequate fidelity 20% of teachers at moderate fidelity	0% of teachers at adequate fidelity 40% of teachers at moderate fidelity	Overall fidelity rating includes: Instructional practices, dosage of the class, use of materials and/or technology, use of assessments to inform instruction Based on classroom observations, staff surveys Overall score is average of ratings on 4 components on binary scale (1 =adequate/ 0 = not adequate) Adequate fidelity = average score on adequacy of components $\geq 75\%$ Moderate fidelity = average score on adequacy of components between 50–74%
<i>Source: Striving Readers Year 2 Evaluation Reports (available at: http://www.ed.gov/programs/strivingreaders/performance.html)</i>		

ⁱ Memphis included professional development in their classroom fidelity ratings. That PD variable has been excluded from this classroom rating in order to be consistent across sites.

Summary of Striving Readers Projects: Targeted Interventions for Struggling Readers

Table 6: Evaluation Designs for the Analysis of the Impacts for Struggling Readers

Evaluation Design	Number of School Years Intervention will be Provided by District	Description of the Counterfactual
Chicago Public Schools, IL		
<i>Chicago Striving Readers English Language Arts Curriculum and Achieving Maximum Potential (AMP) After-School Program</i>		
School-level random assignment of 63 middle schools (31 treatment, 32 control over two cohorts)	5	Students in control schools who are equivalent to Tier 2/3 students in treatment schools continue to receive the regular English language arts curriculum.
Danville School District, KY		
<i>Learning Strategies Curriculum</i>		
Within-school student-level random assignment in 21 schools	4	Control students continue to receive regular elective courses in place of the treatment class.
Memphis City Schools, TN		
<i>Read 180 Enterprise Edition</i>		
Within-school student-level random assignment in 8 schools	4	Control students continue to receive regular elective courses in place of the treatment class.
Newark Public Schools, NJ		
<i>Read 180 Enterprise Edition</i>		
School-level random assignment of 19 schools (10 treatment, 9 control). Schools were blocked on four school-level variables prior to randomization: 1) school size, 2) proportion of ELL students, 3) proportion of students with special needs, and 4) AYP status.	4	Control students continue to receive the regular English language arts curriculum.

Evaluation Design	Number of School Years Intervention will be Provided by District	Description of the Counterfactual
Ohio Department of Youth Services (students in juvenile correction facilities)		
<i>Read 180 Enterprise Edition</i>		
Within-school student-level random assignment in 7 youth detention facilities	5	Control students continue to receive the regular English language arts curriculum for 45 minutes and then transfer to another class (i.e., technology education, mathematics, etc.) for 45 minutes.
Portland School District, OR		
<i>Xtreme Reading Strategic Instruction Model</i>		
Within-school student-level random assignment in 10 schools	4	Control students continue to receive the regular English language arts curriculum (Grades 7–8) or a regular elective course in place of the treatment class (Grades 9–10).
San Diego Unified School District, CA		
<i>Strategies for Literacy Independence across the Curriculum</i>		
Within-school student-level random assignment in 5 schools in Year 1, 8 schools in Year 2.	3 ⁱ	Control students continue to receive regular elective courses in place of the treatment class.
Springfield and Chicopee Public Schools, MA		
<i>Read 180 Enterprise Edition</i>		
Within-school student-level random assignment in 5 schools to 3 conditions: Read 180, Xtreme Reading, or control	4	Control students continue to receive regular elective courses in place of the treatment class.
<i>Xtreme Reading Strategic Instruction Model</i>		
Within-school student-level random assignment in 5 schools to 3 conditions: Read 180, Xtreme Reading, or control	4	Control students continue to receive regular elective courses in place of the treatment class.
Source: Striving Readers Year 2 Evaluation Reports (available at: http://www.ed.gov/programs/strivingreaders/performance.html)		

ⁱ San Diego Unified School District will implement the targeted intervention for four years, but only three years will be included in the evaluation.

Summary of Striving Readers Projects: Targeted Interventions for Struggling Readers

Table 7: Impacts of Interventions on All Struggling Readersⁱ

Reading Test (Source)	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ⁱⁱ	Impact on Reading Test Scores in Percentile Units ⁱⁱⁱ	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ^{iv}	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ^v	Grade Level in Impact Analysis	Sample Size in Impact Analysis
Chicago Public Schools, IL							
<i>Chicago Striving Readers English Language Arts Curriculum^{vi}</i>							
Illinois Standard Achievement Test (State)	Vocabulary, Reading Strategies, Comprehension, and Literature	.20	Treatment students are in 48 th percentile, control students are in 44 th percentile of nationally normed sample ^{vii}	No	.36	6 th	225 Treatment students in Tier 2 and 246 Control students in Tier 2 in 62 schools ^{viii}
<i>Chicago Striving Readers English Language Arts Curriculum and Achieving Maximum Potential (AMP) After School Program^{ix}</i>							
Illinois Standard Achievement Test (State)	Vocabulary, Reading Strategies, Comprehension, and Literature	.10	Treatment students are in 23 rd percentile, control students are in 21 st percentile of nationally normed sample ^x	No	.21	6 th	549 Treatment students in Tier 3 and 561 Control students in Tier 3 in 63 schools

Reading Test (Source)	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ⁱⁱ	Impact on Reading Test Scores in Percentile Units ⁱⁱⁱ	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ^{iv}	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ^v	Grade Level in Impact Analysis	Sample Size in Impact Analysis
Danville School District, KY							
<i>Learning Strategies Curriculum</i>							
Group Reading Assessment Diagnostic Evaluation (External test publisher)	Vocabulary, Comprehension, Oral Language	.10	Treatment students are in 16 th percentile, control students are in 14 th percentile of nationally normed sample	No	.20	6 th	317 Treatment and 266 Control students in 12 middle schools
Group Reading Assessment Diagnostic Evaluation (External test publisher)	Vocabulary, Comprehension, Oral Language	.11	Treatment students are in 18 th percentile, control students are in 17 th percentile of nationally normed sample	No	.20	9 th	365 treatment and 315 control students in 11 high schools
Memphis City Schools, TN							
<i>Read 180 Enterprise Edition</i>							
Iowa Test of Basic Skills (External test publisher)	Total Reading	.03	Both treatment and control students score in the 9 th percentile of nationally normed sample	No	.15	6 th -8 th	987 Treatment and 1446 Control students in 8 schools
Tennessee Comprehensive Assessment Program (State)	Reading and Language Arts	.01	Not available	No	.14	6 th -8 th	987 Treatment and 1446 Control students in 8 schools

Reading Test (Source)	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ⁱⁱ	Impact on Reading Test Scores in Percentile Units ⁱⁱⁱ	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ^{iv}	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ^v	Grade Level in Impact Analysis	Sample Size in Impact Analysis
Newark Public Schools, NJ							
<i>Read 180 Enterprise Edition</i>							
Stanford Achievement Test (External test publisher)	Language Arts	.05	Treatment students are in the 9 th percentile, control students are in the 6 th percentile of nationally normed sample	No	.16	6 th -8 th	934 Treatment students in 10 schools and 838 Control students in 9 schools
Stanford Achievement Test (External test publisher)	Comprehension	.07	Treatment students are in the 13 th percentile, control students are in the 9 th percentile of nationally normed sample	No	.20	6 th -8 th	934 Treatment students in 10 schools and 838 Control students in 9 schools
Stanford Achievement Test (External test publisher)	Vocabulary	.08	Treatment students are in the 9 th percentile, control students are in the 8 th percentile of nationally normed sample	No	.15	6 th -8 th	934 Treatment students in 10 schools and 838 Control students in 9 schools

Reading Test (Source)	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ⁱⁱ	Impact on Reading Test Scores in Percentile Units ⁱⁱⁱ	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ^{iv}	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ^v	Grade Level in Impact Analysis	Sample Size in Impact Analysis
Ohio Department of Youth Services (students in juvenile correction facilities)							
<i>Read 180 Enterprise Edition</i>							
Scholastic Reading Inventory Assessment (Scholastic, developer of Read-180)	Reading Comprehension	.17	Treatment students are in 13 th percentile, control students in 11 th percentile of nationally normed sample	Yes	.16	9 th -12 th	409 Treatment and 347 Control students in 7 facilities
Portland School District, OR							
<i>Xtreme Reading Strategic Instruction Model</i>							
Group Reading Assessment Diagnostic Evaluation (External test publisher)	Vocabulary, Comprehension	.29	Treatment students are in 22 nd percentile, control students are in 13 th percentile of nationally normed sample	Yes	.10	7 th -8 th	209 Treatment and 234 Control students in 5 middle schools (Yr 1); 3 middle schools and 2 K-8 schools (Yr 2)
Group Reading Assessment Diagnostic Evaluation (External test publisher)	Vocabulary, Comprehension	.01	Both treatment and control students score in the 14 th percentile of nationally normed sample	No	.13	9 th -10 th	174 Treatment and 232 Control students in 4 schools

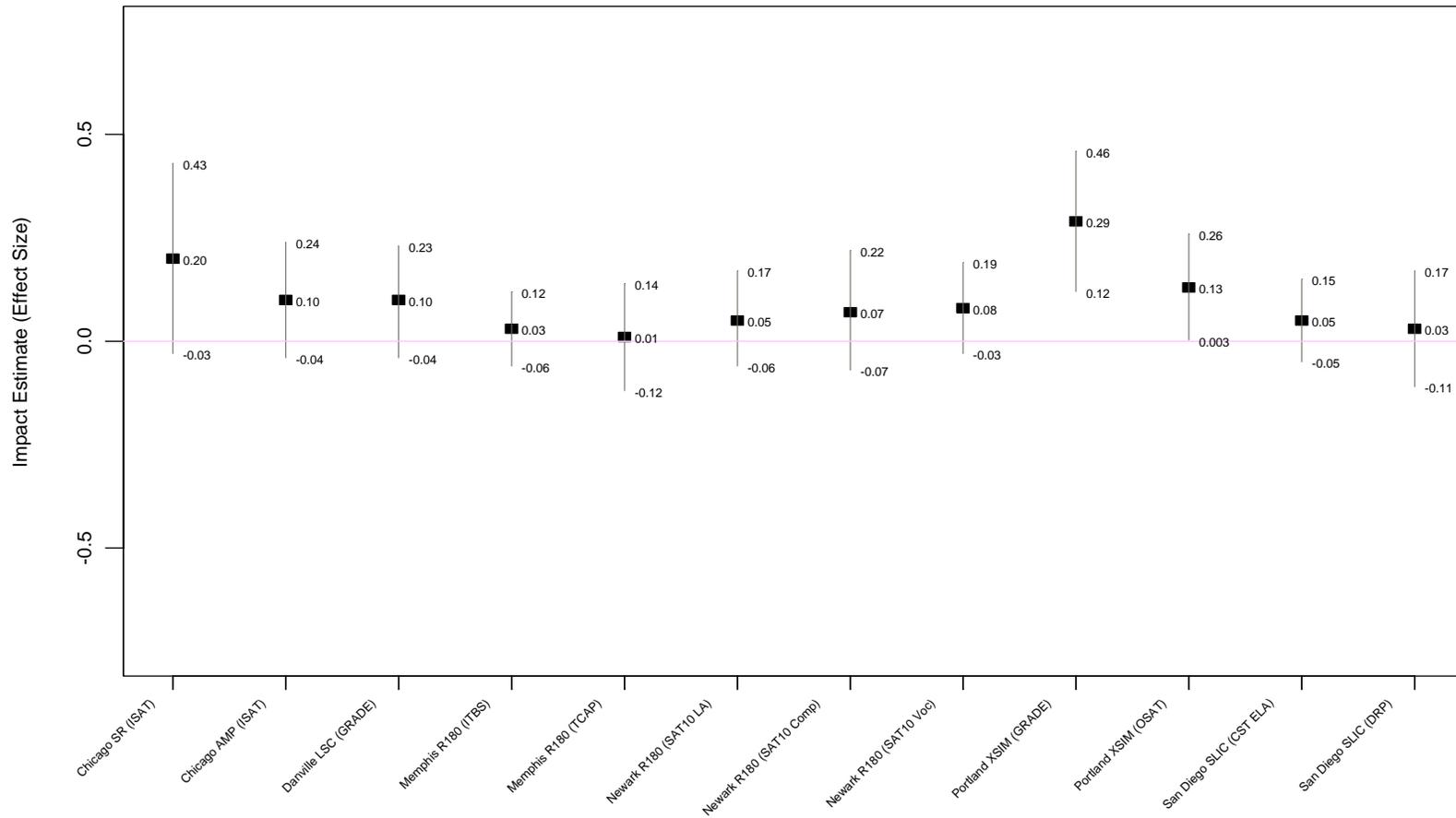
Reading Test (Source)	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ⁱⁱ	Impact on Reading Test Scores in Percentile Units ⁱⁱⁱ	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ^{iv}	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ^v	Grade Level in Impact Analysis	Sample Size in Impact Analysis
Oregon State Assessment Test (State)	Reading and Literature	.13	Treatment students in 22 nd percentile, control students in 18 th percentile of state normed sample	Yes	.09	7 th -8 th	273 Treatment and 257 Control students in 5 middle schools (Yr 1); 3 middle schools and 2 K-8 schools (Yr 2)
Oregon State Assessment Test (State)	Reading and Literature	-.05	Treatment students in 25 th percentile, control students in 28 th percentile of state normed sample	No	.12	10 th	160 Treatment and 170 Control students in 4 schools
San Diego Unified School District, CA							
<i>Strategies for Literacy Independence across the Curriculum</i>							
California Standards Test (State)	English Language Arts	.05	Treatment students in 29 th percentile, control students in 27 th percentile of state normed sample	No	.17	7 th -8 th	318 Treatment and 339 Control students in 4 middle schools
California Standards Test (State)	English Language Arts	.06	Treatment students in 33 rd percentile, control students in 32 nd percentile of state normed sample	No	.12	9 th -10 th	255 Treatment and 291 Control students in 4 high schools

Reading Test (Source)	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ⁱⁱ	Impact on Reading Test Scores in Percentile Units ⁱⁱⁱ	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ^{iv}	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ^v	Grade Level in Impact Analysis	Sample Size in Impact Analysis
Degrees of Reading Power (External test publisher)	Reading Comprehension	.03	Treatment students in 35 th percentile, control students in 34 th percentile of nationally normed sample	No	.18	7 th -8 th	321 Treatment and 339 Control students in 4 middle schools
Degrees of Reading Power (External test publisher)	Reading Comprehension	.15	Treatment students in 50 th percentile, control students in 49 th percentile of nationally normed sample	Yes	.21	9 th -10 th	277 Treatment and 243 Control students in 4 high schools
Springfield and Chicopee Public Schools, MA							
<i>Read 180 Enterprise Edition</i>							
Stanford Diagnostic Reading Test, 4 th Edition (External publisher)	Reading Comprehension	.11	Treatment students in 18 th percentile, control students in 16 th percentile of nationally normed sample	No	.18	9 th	128 Treatment and 114 Control students in 5 schools
<i>Xtreme Reading Strategic Instruction Model</i>							
Stanford Diagnostic Reading Test, 4 th Edition (External publisher)	Reading Comprehension	.16	Treatment students in 20 th percentile, control students in 16 th percentile of nationally normed sample	No	.19	9 th	105 Treatment and 114 Control students in 5 schools
Source: Striving Readers Year 2 Evaluation Reports (available at: http://www.ed.gov/programs/strivingreaders/performance.html)							

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- i Impact estimates for one year of intervention services for students new to the intervention in the 2006-07 or 2007-08 school year, except in San Diego, where impact estimates are for one year of intervention services for students new to the intervention in the 2007-08 school year.
 - ii Impact is measured in standardized effect size units using Glass' Δ . A standardized effect size measures the difference in outcomes between treatment and control group students in standard deviation units. It is often used in social science research because it facilitates comparing findings across studies that have outcomes in different scales.
 - iii Percentiles were derived from conversion tables provided by external test publishers or by calculating normal curve equivalent (NCE) scores, which range from 1-99, with a mean of 50, and using a conversion table to obtain percentile units.
 - iv Statistical significance is measured at 95% confidence level, which is a conventional standard set for social science research.
 - v Abt Associates staff calculated the MDE by multiplying the standard error of the impact estimate by 2.8. This calculation produces the MDE for a two-tailed test with 80% power, and with an alpha level of .05, and accounts for clustering and for the inclusion of the covariates in the model.
 - vi Impact estimate for Chicago's Striving Readers English Language Arts Curriculum is for students reading below grade level (Tiers 2 and 3).
 - vii ISAT scores were converted to SAT-10 scores to produce percentiles. Therefore, SAT-10 is based on a nationally normed sample.
 - ^{viii} One of the treatment schools in CPS was not included in these analyses because there were no students in that school with complete data for the impact analysis.
 - ix Impact estimate for Chicago Striving Readers Language Arts Curriculum and After School Program (Achieving Maximum Potential) is offered is for 6th grade students reading more than one year below grade level (Tier 3).
 - ^x ISAT scores were converted to SAT-10 scores to produce percentiles. Therefore, SAT-10 is based on a nationally normed sample.

Summary of Striving Readers Projects: Targeted Interventions for Struggling Readers

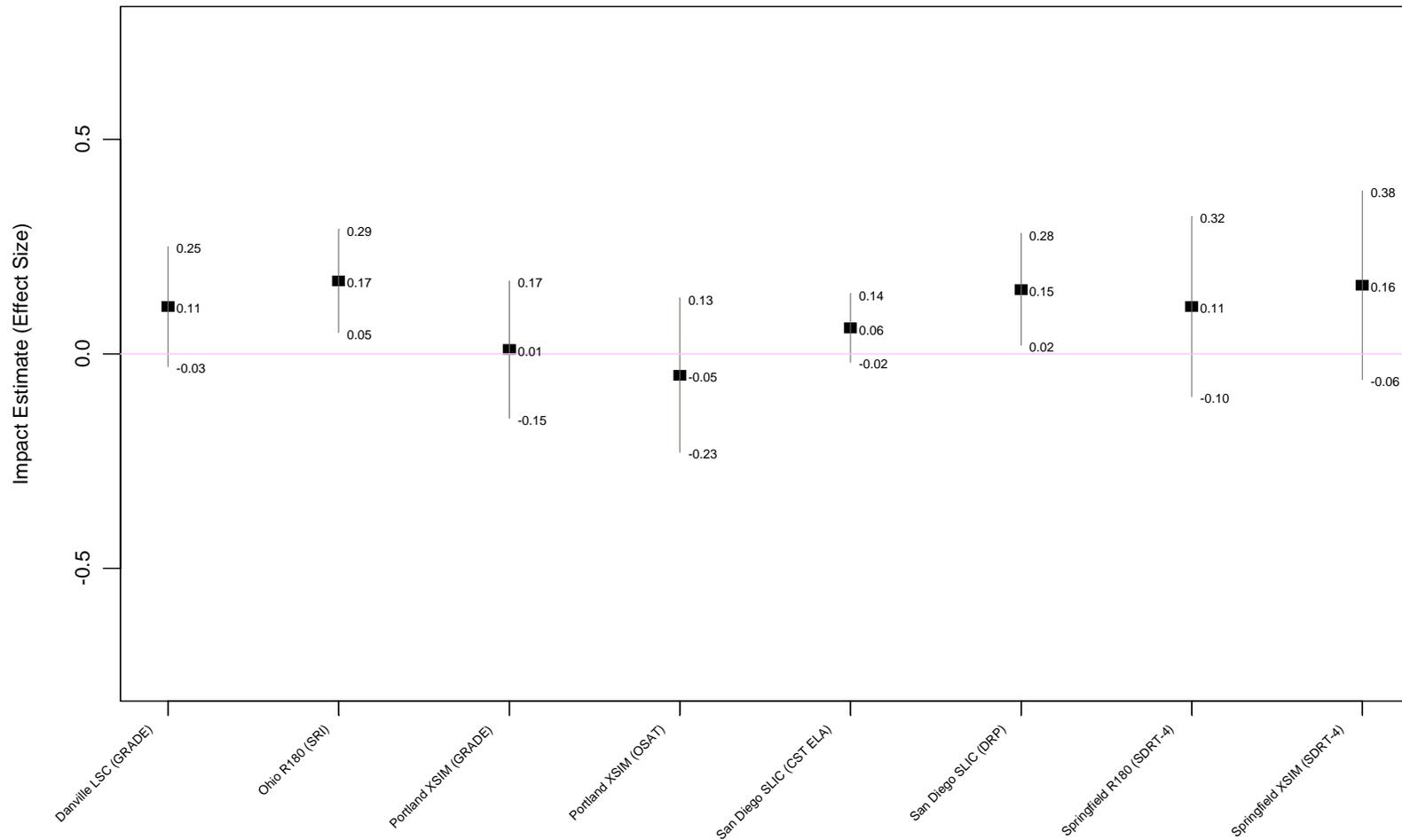
Exhibit 1: Impact on Reading Test Scores in Standard Deviation Units for Middle School Students



Source: Striving Readers Year 2 Evaluation Reports (available at: <http://www.ed.gov/programs/strivingreaders/performance.html>)

Note: Bold square is the estimated impact on reading test scores in standard deviation units. The vertical line represents the confidence interval of the impact; that is, we can be 95% sure that the true impact is between the top and bottom numbers on the line. If the confidence interval overlaps with zero (the horizontal pink line), the estimated impact is not statistically significant.

Exhibit 2: Targeted Interventions: Impact on Reading Test Scores in Standard Deviation Units for High School Students



Source: Striving Readers Year 2 Evaluation Reports (available at: <http://www.ed.gov/programs/strivingreaders/performance.html>)

Note: Bold square is the estimated impact on reading test scores in standard deviation units. The vertical line represents the confidence interval of the impact; that is, we can be 95% sure that the true impact is between the top and bottom numbers on the line. If the confidence interval overlaps with zero (the horizontal pink line), the estimated impact is not statistically significant.

Summary of Striving Readers Projects: Targeted Interventions for Struggling Readers

Table 8: Impacts of Interventions for Subgroups of Struggling Readersⁱ

Reading Test (Source)	Areas Covered by Test	Subgroups of Students Analyzed Separately ⁱⁱ	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁱⁱⁱ	Grade Level in Impact Analysis
Chicago Public Schools, IL				
<i>Chicago Striving Readers English Language Arts Curriculum^{iv}</i>				
Illinois Standard Achievement Test (State)	Vocabulary, Reading Strategies, Comprehension, and Literature	<ul style="list-style-type: none"> – Black or African American – Hispanic or Latino – Female – Male – Special Education/IEP – Free and Reduced Lunch 	No for all subgroups	6
<i>Chicago Striving Readers English Language Arts Curriculum and Achieving Maximum Potential (AMP) After-School Program^v</i>				
Illinois Standard Achievement Test (State)	Vocabulary, Reading Strategies, Comprehension, and Literature	<ul style="list-style-type: none"> – Black or African American – Hispanic or Latino – Female – Male – Special Education/IEP – Free and Reduced Lunch 	No for all subgroups	6
Danville School District, KY				
<i>Learning Strategies Curriculum</i>				
Group Reading Assessment Diagnostic Evaluation (External test publisher)	Vocabulary, Comprehension, Oral Language	None	Not Applicable	Not Applicable
Group Reading Assessment Diagnostic Evaluation (External test publisher)	Vocabulary, Comprehension, Oral Language	None	Not Applicable	Not Applicable

Reading Test (Source)	Areas Covered by Test	Subgroups of Students Analyzed Separately ⁱⁱ	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁱⁱⁱ	Grade Level in Impact Analysis
Memphis City Schools, TN				
<i>Read 180 Enterprise Edition</i>				
Iowa Test of Basic Skills (External test publisher)	Total Reading	<ul style="list-style-type: none"> - Grade 6 2006-2007 school year - Grade 6 2007-2008 school year - Grades 7-8, 2-years of intervention 	No for all subgroups	6-8
Tennessee Comprehensive Assessment Program (State)	Reading and Language Arts	<ul style="list-style-type: none"> - Grade 6 grade 2006-2007 school year - Grade 6 2007-2008 school year - Grades 7-8, 2-years of intervention 	No for all subgroups	6-8
Newark Public Schools, NJ				
<i>Read 180 Enterprise Edition</i>				
Stanford Achievement Test (External test publisher)	Language Arts	<p>Grades 6-8 (1 yr exposure)</p> <ul style="list-style-type: none"> - Female - Male - Black or African American - Hispanic or Latino - Special Education/IEP <p>Grade 6 only (1 yr exposure)</p> <ul style="list-style-type: none"> - Female - Male - Black or African American - Hispanic or Latino - Special Education/IEP <p>Grade 7 only (2 yrs exposure)</p> <ul style="list-style-type: none"> - Female - Male - Black or African American - Hispanic or Latino - Special Education/IEP <p>Grade 8 only (2 yrs exposure)</p> <ul style="list-style-type: none"> - Female - Male - Black or African American - Hispanic or Latino - Special Education/IEP 	<p>Grades 6-8 (1 yr)</p> <ul style="list-style-type: none"> - Yes, positive impact - No - No - No - No <p>Grade 6 only (1 yr)</p> <ul style="list-style-type: none"> - No - No - No - No - No <p>Grade 7 only (2 yrs)</p> <ul style="list-style-type: none"> - No - No - No - No - No <p>Grade 8 only (2 yrs)</p> <ul style="list-style-type: none"> - No - No - No - Yes, positive impact - No 	

Reading Test (Source)	Areas Covered by Test	Subgroups of Students Analyzed Separately ⁱⁱ	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁱⁱⁱ	Grade Level in Impact Analysis
		Grades 7-8 (2 yrs exposure) <ul style="list-style-type: none"> - Female - Male - Black or African American - Hispanic or Latino - Special Education/IEP 	Grades 7-8 (2 yrs) <ul style="list-style-type: none"> - No - No - No - No - No 	
Stanford Achievement Test (External test publisher)	Comprehension	Grades 6–8 (1 yr exposure) <ul style="list-style-type: none"> - Female - Male - Black or African American - Hispanic or Latino - Special Education/IEP Grade 6 only (1 yr exposure) <ul style="list-style-type: none"> - Female - Male - Black or African American - Hispanic or Latino - Special Education/IEP Grade 7 only (2 yrs exposure) <ul style="list-style-type: none"> - Female - Male - Black or African American - Hispanic or Latino - Special Education/IEP Grade 8 only (2 yrs exposure) <ul style="list-style-type: none"> - Female - Male - Black or African American - Hispanic or Latino - Special Education/IEP Grades 7-8 (2 yrs exposure) <ul style="list-style-type: none"> - Female - Male - Black or African American - Hispanic or Latino - Special Education/IEP 	Grades 6–8 (1 yr) <ul style="list-style-type: none"> - No - No - No - No - No Grade 6 only (1 yr) <ul style="list-style-type: none"> - No - No - No - No - No Grade 7 only (2 yrs) <ul style="list-style-type: none"> - No - No - No - No - Yes, positive impact Grade 8 only (2 yrs) <ul style="list-style-type: none"> - No - No - No - No - No Grades 7-8 (2 yrs) <ul style="list-style-type: none"> - No - No - No - No - Yes, positive impact 	6–8

Reading Test (Source)	Areas Covered by Test	Subgroups of Students Analyzed Separately ⁱⁱ	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁱⁱⁱ	Grade Level in Impact Analysis
Stanford Achievement Test (External test publisher)	Vocabulary	Grades 6–8 (1 yr exposure) <ul style="list-style-type: none"> – Female – Male – Black or African American – Hispanic or Latino – Special Education/IEP Grade 6 only (1 yr exposure) <ul style="list-style-type: none"> – Female – Male – Black or African American – Hispanic or Latino – Special Education/IEP Grade 7 only (2 yrs exposure) <ul style="list-style-type: none"> – Female – Male – Black or African American – Hispanic or Latino – Special Education/IEP Grade 8 only (2 yrs exposure) <ul style="list-style-type: none"> – Female – Male – Black or African American – Hispanic or Latino – Special Education/IEP Grades 7-8 (2 yrs exposure) <ul style="list-style-type: none"> – Female – Male – Black or African American – Hispanic or Latino – Special Education/IEP 	Grades 6–8 (1 yr) <ul style="list-style-type: none"> – No – No – No – No – Yes, positive impact Grade 6 only (1 yr) <ul style="list-style-type: none"> – No – No – No – No – No Grade 7 only (2 yrs) <ul style="list-style-type: none"> – No – Yes, positive impact – No – No – No Grade 8 only (2 yrs) <ul style="list-style-type: none"> – Yes, negative impact – No – No – No – No Grades 7-8 (2 yrs) <ul style="list-style-type: none"> – No – Yes, positive impact – No – No – No 	6–8

Reading Test (Source)	Areas Covered by Test	Subgroups of Students Analyzed Separately ⁱⁱ	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁱⁱⁱ	Grade Level in Impact Analysis
Ohio Department of Youth Services (students in juvenile correction facilities)				
<i>Read 180 Enterprise Edition</i>				
Scholastic Reading Inventory Assessment (Scholastic, developer of Read-180)	Reading Comprehension	None	Not Applicable	Not Applicable
Portland School District, OR				
<i>Xtreme Reading Strategic Instruction Model</i>				
Group Reading Assessment Diagnostic Evaluation (External test publisher)	Vocabulary, Comprehension, Oral Language	None	Not Applicable	Not Applicable
Group Reading Assessment Diagnostic Evaluation (External test publisher)	Vocabulary, Comprehension, Oral Language	None	Not Applicable	Not Applicable
Oregon State Assessment Test (State)	Reading and Literature	None	Not Applicable	Not Applicable
Oregon State Assessment Test (State)	Reading and Literature	None	Not Applicable	Not Applicable
San Diego Unified School District, CA				
<i>Strategies for Literacy Independence across the Curriculum</i>				
California Standards Test (State)	English Language Arts	– English Language Learners	No	7–8
California Standards Test (State)	English Language Arts	– English Language Learners	No	9–10
Degrees of Reading Power (External test publisher)	Reading Comprehension	– English Language Learners	No	7–8

Reading Test (Source)	Areas Covered by Test	Subgroups of Students Analyzed Separately ⁱⁱ	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁱⁱⁱ	Grade Level in Impact Analysis
Degrees of Reading Power (External test publisher)	Reading Comprehension	– English Language Learners	No	9–10
Springfield and Chicopee Public Schools, MA				
<i>Read 180 Enterprise Edition</i>				
Stanford Diagnostic Reading Test, 4 th Edition (External publisher)	Reading Comprehension	None	Not Applicable	Not Applicable
<i>Xtreme Reading Strategic Instruction Model</i>				
Stanford Diagnostic Reading Test, 4 th Edition (External publisher)	Reading Comprehension	None	Not Applicable	Not Applicable
Source: Striving Readers Year 2 Evaluation Reports (available at: http://www.ed.gov/programs/strivingreaders/performance.html)				

ⁱ Impact estimates for one year of intervention services for students new to the intervention in the 2006-07 or 2007-08 school year, except in San Diego, where impact estimates are for one year of intervention services for students new to the intervention in the 2007-08 school year. Subgroup analyses are listed only if they preserve the original randomized study design.

ⁱⁱ When impacts are estimated for multiple reading outcomes in an evaluation, it is possible that some of the estimated impacts will be statistically significant due to chance alone, even if there is no true effect of the intervention.

ⁱⁱⁱ Statistical significance is measured at 95% confidence level, which is a conventional standard set for social science research.

^{iv} Impact estimate for Chicago’s Striving Readers English Language Arts Curriculum is for students reading below grade level (Tiers 2 and 3).

^v Impact estimate for Chicago Striving Readers Language Arts Curriculum and After School Program (Achieving Maximum Potential) is offered is for 6th grade students reading more than one year below grade level (Tier 3).

Summary of Striving Readers Projects: Whole School Interventions for All Readers

Table 9: Elements of the Intervention Models

Model / Developer	Goals and Focus on Intervention	Content Areas Involved
Chicago Public Schools, IL		
<i>Chicago Striving Readers Program</i>		
<p>Developed by Chicago Public Schools Striving Readers program developers and implementers in collaboration with Donna Ogle at National-Louis University.</p>	<p>Blended intervention model of reading comprehension instruction for all students. Professional development to help teachers provide direct explicit instruction in comprehension, fluency, vocabulary, and word identification, and to help facilitate gradual release of responsibility from teacher to students within a whole group/small group/whole group configuration.</p> <p>Three reading instruction components:</p> <ul style="list-style-type: none"> • Build background knowledge through direct vocabulary instruction (developed by Marzano & Assoc for Supervision and Curriculum Development (ASCD)) • Partner Reading in the Content Area Too for fluency, comprehension, vocabulary development (developed by D. Ogle) • Text set units related to subject area content/formats, (developed by D. Ogle) 	<p>English language arts, math, science, and social science teachers; self-contained special education and bilingual education teachers, school librarians.</p>
Danville School District, KY		
<i>Adolescent Literacy Model (ALM)</i>		
<p>Developed by Collaborative for Teaching and Learning, University of Kentucky (Awbry, 2008)ⁱ</p> <p>http://www.ctlonline.org/site/news_articles/ctl-and-the-national-stimulus-effort.html</p>	<p>Professional development to help teachers improve student content learning by applying literacy strategies during instruction, including vocabulary development, reading comprehension, verbal fluency, writing to learn, writing to demonstrate learning, and academic dialogue.</p>	<p>All core subject and auxiliary staff (special education and other certified staff)</p>

Model / Developer	Goals and Focus on Intervention	Content Areas Involved
Memphis City Schools, TN		
<i>Memphis Content Literacy Academy (MCLA)</i>		
<p>Developed by the University of Memphis with input from key staff at Memphis City Schools</p>	<p>Professional development designed to help teachers:</p> <ul style="list-style-type: none"> • Provide students explicit and direct instruction and practice incorporating appropriate literacy strategies matched to content learning objectives. • Provide on-site literacy coaching support to assist teachers with literacy integration. • Use cooperative learning activities intended to provide students extensive practice opportunities. • Use curriculum resource center in each school that is designed to include content-rich, multi-levelled materials. 	<p>English/language arts (ELA), mathematics, science, and social studies teachers; non-self contained special education teachers.</p>
Newark Public Schools, NJ		
<i>National Urban Alliance (NUA) / New Jersey City University (NJCU)</i>		
<p>Developed by New Jersey City University (NJCU).</p>	<p><i>NJCU:</i> Professional development for language arts teacher and literacy coaches to help teachers provide instruction on a variety of strategies including use of graphic organizers, text annotation, note taking, post-reading reflection, anticipation guides to model brainstorming.</p>	<p>English language arts teachers.</p>
<p>Developed by National Urban Alliance (NUA)</p>	<p><i>NUA:</i> Professional development for other content teachers to help them provide instruction in content lessons literacy strategies such as graphic organizers (“Thinking Maps”), anticipation guides, word taxonomies.</p>	<p>Math, science, and social studies teachers.</p>

Model / Developer	Goals and Focus on Intervention	Content Areas Involved
Ohio Department of Youth Services (students in juvenile correction facilities)		
<p>Year 1: State Institute for Reading Instruction- Adolescent Literacy(SIRI-AL) and English Language Arts Writing Academy Year 2: High Yield Strategies (HYS)</p>		
<p>Year 1 State Institute for Reading Instruction— Adolescent Literacy (SIRI-AL) Developed by the Ohio State Department of Education.</p>	<p>SIRI-AL: Professional development to provide teachers with research based national knowledge and skills on a classroom reading and writing instruction.</p>	<p>English language arts math, science, history, technical trade teachers.</p>
<p>English Language Arts Writing Academy (modified version). Developed by the Ohio State Department of Education</p>	<p>English Language Arts Writing Academy: Professional development to build teachers' capacity to use Ohio's Writing Academic Content Standards to inform instruction.</p>	<p>English language arts math, science, history, technical trade teachers.</p>
<p>Year 2 The High Yield Strategies (HYS). Developed by R. Marzano.</p>	<p>HYS: Professional development to help teachers provide instruction on nine strategies to improve reading comprehension, such as advance organizers, note-taking, summarizing, etc.</p>	<p>English language arts math, science, history, technical trade teachers.</p>
Portland School District, OR		
<i>Strategic Instruction Model Content Enhancement Routines for Teachers (SIM-CERT)</i>		
<p>Developed by the University of Kansas, as part of its Content Literacy Continuum. http://www.xtremereading.com/pages/sim.html</p>	<p>Professional development to train teachers to implement strategic teaching to help all students master critical content (Level 1 of Content Literacy Continuum) and to provide embedded learning strategy instruction in core curriculum courses (Level 2). [Level 3 comprises the targeted intervention.] Organized around a set of Content Enhancement Routines.</p> <p>In Year 1 language arts and social studies teachers received training on the use of the content enhancement routines: Unit Organizer, Framing, Vocabulary LINCing, and Concept Mastery.</p> <p>In Year 2 math teachers were introduced to the Unit Organizer and Framing content enhancement routines, and science teachers were introduced to the Framing,</p>	<p>Year 1 English language arts, social studies teachers.</p> <p>Year 2 English language arts, social studies, math and science teachers.</p>

Model / Developer	Goals and Focus on Intervention	Content Areas Involved
	<p>Concept Mastery, and the new Chapter Survey routines. The professional developers also offered optional training on the Concept Anchoring, Concept Comparison, Lesson Organizer, and Course Organizer content enhancement routines.</p>	
San Diego Unified School District, CA		
<i>Strategies for Literacy Integration across the Curriculum (SLIC)</i>		
<p>Developed by T. McDonald & C. Thornley, Education Associates, New Zealand.</p>	<p>Professional development to train teachers to present students with a set of literacy strategies to enhance skills in reading and writing, focused on helping students understand the ways authors use text forms to present particular types of information and how surface features of text convey information about meaning.</p>	<p>English language arts, math, science, social science, history, and special education teachers.</p>
Springfield and Chicopee Public Schools, MA		
<i>Strategic Instruction Model Content Enhancement Routines for Teachers (SIM-CERT)</i>		
<p>Developed by the University of Kansas, as part of its Content Literacy Continuum http://www.kucrl.org/featured/wholeschool.shtml</p>	<p>Professional development to train teachers to implement strategic teaching intended to help all students master critical content (Level 1 of Content Literacy Continuum) and to provide embedded learning strategy instruction in core curriculum courses (Level 2). <i>[Level 3 comprises the targeted intervention.]</i> Organized around a set of Content Enhancement Routines over a two-year period: unit organizers, course organizer framing, vocabulary LINCing, concept mastery, and concept comparison. The professional developers also offered optional training on concept anchoring and concept comparison.</p>	<p>All content areas: English language arts, science, social studies/history, math teachers.</p>
<p>Source: Striving Readers Year 2 Evaluation Reports (available at: http://www.ed.gov/programs/strivingreaders/performance.html)</p>		

ⁱ Awbrey, A. (2008). *Where everyone gets it: CTL's adolescent literacy model*. Unpublished manuscript.

Summary of Striving Readers Projects: Whole School Interventions for All Readers

Table 10: Context for Implementation of the Models

Relationship of Whole School and Targeted Interventions	Number of Schools/Teachers Implementing Intervention	Grade Levels	Number of Students per year served by Intervention
Chicago Public Schools, IL			
<i>Chicago Striving Readers Program</i>			
Integrated model, with all students receiving whole school intervention and struggling readers additionally receiving linked targeted intervention	<i>Year 1</i> 16 middle schools 214 eligible teachers <i>Year 2</i> 15 additional middle schools 281 eligible teachers	Grades 6–8	Year 1: 3068 Year 2: 5915
Danville School District, KY			
<i>Adolescent Literacy Model (ALM)</i>			
Separate models for whole school intervention and targeted intervention	10 middle schools 9 high schools 2 schools with grades 6-12 739 eligible teachers	Grades 6–12	13,431
Memphis City Schools, TN			
<i>Memphis Content Literacy Academy (MCLA)</i>			
Separate models for whole school intervention and targeted intervention	4 middle schools 145 eligible teachers	Grades 6–8	2,400
Newark Public Schools, NJ			
<i>National Urban Alliance (NUA) / New Jersey City University (NJCU)</i>			
Separate models for whole school intervention and targeted intervention	19 middle schools 363 eligible teachers	Grades 6–8	2430

Relationship of Whole School and Targeted Interventions	Number of Schools/Teachers Implementing Intervention	Grade Levels	Number of Students per year served by Intervention
Ohio Department of Youth Services (students in juvenile correction facilities)			
Year 1: State Institute for Reading Instruction- Adolescent Literacy(SIRI-AL) and English Language Arts Writing Academy Year 2: High Yield Strategies (HYS)			
Separate models for whole school intervention and targeted intervention	7 youth detention facilities 185 eligible teachers	Grades 9–12	3,650
Portland School District, OR			
<i>Strategic Instruction Model Content Enhancement Routines for Teachers (SIM-CERT)</i>			
Integrated model, with all students receiving whole school intervention and struggling readers additionally receiving linked targeted intervention	5 middle schools (in Yr 2, reconfigured as 3 middle schools, 2 K – 8 schools) 4 high school -270 eligible teachers	Grades 6–12	4,209
San Diego Unified School District, CA			
<i>Strategies for Literacy Integration across the Curriculum (SLIC)</i>			
Integrated model, with all students receiving whole school intervention and struggling readers additionally receiving linked targeted intervention	Year 1 3 middle schools- 115 eligible teachers 2 high schools- 112 eligible teachers eligible teachers Year 2 1 additional middle school- 68 eligible teachers 2 additional high schools- 116 eligible teachers	Grades 6-12	6,323
Springfield and Chicopee Public Schools, MA			
<i>Strategic Instruction Model Content Enhancement Routines for Teachers (SIM-CERT)</i>			
Separate models for whole school intervention and the Read 180 targeted intervention	5 schools 450 eligible teachers	Grades 9–12	7,146
Integrated model with Xtreme Reading targeted intervention, with all students receiving whole school intervention and struggling readers additionally receiving linked Xtreme Reading targeted intervention	5 schools 450 eligible teachers	Grades 9–12	7,146
Source: Striving Readers Year 2 Evaluation Reports (available at: http://www.ed.gov/programs/strivingreaders/performance.html)			

Summary of Striving Readers Projects: Whole School Interventions for All Readers

Table 11: Elements of Professional Development Models as Planned

Training Offered to Teachers New to the Intervention		Follow-Up Training Offered to Returning Teachers	
Group Training	In-Classroom Support	Group Training	In-Classroom Support
Chicago Public Schools, IL			
<i>Chicago Striving Readers Program</i>			
<p>Total= 57 hours/teacher</p> <ul style="list-style-type: none"> Summer institute (30 hrs) Quarterly follow-up training sessions (12 hrs) Saturday Seminars (15 hrs) <p>Training by school district</p>	<p>Total= 32–36 hrs/teacher and as needed</p> <ul style="list-style-type: none"> School Literacy Team meetings (monthly, 4hrs/meeting) Site-based PD as needed <p>TA by district literacy coaches</p>	<p>Total= 57 hours/teacher</p> <ul style="list-style-type: none"> 3 days at Summer Institute (6 hrs/day) Quarterly follow-up training sessions (3 hrs/session) Monthly Saturday seminars (15 hrs) Technology training (12 hrs) <p>Training by school district</p>	<p>Site-based PD as needed, by district literacy coaches</p>
Danville School District, KY			
<i>Adolescent Literacy Model (ALM)</i>			
<p>Total= est. 30 hours/teacher</p> <ul style="list-style-type: none"> 5 days at Teacher Institute (est. 6 hrs/day) <p>Training by developer</p>	<p>Total= est. 12 hours/teacher</p> <ul style="list-style-type: none"> 9 site visits/teacher by CTL mentor coach (est. 3 hrs/visit) 	<p>Total= 24 hours/teacher and as needed</p> <ul style="list-style-type: none"> 1 day common trainings 1 day school-specific sub-domain trainings 2 day school institutes 2 half day department-specific trainings per discipline/school as needed (3 hrs/session) <p>Training by developer</p>	<p>Same as initial training</p>

Training Offered to Teachers New to the Intervention		Follow-Up Training Offered to Returning Teachers	
Group Training	In-Classroom Support	Group Training	In-Classroom Support
Memphis City Schools, TN			
<i>Memphis Content Literacy Academy (MCLA)</i>			
Total= 90 hours/teacher <ul style="list-style-type: none"> Year 1 of 2-year MCLA course, 30 weekly classes (3 hrs/class) Training by developers, facilitated by MCS staff	Coaching support by on-site literacy coach as needed	Total= 90 hours/teacher <ul style="list-style-type: none"> Year 2 of 2-year MCLA course, 30 weekly classes (3 hrs/class) Training by developers, facilitated by MCS staff	Coaching support by on-site literacy coach as needed
Newark Public Schools, NJ			
<i>National Urban Alliance (NUA) / New Jersey City University (NJCU)</i>			
<i>NJCU</i> (language arts teachers) Total= 32.5 hrs/teacher <ul style="list-style-type: none"> 4 half days at summer institute (4 hrs/day) 3 follow-up training sessions (5.5 hrs/session) <i>NUA</i> (other content area teachers) Total= 23 hrs/teacher <ul style="list-style-type: none"> 3 half-days at summer institute with (4 hrs/day) 2 follow-up training sessions (5.5 hrs/session) Training by developers	<i>NJCU</i> Total= 5 visits/school by NJCU coaches <i>NUA</i> Total= 15 visits/school by NUA coaches Visits to teachers by district resource teacher coordinators (RTC) on as-needed basis	Same as initial training	<i>NJCU</i> Total= 10 visits/school by NJCU coaches <i>NUA</i> Total= 15 visits/school by NUA coaches Visits to teachers by district resource teacher coordinators (RTC) on as-needed basis

Training Offered to Teachers New to the Intervention		Follow-Up Training Offered to Returning Teachers	
Group Training	In-Classroom Support	Group Training	In-Classroom Support
Ohio Department of Youth Services (students in juvenile correction facilities)			
Year 1: State Institute for Reading Instruction- Adolescent Literacy(SIRI-AL) and English Language Arts Writing Academy Year 2: High Yield Strategies (HYS)			
Total= 63 hours/teacher <ul style="list-style-type: none"> • SIRI-AL (45 hrs) • Writing Academy- (18 hrs) Training by literacy coaches	On-site literacy coaches provide TA as needed	Total= 17.5–33.5 hrs/teacher <ul style="list-style-type: none"> • High Yield Strategies (17.5–33.5 hrs, depending on how many modules each facility offered) Training by literacy coaches	Same as initial training
Portland School District, OR			
<i>Strategic Instruction Model Content Enhancement Routines for Teachers (SIM-CERT)</i>			
Total= 55 hours/teacher <ul style="list-style-type: none"> • Group training on Content Enhancement Routines (37 hrs) • Ongoing PD where teachers select from a menu of training sessions on new content enhancement routines (18 hrs) Training by professional developers, Strategic Learning Center (SLC) of Seattle, Washington, hired as consultants to developer	Total= 44 hrs/teacher <ul style="list-style-type: none"> • In-school coaching by literacy coaches (2 hrs/month for 7 months) • In-school coaching by professional developers (2 hrs/month for 7 months) • Observations with feedback (twice each semester, 4 hrs/session) 	Total= hours variable <ul style="list-style-type: none"> • Follow-up training on Content Enhancement Routines selected by school administrators and professional developers- attendance voluntary (hours vary) Training by developer	Same as initial training

Training Offered to Teachers New to the Intervention		Follow-Up Training Offered to Returning Teachers	
Group Training	In-Classroom Support	Group Training	In-Classroom Support
San Diego Unified School District, CA			
<i>Strategies for Literacy Integration across the Curriculum (SLIC)</i>			
Total= 23-28 hours/teacher <ul style="list-style-type: none"> Whole school/ cross site conferences (15-20 hrs) Small group, content-area seminars (8 hrs) Training by developer, district staff, and/or coaches	Total= 8 hours/teacher <ul style="list-style-type: none"> School literacy coaches provide individual/in-class support (8 hrs) 	Same as initial training	Same as initial training
Springfield and Chicopee Public Schools, MA			
<i>Strategic Instruction Model Content Enhancement Routines for Teachers (SIM-CERT)</i>			
Total= 24 hours/teacher <ul style="list-style-type: none"> Initial summer training (2 days) Ongoing PD for additional routines (2 days) Training by professional developers, Strategic Learning Center (SLC)	Total= 16-18 hours/ teacher <ul style="list-style-type: none"> 8-9 monthly classroom visits and feedback by on-site literacy coach in the first year only (2 hrs/visit) Consultation and problem-solving as needed by onsite coaches (1 per school) 	Total= 2 days/teacher <ul style="list-style-type: none"> Ongoing training (2 days) Training by developers and literacy coaches	Same as initial training
<i>Source: Striving Readers Year 2 Evaluation Reports (available at: http://www.ed.gov/programs/strivingreaders/performance.html)</i>			

Summary of Striving Readers Projects: Whole School Interventions for All Readers

Table 12: Fidelity of Implementation: Teacher and School Participation in Professional Development

Evaluator Rating of Fidelity of Implementation of Professional Development Activities Year 1 (2006–07)	Evaluator Rating of Fidelity of Implementation of Professional Development Activities Year 2 (2007–08)	Basis for Determining Level of Implementation
Chicago Public Schools, IL		
<i>Chicago Striving Readers Program</i>		
Not calculated	3% of schools at high implementation 58% of schools at medium implementation	High = high attendance at 5 of 5 types of professional development offered Medium = high attendance at some types/moderate attendance at all types of professional development
Danville School District, KY		
<i>Adolescent Literacy Model (ALM)</i>		
<i>Middle schools:</i> 86% of teachers with high participation = adequate fidelity <i>High schools</i> = 84% of teachers with high participation = adequate fidelity <i>Schools with grades 6–12</i> = 100% of teachers with high participation = adequate fidelity	<i>Middle schools:</i> 85% of teachers with high participation = adequate fidelity <i>High schools</i> = 81% of teachers with high participation = adequate fidelity <i>Schools with grades 6–12</i> = 78% of teachers with high participation = below-adequate fidelity	Adequate fidelity = high participation of teachers in training: defined as $\geq 80\%$ of teachers attending at least one day of summer training
Memphis City Schools, TN		
<i>Memphis Content Literacy Academy (MCLA)</i>		
51% of teachers enrolled in fall MCLA course 62% of attending teachers had high attendance	64% of teachers completed fall MCLA course; 80% of attending teachers had high attendance 57% of teachers completed spring MCLA course 77% of attending teachers had high attendance	Adequate participation in MCLA course = completion High attendance = attended 80-100% of professional development sessions offered

Evaluator Rating of Fidelity of Implementation of Professional Development Activities Year 1 (2006–07)	Evaluator Rating of Fidelity of Implementation of Professional Development Activities Year 2 (2007–08)	Basis for Determining Level of Implementation
Newark Public Schools, NJ		
<i>National Urban Alliance (NUA) / New Jersey City University (NJCU)</i>		
0% of schools at high participation 42% of schools at adequate participation	5% of schools at high participation 11% of schools at adequate participation	High participation = > 75% of teachers attended each types of professional development (NUA, NJCU, RCT) Adequate participation = > 50% of teachers attended each type of professional development
Ohio Department of Youth Services (students in juvenile correction facilities)		
Year 1: State Institute for Reading Instruction- Adolescent Literacy(SIRI-AL) and English Language Arts Writing Academy Year 2: High Yield Strategies (HYS)		
<i>SIRI-AL</i> 0% of facilities at high implementation 71% of facilities at moderate implementation <i>Writing Academy</i> 100% of facilities at high implementation	<i>HYS</i> 57% of facilities at high implementation 43% of facilities at moderate implementation	High implementation = attended 75%–100% of professional development offered Moderate implementation = attended 50%–74% of professional development offered
Portland School District, OR		
<i>Strategic Instruction Model Content Enhancement Routines for Teachers (SIM-CERT)</i>		
<i>Middle schools</i> 0% of schools at high implementation 80% of schools at medium implementation <i>High schools</i> 0% of schools at high implementation 75% of schools at medium implementation	<i>Middle schools</i> 0% of schools at high implementation 80% of schools at medium implementation <i>High schools</i> 0% of schools at high implementation 50% of schools at medium implementation	Implementation score for group training: Year 1 score is sum of 4 pts summer training, 3 pts fall training, 2 pts October/November trainings, 1 pt each additional training session subtract 2 pts if not trained in all required Routines) <i>Year 1</i> 4 = 5 or more points 3 = 6–6.9 points 2 = 4–5.9 points 1 = less than 4 points Year 2 score is sum of 4 pts summer training, 3 pts fall training, 2 pts October/November trainings, subtract 2 pts if not trained in all 4

Evaluator Rating of Fidelity of Implementation of Professional Development Activities Year 1 (2006–07)	Evaluator Rating of Fidelity of Implementation of Professional Development Activities Year 2 (2007–08)	Basis for Determining Level of Implementation
		required Routines) Year 2 4 = 5 or more points 3 = 4–4.9 points 2 = 3–3.9 points 1 = less than 3 points
San Diego Unified School District, CA		
<i>Strategies for Literacy Integration across the Curriculum (SLIC)</i>		
<p><i>Whole school professional development</i> 20% of schools at high implementation 0% of schools at medium implementation</p> <p><i>Content area professional development</i> 0% of schools at high implementation 20% of schools at medium implementation</p> <p><i>Individual teacher support</i> 0% of schools at high implementation 0% of schools at medium implementation</p> <p><i>Total</i> 0% of schools at high implementation 20% of schools at medium implementation</p>	<p><i>Whole school professional development</i> 0% of schools at high implementation 13% of schools at medium implementation</p> <p><i>Content area professional development</i> 0% of schools at high implementation 63% of schools at medium implementation</p> <p><i>Individual teacher support</i> 0% of schools at high implementation 50% of schools at medium implementation</p> <p><i>Total</i> 0% of schools at high implementation 38% of schools at medium implementation</p>	<p>High participation = > 60% of teachers received at least 27 hours of professional development</p> <p>Medium participation = 20–60% of teachers received at least 27 hours of professional development</p>
Springfield and Chicopee Public Schools, MA		
<i>Strategic Instruction Model Content Enhancement Routines for Teachers (SIM-CERT)</i>		
<p>92% of teachers at adequate participation in initial training</p> <p>84% of teachers at adequate participation in ongoing training</p>	<p>98% of teachers adequate participation in initial training</p> <p>24% of teachers adequate in ongoing training</p> <p>65% of 2nd year teachers adequate in ongoing training</p>	<p>Adequate participation = attended all required trainings</p>
<p>Source: Striving Readers Year 2 Evaluation Reports (available at: http://www.ed.gov/programs/strivingreaders/performance.html)</p>		

Summary of Striving Readers Projects: Whole School Interventions for All Readers

Table 13: Evaluation Designs for the Analysis of the Impacts for All Readers
(Results of the impact analyses will be presented in future reports)ⁱ

Evaluation Design	Number of years project plans to implement whole school model	Number of Schools In Evaluation
Chicago Public Schools, IL		
<i>Chicago Striving Readers Program</i>		
Cluster randomized control trial: School-level random assignment of 63 schools Regression adjusted comparison of mean outcomes	5	31 treatment schools 32 control schools
Danville School District, KY		
<i>Adolescent Literacy Model (ALM)</i>		
Quasi-experimental: 21 schools receive intervention; 21 comparison schools Interrupted time series with comparison group	4	21 treatment schools 21 comparison schools
Memphis City Schools, TN		
<i>Memphis Content Literacy Academy (MCLA)</i>		
Cluster randomized control trial: School-level random assignment of 8 schools Regression adjusted comparison of mean outcomes	4	4 treatment schools 4 control schools (will receive intervention in year 3)
Newark Public Schools, NJ		
<i>National Urban Alliance (NUA) / New Jersey City University (NJCU)</i>		
Quasi-experimental: All schools receive intervention Interrupted time series	4	19 treatment schools

Evaluation Design	Number of years project plans to implement whole school model	Number of Schools In Evaluation
Ohio Department of Youth Services (students in juvenile correction facilities)		
<i>Year 1: State Institute for Reading Instruction- Adolescent Literacy(SIRI-AL) and English Language Arts Writing Academy</i> <i>Year 2: High Yield Strategies (HYS)</i>		
Quasi-experimental: All facilities receive intervention Interrupted time series	5	7 juvenile correction facilities
Portland School District, OR		
<i>Strategic Instruction Model Content Enhancement Routines for Teachers (SIM-CERT)</i>		
Quasi-experimental: All schools receive intervention Interrupted time series	5	9 schools
San Diego Unified School District, CA		
<i>Strategies for Literacy Integration across the Curriculum (SLIC)</i>		
Quasi-experimental: 8 treatment schools receive intervention; 8 comparison schools do not receive intervention Interrupted time series with comparison group	4	8 treatment schools 8 comparison schools
Springfield and Chicopee Public Schools, MA		
<i>Strategic Instruction Model Content Enhancement Routines for Teachers (SIM-CERT)</i>		
Quasi-experimental: All schools receive intervention Interrupted time series	5	5 schools
<i>Source: Striving Readers Year 2 Evaluation Reports (available at: http://www.ed.gov/programs/strivingreaders/performance.html)</i>		

ⁱ The results are not yet available because most of the evaluation designs are made more rigorous with the inclusion of more than two years of post-implementation data.

Summary of Striving Readers Projects:

Profile of Chicago Public Schools' Striving Readers Project and Evaluation

Grantee: Chicago Public Schools
Project Director: Elizabeth Cardenas-Lopez
Local Evaluator: Metis Associates
Principal Investigator: Alan J. Simon, Ph.D.
Project Website: www.chicagostrivingreaders.org

Setting

Sixty-three Title I schools serving sixth- through eighth-grade students in the Chicago Public School system were selected to participate in the Chicago Public Schools Striving Readers (CPS-SR) Project. The vast majority of the schools in the CPS-SR project are located in communities that are economically disadvantaged and racially segregated. On average, 93 percent of students in the CPS-SR schools receive free or reduced priced lunch.¹ Across the schools, 39 percent of the students are African-American, 54 percent are Hispanic, 6 percent are white, and 1 percent are from other ethnic groups; however, nearly all CPS-SR schools are comprised of one predominate racial or ethnic group. Half of the students are classified as English Language Learners.

Intervention Models

Targeted Intervention

Classroom Model as Planned: The Chicago Striving Readers Program was developed specifically for this district, in consultation with Dr. Donna Ogle (National-Louis University). The program is a blended intervention model of instruction in comprehension, fluency, vocabulary, and word identification. The model is designed to help facilitate gradual release of responsibility from teacher to students within a whole group/small group/whole group configuration. The program has three reading instruction components: (a) direct vocabulary instruction (developed by Marzano & Assoc for Supervision and Curriculum Development (ASCD); (b) Partner Reading in the Content Area Too for fluency, comprehension, vocabulary development (developed by D. Ogle, National-Louis University); and text set units related to subject area content/ formats (developed by D. Ogle, National-Louis University).

Students in the treatment schools are assigned to tiers based on their reading skills, as assessed on the Stanford Achievement Test (SAT) or, for students missing a SAT score, the Basic Reading Inventory. Tier 1 includes proficient readers; Tier 2 consists of struggling readers who could reach grade level with focused classroom support; and Tier 3 are the struggling readers

¹ These data are from 32 schools selected for Cohort 1 of the project. Thirty-two additional schools were selected for Cohort 2; data for these schools will be available upon the submission of the Year 2 Evaluation Report, scheduled for late 2008.

who require long-term intensive support/ customized instruction. All tiers receive the whole-school intervention model of reading comprehension-focused literacy strategies. Tier 1 students receive the regular English Language Arts instruction. Tier 2 and Tier 3 students receive 20 minutes of targeted intervention daily during the regular English Language Arts class, during which differentiated instruction/ scaffolding/support is provided by the Literacy Intervention Teacher.

Tier 3 students also receive intensive instruction in an after-school supplemental literacy program, Achieving Maximum Potential program, (AMP), which uses an approach based on work by T. Shanahan of the University of Illinois at Chicago. Tier 3 students attend AMP four hours a week for extra help in building vocabulary, fluency, word identification skills, and background knowledge through interactive/diagnostic computer software. The AMP program includes books on tape, which students listen to while following the reading in their story books. Seven core comprehension strategies are taught in the AMP reading program: summarizing, previewing and predicting, questioning, visualizing, inferring, metacognition and text structure.

Technology is integrated into the English Language arts classroom instruction through a listening center where students can access models of fluency, record themselves reading, monitor own fluency levels, and listen to audio books; a media center with 3 computers and printer to support special intervention software and group or individual research; and 10 Alpha Smarts (hand-held computers) for note-taking, brainstorming, preparing graphic organizers, and taking spelling tests. The classroom model uses multi-leveled materials that are designed to be high-interest and integrated with technology and audio resources. “Text set” units, developed with collaboration of Donna Ogle and New Louis University staff, feature a variety of informational non-fiction texts at different reading levels and with varied text structures and organizational features.

The program makes use of screening, diagnostic, and progress-monitoring tools that are intended to help teachers adjust instruction to match student needs. Stanford Learning First ClassLinks and ClassViews, informal classroom assessments, comprehension rubrics, fluency snapshots, spelling inventories, teacher observation and checklists, student self-assessment, student interviews and students interest inventories

Professional Development Model as Planned: In Year 1 of implementation (2006-07), teachers new to the intervention are offered about 54 hours a year of professional development. This includes a 5-day Summer Institute, quarterly follow-up training sessions, and monthly Saturday Seminars. Teachers also have available in-class technical assistance from district literacy coaches on an as-needed basis. In Year 2 of implementation (2007-08), teachers new to the intervention are offered about 69 hours a year of professional development; in addition to the elements offered to new teachers in Year 1, new teachers in Year 2 are offered technology training.

In subsequent years, returning teachers are offered a 3-day Summer Institute, and the quarterly follow-up training sessions and monthly Saturday Seminars continue. In addition, since a technology component was added to the classroom instruction model in the second year of the project, teachers are offered training on using the technology as part of their professional development.

Context for Implementation: The Chicago Striving Readers program is being implemented in 31 middle schools. For students in Tiers 2 and 3, the Striving Readers program replaces 20 – 30 minutes of the regular English Language Arts class each day with small group work. For students in Tier 3, Grade 6 only, the small group work as part of the English Language Arts class also is supplemented with the AMP after-school program 240 minutes each week. Students in grades 6-8 are tiered based on their previous year’s score on the Stanford Achievement Test or the Basic Reading Inventory. Students who score up to one year below grade level are assigned to Tier 2, and students who score more than one year below grade level are assigned to Tier 3. All special education students participate in the program and are tiered similarly to the regular education students. Students may move between tiers throughout the three years of middle school, as they acquire stronger reading skills. In the first year of implementation (2006-07), the program was implemented in 16 treatment schools in Cohort 1. In the second year of implementation (2007-08), the program was implemented in 16 treatment schools in Cohort 2 and continued in the 16 Cohort 1 schools. Approximately 2,600 students in grades 6-8 were assigned to tiers 2 and 3 in Cohort 1 schools in each of the first two years of implementation, with 2,000 students assigned to tiers 2 and 3 in Cohort 2 schools the second year of implementation. In years 3-5 of the project, the intervention will be implemented in Cohort 1 and Cohort 2 schools. The targeted intervention will be implemented for a total of five years.

Whole School Intervention

Classroom Model as Planned: The goal of Chicago Striving Readers Program is to provide a seamless, aligned approach to reading instruction across language arts, social studies, science, and math for all readers across all grades. Therefore, in treatment schools, all students receive reading instruction guided by the Chicago Striving Readers Program, focused on five key comprehension strategies:

1. Direct / explicit vocabulary instruction: Systematic approach to teaching academic content vocabulary in all subjects using Robert Marzano’s *Building Background Knowledge*.
2. Partner reading (PRC2): a reading instructional framework developed by Dr. Donna Ogle to support reading comprehension and fluency of nonfiction text.
3. Text Sets: books intended to be of high interest used to help students read strategically, promote engagement and motivation, and deepen their content knowledge.
4. Aligned library support: aligning library materials and resources to support students in wide reading.
5. Technology integration: use of classroom computers and listening centers designed to support small group differentiated instruction.

Professional Development Model as Planned: In both Years 1 and 2 of implementation, teachers are offered about 57 hours a year of professional development. In Year 1 (2006-07), this includes a 5-day Summer Institute, quarterly follow-up training sessions, and monthly Saturday Seminars. In-class technical assistance from district literacy coaches is available to teachers on an as-needed basis. In the second year of implementation (2007-08), teachers are offered a 3-day Summer Institute, and the quarterly follow-up training sessions, and monthly Saturday Seminars continued. In addition, since a technology component was added to classroom instruction model

in the second year of the program, starting in Year 2 (2007-08), teachers are offered training on using the new technology.

Context for Implementation: All sixth through eighth-grade students in the 31 treatment schools (Tiers 1, 2, and 3) receive instruction guided by the Striving Readers project. Across the treatment schools, nearly 500 teachers are implementing the whole school model. Each year, the participating schools enroll approximately 5,900 students in grades 6-8. The whole school intervention will be implemented for a total of five years.

Evaluation Design

Evaluation of the Targeted Intervention

Research Questions:

1. What is the impact of the Chicago Striving Readers Program on Tier 2 and Tier 3 students in grade six, defined as students reading below grade level?
2. What is the impact of the Chicago Striving Readers Program on Tier 3 sixth grade students, defined as those students reading two to three years below grade level?

Research Design and Methods: Two cohorts of middle schools have been randomly assigned to implement the Chicago Striving Readers Program or to continue implementing their current language arts curriculum. In the first cohort of 32 schools, 16 were assigned to Treatment and 16 to Control. In the second cohort of 31 schools, 15 were assigned to Treatment and 16 to Control. The school-level random assignment is maintained for the duration of the five-year study.

The impact of the Chicago Striving Readers Program will be analyzed using multilevel models, to account for the nesting of students within schools. Because random assignment was at the school-level, the intervention (or treatment indicator) is modeled at the school level (level two). Models will also be run to disaggregate effects by Tier, in order to examine the separate effect of the most intense services on the most struggling readers. Impacts will also be examined separately by grade level.

Control Condition: The students in control schools are not tiered, as in the treatment schools. Students in the control schools are in their regular language arts classes, instructed by teachers who attend the regular professional development offered by the school district and deliver instruction to students according to the regular language arts curriculum. For analysis purposes, students in the control school will be tiered post-hoc using the Illinois Student Achievement Test (ISAT). For example, Tier 3 students in the treatment schools will be compared to students in the control schools who also perform two to three years below grade level.

Sample Size: Sixty-three schools are participating in the evaluation. Across Years 1 and 2 of implementation, the evaluation included 225 6th grade treatment students and 246 control students in Tier 2. For Tier 3, the evaluation included 549 6th grade treatment students and 561 control students.

Key Measures of Student Reading Outcomes (Source):

Illinois Standards Achievement Test (ISAT) (State Test)

Evaluation of the Whole School Intervention

Research Questions:

1. What is the impact of the Chicago Striving Readers Program on all students in grades six through eight?

Research Design and Methods: Participating schools are randomly assigned to either implement CPS-SR or to continue with the existing literacy program. The same design will be used to assess the impacts of the whole school intervention as is being used to evaluate the impacts of the targeted intervention. The same analytic strategy is used to evaluate both the targeted and whole-school models.

Future evaluation reports will include findings on the impact of the whole school intervention on student achievement.

Control Condition: Control school teachers receive the regular professional development offered by the districts and deliver instruction according to the regular language arts curriculum. The control school teachers do not attend the Striving Readers professional development workshops.

Sample Size: The 63 schools in the study enroll approximately 5,500 students in grades 6 – 8. All students will be included in the evaluation of the impact of the Striving Readers program on the entire population of students (Tiers 1, 2 and 3).

Key Measures of Student Reading Outcomes (Source):

Illinois Standards Achievement Test (ISAT) (State Test)

Year 2 Evaluation Findings

Targeted Intervention

Fidelity of Implementation of the Targeted Intervention Model: Fidelity of implementation of the *professional development model* was not calculated for the first year of the program. In Year 2 (2007-08), teachers in only one of the treatment schools participated fully in all types of professional development activities. In 58% of the schools, teachers participated at a high level in some but not all of the professional development activities.

The fidelity of implementation of the *classroom model* was not calculated for the first year of the program. In Year 2 (2007-08), the classroom instruction model for the Tier 2 and Tier 3 students was implemented at a moderate level of fidelity in 84% of schools. None of the schools implemented the classroom model at a high level of fidelity.

Impact of the Targeted Interventions on Student Reading Outcomes: After one year of intervention, there were no significant impacts on the reading achievement of 6th grade struggling readers (those assigned to Tiers 2 and 3). The non-significant effect sizes for Tier 2 and Tier 3 was .20 and .10, respectively. There were no significant impacts on subgroups of the 6th grade students, including males or females, special education students, students eligible for free- or reduced-price lunch, or black or Hispanic students.

Whole School Intervention

Fidelity of Implementation of the Whole School Intervention Model: Fidelity of implementation of the *professional development model* was not calculated for Year 1. In Year 2, the classroom instruction model for the Tier 2 and Tier 3 students was implemented at a moderate level of fidelity in 84% of schools. None of the schools implemented the classroom model at a high level of fidelity.

Summary of the Strengths and Weaknesses of the Impact Evaluation of the Targeted Intervention:

Strengths

- Eligibility for inclusion in the Chicago Striving Readers Program was determined systematically, using a predetermined cutoff score on a test of reading achievement (SAT 10 or the Basic Reading Inventory (BRI)).
- School level random assignment was faithfully executed. The evaluators note that there were 41 students who moved from a treatment school to a control school, and 36 students who moved from a control school to a treatment school. This corresponds to 0.6% of the student sample, and is a minimal crossover rate.
- There is no evidence that there are other factors (e.g., other reading programs or district policies) that were implemented in ways that would undermine the evaluators' ability to attribute impacts to the Chicago Striving Readers Program. It is important to note that the impacts of the targeted intervention for struggling readers cannot be estimated independently from the whole school intervention for all readers; all students in the treatment schools, including those in the targeted intervention, receive the whole school intervention.
- The reading test used as an outcome measure, the Illinois Standard Achievement Test (ISAT), assess vocabulary, reading strategies, comprehension, and literature, and was developed by the state. There is no reason to believe that students assigned to the treatment group have more experience taking the test than do the control group students, or that the test measures skills specific to the intervention, both of which could undermine confidence in the impact estimates.
- One Cohort 1 treatment school refused to participate in the study after random assignment, and therefore did not participate in follow-up data collection. Within schools, few students were unable to participate in follow-up data collection. This suggests that the integrity of the original randomized design appears to have been maintained at the student level and that treatment and control groups continue to be

statistically equivalent on all measured and unmeasured characteristics at follow-up. With respect to measured characteristics, no differences in pre-study reading achievement or other demographics were noted between the students in the 32 treatment schools and students in the remaining 31 control schools included in the analysis at follow-up.²

- When estimating impacts, appropriate analytic steps were taken to account for the clustering of students within schools. A pre-study measure of reading achievement is included in the models to increase the precision of the impact estimates.

Weaknesses

- The year two evaluation report, which includes findings from the first two years of implementation, includes a sample of students large enough to detect an impact (in standard deviation units) of the intervention on reading achievement equivalent to .36 on the standardized test (Illinois Standard Achievement Test) for Tier 2 students and .21 for Tier 3 students in grade 6.³ Because Chicago plans to offer the intervention to new groups of students for a total of five school years, future reports will have larger sample sizes of students and will be able to detect somewhat smaller impacts. However, because the Chicago evaluation conducted random assignment at the student level, the additional gains in precision will be minimal. Future reports will also be able to examine the impact of a student remaining in the targeted intervention for two or three years, which one might hypothesize would be larger than the impact of one year of the intervention.

² To date, the evaluation team has been unable to collect data from the treatment school that refused participation. Future reports will be strengthened by the inclusion of data from the control school. The evaluation team will continue to assess the feasibility of collecting reading achievement data from this school for inclusion in future analyses.

³ Abt Associates staff calculated the MDE by multiplying the standard error of the impact estimate by 2.8. This calculation produces the MDE for a two-tailed test with 80% power, and with an alpha level of .05, and accounts for clustering and for the inclusion of the covariates in the model.

Summary of Striving Readers Projects:

Profile of Danville School District's Striving Readers Project and Evaluation

Grantee: Danville School District

Project Director: Kathy Belcher

Local Evaluator: CCLD

Principal Investigator: Susan Cantrell

Project Website: <http://www.danville.k12.ky.us/district/programs/KCLCWebPage/index.htm>

Setting

Ten middle schools, nine high schools and two 6-12 schools in seven rural school districts in central, northwest, and eastern Kentucky are participating in the Striving Readers project. All schools are eligible for Title I services, and about half of the students (49 percent) served by these schools are identified as eligible for free or reduced priced lunch. Across the 21 schools, 21 percent to 91 percent of students scored below proficient on state reading tests in 2005. These schools serve predominantly white students (91 percent), while 5 percent of the students are identified as African American.

Intervention Models

Targeted Intervention

Classroom Model as Planned:

The Learning Strategies Curriculum (LSC), developed by the University of Kansas Center for Research on Learning as one component of the Strategic Interventions Model (SIM), is a curriculum aimed at strategies for word identification, comprehension, vocabulary, and fluency among struggling adolescent readers. The model includes reading materials with content written specifically for and designed to be of high interest to adolescents by including connections to their everyday experiences. Springboard novels, picture books, and articles are also used to support standards integration and build background for comprehension strategies. Frequent grade level and instructional level curriculum based measures are used for reading and writing. Informal reading diagnostics from the Ekwall/Shanker Reading Inventory fourth edition are also used.

Each classroom has a tablet PC to serve as a method of delivery system to whole or small group. Some classrooms use tablet for Visual Imagery Strategy. Some classrooms use a listening center where students can access models of fluency, record themselves while reading, monitor their own fluency levels, and listen to audio books based on individual needs. Some classrooms use blogging or software supports for pre-requisite skills needed prior to strategy instruction.

Professional Development Model as Planned: Teachers who are new to LSC are initially offered 5 half-day workshops with 6 half-day follow-up sessions, totaling 33 hours of training per teacher provided by the model developer. Each new teacher is also offered 9 site

visits by a CTL mentor coach and 3 coaching visits by the LSC trainer, totaling an estimated 12 hours of support per teacher. In subsequent years, returning teachers are offered 2 days of workshops and 6 half-day follow-up sessions. Additionally, teachers are offered bimonthly distance learning sessions for a total of 37 hours of training per teacher provided by the model developer. Teachers are offered 3 to 4 visits throughout the year from a CTL mentor coach for a total of 3-4 hours of support.

Context for Implementation: The Learning Strategies Curriculum is being implemented as a supplement to the district’s regular English language arts curriculum in the schools, replacing an elective course. The targeted intervention serves sixth- and ninth-grade students who scored at least two grade levels below their current grade level on the GRADE reading assessment at the beginning of the school year. Special education students are excluded if they are categorized as functionally mentally disabled or are enrolled in special education for all core classes. Struggling readers can receive the intervention for one year. In year one, 442 students in grades 6 and 9 were served by the intervention. In the second year, new cohorts of 6th and 9th graders were served, totaling 387 students. The targeted intervention will be implemented for a total of four years.

Whole School Intervention

Classroom Model as Planned: The Adolescent Literacy Model (ALM) was developed by the Collaborative for Teaching and Learning at the University of Kentucky to help all core subject and auxiliary teachers improve student content learning by applying literacy strategies during instruction. These strategies include vocabulary development, reading comprehension, verbal fluency, writing to learn, writing to demonstrate learning, and academic dialogue.

Professional Development Model as Planned: Teachers new to the Adolescent Literacy Model are offered 5 days of training at the Teacher Institute provided by the model developer. This training totals 30 hours per teacher. New teachers are also offered mentoring opportunities from the school literacy coaches. Subsequent training for returning teachers includes 1 day of common trainings, 1 day of school-specific sub-domain trainings, 2 days of school institutes and 2 half-day department-specific trainings per discipline per school and as needed. These trainings are offered by the model developers and total 24 hours per teacher and as needed.

Context for Implementation: All students in participating schools are receiving instruction in the whole school intervention. In years 1 and 2, over 13,000 students in grades 6-12 were served by the 21 intervention schools. The whole school intervention will be implemented for a total of four years.

Evaluation Design

Targeted Intervention

Research Question:

1. What is the impact of the Learning Strategies Curriculum on the reading achievement, reading motivation, and reading strategy use of struggling readers?

Research Design and Methods: Within-schools, struggling readers are randomly assigned to either receive the supplemental LSC class or to the control group. The impacts of LSC on student outcomes will be estimated using multilevel models to account for nesting of students within schools.

Control Condition: Students randomized to the control group continue to receive their regular elective courses in place of the LSC class.

Sample Size: Across the first two years of implementation, 317 students in grade 6 were randomized to the treatment group and 266 to the control group across 12 middle schools. In the 11 high schools, 365 students in grade 9 were randomized to the treatment group and 315 to the control group.

Key Measures of Student Reading Outcomes (Source):

Group Reading Assessment Diagnostic Evaluation (GRADE) (External Test Publisher)
Metacognitive Awareness of Reading Strategies Inventory (MARSI)
Motivation to Read Questionnaire (MRQ)

Whole School Intervention

Research Questions:

1. To what extent does the Collaborative Model for Content Literacy impact students' reading achievement, reading strategy use, reading motivation, and content area achievement?
2. To what extent does the profession development model used by the Collaborative Model for Content Literacy improve teacher sense of literacy teaching self efficacy?

Research Design and Methods: An interrupted time series analysis with a comparison group will be used to compare pre-program student achievement scores with post-program student achievement scores.

Future evaluation reports will include findings on the impact of the whole school intervention on student achievement. The interrupted time series evaluation design is made more rigorous with the inclusion of more than two years of post-implementation data and comparison schools.

Comparison Group: The sample will also include collection of school-level aggregate test scores from 21 comparison schools that did not implement the intervention. Comparison schools are matched to intervention schools on ethnicity, region, and proportion of at-risk students.

Sample Size: The whole school intervention is being delivered to all students in the 21 treatment schools (10 middle schools, 9 high schools and 2 schools with grades 6-12). All students in the schools will be included in the sample for the evaluation, totaling approximately 13,000 students in a single year. There are also 21 comparison schools that will be included in the evaluation of the whole school model.

Key Measures of Student Reading Outcomes (Source):

Group Reading Assessment Diagnostic Evaluation (GRADE) (External Test Publisher)

Year 2 Evaluation Findings

Targeted Intervention

Fidelity of Implementation of the Targeted Intervention Model: In terms of fidelity of implementation of the *professional development model* in Year 1 (2006-07), 100% of teachers implemented the intervention at a high level. In the second year of implementation (2007-08), all of the teachers continued to implement at a high level (100%).

In terms of fidelity of implementation of the *classroom model* ratings of the fidelity of implementation of the program model were based on classroom observations and teacher interviews. In year 1 of implementation, teachers of grade 6 did not achieve high fidelity of overall implementation of LSC instruction, but did achieve high fidelity of teacher attendance. Teachers of grade 9 achieved overall implementation of LSC instruction and teacher attendance with high fidelity in year 1. In the second year of implementation, both 6th and 9th grade teachers reached high fidelity on the overall implementation of LSC instruction but not on teacher attendance. The 9th grade teachers continued to reach high fidelity in year two.

Impact of the Targeted Intervention on Student Reading Outcomes: There were no significant impacts of the targeted intervention on the reading achievement of students in grade 6 or 9 who received one year of the treatment, with effect sizes of .10 and .11, respectively.

Whole School Intervention

Fidelity of Implementation of the Whole School Intervention Model: In terms of fidelity of implementation of the *professional development model* in year one (2006-07), 86% of teachers in the middle schools, 84% teachers in the high schools and 100% of teachers in the 6-12 schools achieved adequate levels of participation. In year two of implementation, these levels decreased to 85% in middle schools, 81% in high schools and 78% in the 6-12 schools.

Summary of the Strengths and Weaknesses of the Impact Evaluation of the Targeted Intervention:

Strengths

- Eligibility for random assignment was determined systematically, using a predetermined cutoff score on a test of reading achievement (GRADE).
- Random assignment was faithfully executed, with no evidence of students receiving the intervention after being randomized to the control condition.
- There is no evidence that there are other factors (e.g., other reading programs or district policies) that were implemented in ways that would undermine the evaluators' ability to attribute impacts to The Learning Strategies Curriculum.
- The reading test used as an outcome measure (GRADE) assesses vocabulary, comprehension, and oral language, and was developed by an external test publisher. There is no reason to believe that students assigned to the treatment group have more experience taking the test than do the control group students, or that the test measures

- In grade 6, few students were unable to participate in follow-up data collection, suggesting that the integrity of the original randomized design was preserved, and that treatment and control groups continue to be statistically equivalent on all measured and unmeasured characteristics at follow-up. With respect to measured characteristics, no differences in pre-study reading achievement or other demographics were noted between the treatment and control students included in the analysis at follow-up.
- When estimating impacts, appropriate analytic steps were taken to account for the clustering of students within schools. A pre-study measure of reading achievement is included in the models to increase the precision of the impact estimates.

Weaknesses

- In grade 9, 25.4% of the students randomized were unable to participate in follow-up data collection. The rate of attrition was different in the treatment and control group (20.8% versus 30.2% respectively). The 9.3 percentage point difference in the attrition rate borders on high by convention, suggesting that the treatment and control groups may no longer be equivalent on all measured and unmeasured characteristics at follow-up. With respect to measured characteristics, no differences in pre-study reading achievement or other demographics were noted between the treatment and control students included in the analysis at follow-up. However, to the extent that the groups differ on unmeasured characteristics, the estimated impacts in grade 9 may contain bias.
- The year two evaluation report, which includes findings from the first two years of implementation, includes a sample of students large enough to detect an impact (in standard deviation units) of the intervention on reading achievement equivalent to .20 on the standardized test (GRADE) for grades 6 and 9.¹ Because Danville plans to offer the intervention to new groups of students for four school years, future reports will have larger sample sizes and be able to detect smaller impacts.

¹ Abt Associates staff calculated the MDE by multiplying the standard error of the impact estimate by 2.8. This calculation produces the MDE for a two-tailed test with 80% power, and with an alpha level of .05, and accounts for clustering and for the inclusion of the covariates in the model.

Summary of Striving Readers Projects:

Profile of Memphis City Schools' Striving Readers Project and Evaluation

Grantee: Memphis City Schools
Project Director: Dr. Elizabeth Heeren
Local Evaluator: RBS
Principal Investigator: Dr. Jill Feldman
Project Website: <http://memphisstrivingreaders.org>

Setting

Eight middle schools serving over 6,000 students in grades six through eight in Memphis, Tennessee are participating in the Striving Readers project. Four middle schools are implementing both the targeted and the whole school interventions; four are control schools. Ninety-five percent of the students served by these schools are African American and five percent are Hispanic. Eighty-eight percent of these students are eligible for free or reduced priced lunch, and 3 percent are identified as English Language Learners.

Intervention Models

Targeted Intervention

Classroom Model as Planned: READ 180 Enterprise Edition, developed by Scholastic Inc, aims to address the individual needs of struggling adolescent readers who are reading below grade level through adaptive and instructional software, teacher-directed instructional rotations, and the use of tailored textbooks and independent or modeled reading of literature intended to be of high interest to adolescents. The program focuses on elements of phonics, fluency, vocabulary, comprehension, spelling, writing and grammar, and aims to promote self-directed learning. Weekly and monthly assessments are provided by the READ 180 Topic Software and the Scholastic Achievement Manager (SAM) software provides feedback to teachers on student assessments. In addition, diagnostic testing using the Scholastic Reading Inventory (SRI) is conducted three times a year.

Professional Development Model as Planned: Teachers who are new to READ 180 are offered an initial one-day training, an additional one day of follow-up training on the model provided by the developer, and six networking meetings throughout the year provided by district staff, totaling 24 hours per teacher. In the second year of implementation, a six-hour online training module from Scholastic on “Best Practices for Reading Intervention” as well as observations three times a year with follow-up meetings with the model developer and district staff (4.5 additional hours per teacher) were added for teachers new to the intervention. In subsequent years, returning teachers are offered a one day training at the beginning of the school year with the model developer and four networking meetings with district staff, totaling 10 hours per teacher. They are to be observed three times a year with follow-up meetings by district staff.

Context for Implementation: The READ 180 program is being implemented as a supplement to the district’s regular English language arts curriculum in the schools, replacing an elective course. Students in grades 6-8 are eligible for READ 180 if they score in the bottom quartile of the Tennessee Comprehensive Assessment Program (TCAP). All special education students who are struggling readers are eligible for the interventions. Eligible students can receive the intervention for up to two years. In year one of implementation, 698 students in grades 6-8 were served by the intervention. In the second year (2007-08), the students in grade 8 in year one (2006-07) graduated out of the program and a new cohort of 6th graders were added to READ 180, for a total of 608 students being served in Year 2 of implementation. The targeted intervention will be implemented for a total of four years.

Whole School Intervention

Classroom Model as Planned: The Memphis Content Literacy Academy (MCLA) professional development model is being implemented as the whole school intervention. The model, which was developed by team members from the University of Memphis and Memphis City Schools, trains core content area teachers to teach students research-based strategies to help them strengthen their fluency, vocabulary, and comprehension skills before, during, and after reading.

Professional Development Model as Planned: English language arts, mathematics, science, and social studies teachers in four of the middle schools are offered professional development in the MCLA model. New teachers of the Memphis Content Literacy Academy are offered a two year course with 30 weekly classes per year provided by model developers, totaling 90 hours per teacher per year. Literacy coaches are also available on-site to provide technical assistance on the whole school model on an as-needed basis. The teachers’ professional development in their second year consists of the second half of the MCLA course, totaling 90 hours per teacher per year.

Context for Implementation: The whole school intervention is being implemented only in the 4 treatment middle schools in the first two years of the program but the four control schools are being added in year three. In years 1 and 2 of implementation, the whole school intervention serves approximately 2,400 students in grades 6-8 in each school year in the four treatment schools and year 3 of implementation will include approximately another 2,400 students. The whole school intervention will be implemented for a total of four years.

Evaluation Design

Targeted Intervention

Research Question:

1. What is the immediate impact of Read 180 on the reading and subject area achievement of struggling readers at the end of the first year of student participation?

Research Design and Methods: Students scoring in the lowest quartile on the English/Language Arts component of the TCAP are randomly assigned to receive the supplemental Read 180 class or to a control group. Students continue to receive instruction in

the regular language arts curriculum. The impact of Read 180 on student outcomes will be modeled using multilevel models to account for the nesting of students within schools.

Control Condition: Students randomized to the control group receive their regular elective courses in place of the treatment class.

Sample Size: The samples for the impact evaluation include a treatment group of 987 struggling readers in grades 6–8 who have received READ 180 for one year, and 1,446 struggling readers in the control group, across 8 schools.

Key Measures of Student Reading Outcomes (Source):

Iowa Test of Basic Skills (ITBS) (External Test Publisher)

Tennessee Comprehensive Assessment Program (TCAP) (State Test)

Whole School Intervention

Research Question:

1. What are the separate and combined effects of MCLA and Read 180 on reading achievement levels?

Research Design and Methods: The eight study schools were matched based on school enrollment levels and 2005 TCAP Mean NCE scores in English/Language Arts and Mathematics (disaggregated by grade) and then randomly assigned to implement the MCLA model or to a control condition. Students in the treatment schools are taught by teachers trained in the MCLA model. Within any given MCLA school, some of the students are randomized to the Read 180 group and therefore receive both treatments while the other students only receive the whole-school intervention. Conversely, in non-MCLA schools, some of the students only receive the Read 180 treatment while the other students receive neither treatment. A cluster randomized control trial analysis will be used to compare pre-program student achievement scores with post-program student achievement scores. Two-level hierarchical linear models (students nested within schools) will be fit to assess the impact of MCLA on student outcomes. A cross-level interaction term will be included to estimate the differential effect of MCLA on student outcomes with and without Read 180. A regression adjusted comparison of mean outcomes will also be used.

Future evaluation reports will include findings on the impact of the whole school intervention on student achievement.

Sample Size: Eight schools in the district were randomly assigned to implement the whole school intervention or to continue with business-as-usual for the first 2 years of the program. Starting in the 3rd year of implementation, all 8 middle schools will implement the whole school evaluation. In the first two years of the program (2006-07 and 2007-08), the whole school intervention is being delivered to all students in the 4 treatment middle schools, which involves a sample of approximately 2400 students in grades 6-8. The sample in the four control schools is comparable, with a total estimated enrollment of total of 2,500 students in grades 6–8.

Key Measures of Student Reading Outcomes (Source):

Iowa Test of Basic Skills (ITBS) (External Test Publisher)

Tennessee Comprehensive Assessment Program (TCAP) (State Test)

Year 2 Evaluation Findings

Targeted Intervention

Fidelity of Implementation of the Targeted Intervention Model: In terms of fidelity of implementation of the *professional development model*, in Year 1 (2006-07), the majority of teachers participated in the READ 180 professional development activities at either an adequate level (53%) or high level (16%). The level of participation in professional development increased in the second year of implementation, with 53% of teachers participating at an adequate level and 21% participating at a high level.

In terms of fidelity of implementation of the *classroom model* ratings of the fidelity of implementation of the program model were based on a combination of classroom observations, teacher surveys and ratings from the SAM data management system. In year 1 of the program, 42% of teachers implemented the model at an adequate level. In year 2, this proportion increased to 58% of teachers.

Impact of the Targeted Intervention on Student Reading Outcomes: There were no statistically significant impacts on the reading achievement of struggling readers in grades 6-8 after one year of exposure to READ 180, with effect sizes of .03 on ITBS, and .01 on TCAP. Subgroup analyses that examined effects separately for each cohort of 6th graders showed no significant impacts. There was also no significant impact for struggling readers in grades 7 and 8 who had had the opportunity for two years of exposure to READ 180.

Whole School Intervention

Fidelity of Implementation of the Whole School Intervention Model: In terms of fidelity of implementation of the *professional development model* in year 1 (2006-07), approximately half (51%) of all eligible content-area teachers enrolled in the fall MCLA course. Of those teachers that participated, 62% attended 80 percent or more of their classes. In year two of implementation, 64% of teachers completed the fall MCLA course and 57% completed the spring course. 80% of teachers attended at least 80 percent of the sessions offered in the fall and 77% of teachers attended at least 80 percent of the sessions offered in the spring.

Summary of the Strengths and Weaknesses of the Impact Evaluation of the Targeted Intervention:

Strengths

- Eligibility for random assignment was determined systematically, using a predetermined cutoff score on a test of reading achievement (Reading Language Arts subtest of the Tennessee Comprehensive Assessment Program (TCAP)).
- Random assignment was faithfully executed, with no evidence of students receiving the intervention after being randomized to the control condition.

- There is no evidence that there are other factors (e.g., other reading programs or district policies) that were implemented in ways that would undermine the evaluators' ability to attribute impacts to Read 180.
- The evaluation employs two reading tests as outcome measures. The first (ITBS) assesses vocabulary, word analysis, listening and comprehension, and was developed by an external test publisher. The second (TCAP) assesses reading and language arts, and was developed by the state. There is no reason to believe that students assigned to the treatment group have more experience taking the tests than do the control group students, or that the tests measures skills specific to the intervention, both of which could undermine confidence in the impact estimates.
- Few students were unable to participate in follow-up data collection, suggesting that the integrity of the original randomized design was preserved, and that treatment and control groups continue to be statistically equivalent on all measured and unmeasured characteristics at follow-up. Despite low attrition, small, statistically significant differences in pre-study reading achievement favoring the control group were noted on the students included in the analysis at follow-up. The effects of this difference are mitigated by the inclusion of the pre-test measure in the statistical models estimating the impact of the program.
- When estimating impacts, appropriate analytic steps were taken to account for the clustering of students within schools.

Weaknesses

- The year two evaluation report, which includes findings from the first two years of implementation, includes a sample of students large enough to detect an impact (in standard deviation units) of the intervention on reading achievement equivalent to .15 on the ITBS and .14 on the TCAP for grades 6-8.¹ Because Memphis plans to offer the intervention to new groups of students for four school years, future reports will have larger sample sizes and be able to detect smaller impacts of one year of the intervention.

¹ Abt Associates staff calculated the MDE by multiplying the standard error of the impact estimate by 2.8. This calculation produces the MDE for a two-tailed test with 80% power, and with an alpha level of .05, and accounts for clustering and for the inclusion of the covariates in the model.

Summary of Striving Readers Projects: Profile of Newark Public Schools' Striving Readers Project and Evaluation

Grantee: Newark Public Schools
Project Director: Gayle Griffin, Ph.D.
Local Evaluator: Westat
Principal Investigator: Jennifer Hamilton

Setting

Nineteen middle schools participate in the Newark Striving Readers Project. These schools were selected because they 1) were eligible for Title I funding, 2) served a minimum of two grades across grades six through eight, 3) were not already using READ 180, 4) were categorized as “in need of improvement” under No Child Left Behind, and 5) served a minimum of 25 eligible students reading at least two grades below grade level, based on the 2006 New Jersey state assessment. In these schools, 58 percent of students are African American, 41 percent are Hispanic, 88 percent are identified as low-income, and 7 percent are identified as being English Language Learners (ELL).

Intervention Models

Targeted Intervention

Classroom Model as Planned: The READ 180 program, developed by Scholastic Inc, aims to address the individual needs of struggling adolescent readers who are reading below grade level through adaptive and instructional software, teacher-directed instructional rotations, and the use of tailored textbooks and independent or modeled reading of literature intended to be of high interest to adolescents. The Newark Striving Readers project modified READ 180 to include some supplemental instruction aligned with the state assessment. The program focuses on elements of phonics, fluency, vocabulary, comprehension, spelling, writing and grammar, and aims to promote self-directed learning. Daily assessments are provided by the READ 180 Topic Software and the Scholastic Achievement Manager (SAM) software provides feedback to teachers on student assessments. In addition, diagnostic testing using the Scholastic Reading Inventory (SRI) is conducted three times a year.

Professional Development Model as Planned: Teachers who are new to READ 180 are offered an initial three-day training on the model and three additional follow-up seminars during the year, both provided by the model developer. These training modalities comprise about 33 hours of professional development in a year. New teachers also receive visits by a READ 180 coach four times during the school year for in-class technical assistance, as well as ongoing technical assistance from the trainer and the district as needed. In subsequent years, teachers have two days training at the beginning of the school year and one follow-up session. They receive an annual visit by the READ 180 coach, and the ongoing technical assistance on an as-needed basis.

Context for Implementation: The READ 180 program is being implemented in 10 middle schools, as a replacement of the district’s regular core language arts curriculum. Both models are being implemented as supplements to the regular English language arts (ELA) curriculum in the schools. Students in grades 6-8 are eligible for READ 180 if they score at least 1 standard deviation below the grade-standardized mean on the reading subtest of the New Jersey state assessment (ASK: Assessment of Skills and Knowledge). Eligible students can receive the interventions for up to three years (grades 6-8). All special education students who are struggling readers are eligible for the interventions. In the first year of the implementation, approximately 700 students were assigned to READ 180 classes in the 10 treatment schools. In the second year of implementation, a new cohort of 6th graders was added. The number of students served in Year 2 of implementation was approximately 600, including new 6th graders and students in grades 7 and 8 who were eligible to continue in READ 180 for a second year. The targeted intervention will be implemented for a total of four years.

Whole School Intervention

Classroom Model as Planned: The whole school intervention combines two professional development programs on literacy instruction from two providers, New Jersey City University (NJCU) and the National Urban Alliance (NUA). NJCU provides the professional development for language arts teachers and literacy coaches, helping teachers guide students in using a variety of strategies for helping students comprehend text, such as graphic organizers, text annotation, note-taking, post-reading reflection, and anticipation guides to model brain-storming. NUA provides the professional development for other content teachers, to help them provide instruction in similar strategies for content lessons, such as graphic organizers, anticipation guides, and word taxonomies.

Professional Development Model as Planned: Prior to their first year of implementing either of the whole school models, teachers are offered initial Summer Institutes lasting either three or four half-days, for training by NUA or NCJU, respectively. Language arts teachers also have three follow-up training sessions with NCJU trainers during the year and NCJU coaches visit each of the 19 schools five times a year, for observation and discussion with teachers. Other content area teachers have two follow-up training sessions with NUA during the year, and NUA coaches visit each school 15 times to observe and work with teachers. District resource teacher coordinators are also available to visit schools to provide technical assistance on the whole school model on an as-needed basis.

Context for Implementation: All teachers of language arts, mathematics, science, social studies, and special education in the 19 participating middle schools are trained on the whole school interventions. All students in the participating schools are taught by teachers who are part of the model. In a single school year, this involves approximately 3,600 students in grades 6-8 across the 19 schools. The whole school intervention will be implemented for a total of four years.

Evaluation Design

Evaluation of the Targeted Interventions

Research Questions:

1. Does READ 180 significantly improve the reading skills of targeted students?
2. Do different types of students benefit from the intervention in different ways?
3. Does READ 180 significantly improve the school attendance of targeted students?

Research Design and Methods: School-wide random assignment was used to assign the 19 participating middle schools to either implement READ 180 or to continue to provide only the regular language arts curriculum. Schools were blocked on four school-level variables prior to randomization: 1) school size, 2) proportion of ELL students, 3) proportion of students with special needs, and 4) AYP status.

The impact of READ 180 on student outcomes will be assessed using multilevel models to account for the nesting of students within schools. Analyses will also be run to disaggregate effects by grade level, gender, ELL, and special education.

Control Condition: Students in schools randomized to the control condition continue to receive instruction in the regular language arts curriculum.

Sample Size: Nineteen schools were randomly assigned--ten to implement READ 180 and nine to the control condition. In the first year of the study, 1,371 students participated in the evaluation, across both treatment conditions. A new cohort of approximately 400 6th grade students was added in the second year of the study, 200 in treatment schools and 200 in control schools. The impact analysis was conducted on a sample of 934 students in grades 6-8 who had been in READ 180 for one year in either the first or the second years of implementation. The sample size for the control group was 838 students in nine middle schools.

Key Measures of Student Reading Outcomes (Source):

Stanford Achievement Test-10 (vocabulary, reading comprehension, and language arts subtests)
(External Test Publisher)

Evaluation of the Whole School Intervention

Research Questions:

1. Does participation in an ongoing literacy professional development program change the instructional practices of middle school teachers?
2. Does participation in an ongoing literacy professional development program affect the instructional practices of some groups of teachers more than others?
3. Do these changes in teacher instructional practices result in improved reading skills of middle school students?

Research Design and Methods: An interrupted time series analysis will be used to compare pre-program student reading proficiency scores with post-program student reading proficiency scores on the New Jersey state proficiency test.

Future evaluation reports will include findings on the impact of the whole school intervention on student achievement. The interrupted time series evaluation design is made more rigorous with the inclusion of more than two years of post-implementation data.

Comparison Group: All schools in the study participate in the whole school intervention. Therefore, there is no comparison group.

Sample Size: Approximately 480 teachers from the 19 participating schools were eligible to participate in the whole school intervention. All students in the 19 schools in each year in the time series will be included in the final evaluation of the whole school intervention. This consists of approximately 3,600 students.

Key Measures of Student Reading Outcomes (Source):
New Jersey State Language Arts assessment (State Test)

Year 2 Evaluation Findings

Evaluation of the Targeted Interventions

Fidelity of Implementation of the Targeted Intervention Model: In terms of fidelity of implementation of the *professional development model*, in Year 1 of implementation, the majority of teachers participated in the READ 180 professional development activities at either an adequate level (22%) or fully (56%). The level of participation in professional development declined in Year 2 of implementation, with 24% of teachers participating at an adequate level and 8% participating fully.

In terms of fidelity of implementation of the *classroom model*, ratings of the classrooms were based on a combination of administrative data and data from the READ 180 computerized systems. The student assessments were implemented in line with the READ 180 guidelines in nearly all of the classrooms in Years 1 and 2 of the program. In Year 1 (2006-07), students spent an adequate amount of time using the READ 180 instructional software (compared to the program guidelines) in nearly all of the classrooms. In Year 2 (2007-08), this proportion dropped to fewer than 10% of the classrooms.

Impact of the Targeted Interventions on Student Reading Outcomes: For treatment students who had one year of READ 180, there were no significant effects on any of the three subtests of the Stanford Achievement Test. The effect sizes for the three subtests ranged from .05 to .08. Separate analyses were conducted for students in grade 6 and for students with two years opportunity to participate in READ 180 (7th or 8th grade separately and combined). For each subgroup of students, differential effects were examined by sex, race/ethnicity, and special education status. There were no significant impacts overall in any of the subgroups defined by grade and time in READ 180. There were scattered impacts by other student characteristics, with no discernable pattern.

Evaluation of the Whole School Interventions

Fidelity of Implementation of the Whole School Intervention Model: In terms of fidelity of implementation of the *professional development model*, in Year 1 of implementation, there were no schools where the majority of teachers participated at a high level in the whole schools professional development activities offered by the two developers. In 42% of the schools, between half and three-quarters of the teachers participated in professional development. In Year 2 of implementation, a majority of teachers participated in professional development in a single school, and in another 11% of schools, between half and three-quarters of the teachers participated in professional development.

Summary of the Strengths and Weaknesses of the Impact Evaluation of the Targeted Intervention:

Strengths

- Eligibility for random assignment was determined systematically, using a predetermined cutoff score on a test of reading achievement (reading subtest of the New Jersey Assessment of Skills and Knowledge (NJ-ASK)).
- Random assignment was faithfully executed, with no evidence of students receiving the intervention after being randomized to the control condition.
- There is no evidence that there are other factors (e.g., other reading programs or district policies) that were implemented in ways that would undermine the evaluators' ability to attribute impacts to Read 180.
- The reading test used as an outcome measure (SAT-10) assesses language arts, comprehension, and vocabulary, and was developed by an external test publisher. There is no reason to believe that students assigned to the treatment group have more experience taking the test than do the control group students, or that the test measures skills specific to the intervention, both of which could undermine confidence in the impact estimates.
- All schools were able to participate in follow-up data collection. Within schools, few students were unable to participate in follow-up data collection, suggesting that the integrity of the original randomized design was preserved, and that treatment and control groups continue to be statistically equivalent on all measured and unmeasured characteristics at follow-up. Despite random assignment and low attrition, statistically significant differences in eligibility for free and reduced priced lunch were noted. The effects of this difference are mitigated by the inclusion of this measure in the statistical models estimating the impact of the program.
- When estimating impacts, appropriate analytic steps were taken to account for the clustering of students within schools. A pre-study measure of reading achievement is included in the models to increase the precision of the impact estimates.

Weaknesses

- The year two evaluation report, which includes findings from the first two years of implementation, includes a sample of students large enough to detect an impact (in standard deviation units) of the intervention on reading achievement equivalent to .15 on the standardized test (SAT 10) for grades 6-8.¹ Because Newark plans to offer the intervention to new groups of students for a total of four school years, future reports will have larger sample sizes of students and will be able to detect somewhat smaller impacts. However, because the Newark evaluation conducted random assignment at the student level, the additional gains in precision will be minimal. In addition, future reports will be able to examine the impact on a student remaining in the targeted intervention for two or three years, which one might hypothesize would be larger than the impact of one year of the intervention.

¹ Abt Associates staff calculated the MDE by multiplying the standard error of the impact estimate by 2.8. This calculation produces the MDE for a two-tailed test with 80% power, and with an alpha level of .05, and accounts for clustering and for the inclusion of the covariates in the model.

Summary of Striving Readers Projects: Profile of Ohio Department of Youth Services' Striving Readers Project and Evaluation

Grantee: Ohio Department of Youth Services (ODYS)

Project Director: Kirk Cameron

Local Evaluator: Ohio State University

Principal Investigator: William Loadman, Ph.D.

Setting

The ODYS system is made up of seven juvenile correction facilities, six of which are designated male facilities and one is designated as a female facility, and all seven facilities are participating in the Striving Readers program. Youths aged 14-21 who have not yet attained high school diploma or a GED are required to be enrolled in the high school located within their youth detention facility. A snap shot of the students taken in the middle of May 2006 had 1,628 students enrolled. Seven percent of those students were female, 48 percent were African American, and 46 percent were white. The average length of stay for a student is about 10.5 months, although this varies substantially across students. Students are assigned to a facility based on gender, type of offense and availability of space. Upon entry into ODYS, all students get processed through a common reception center located at one high school, and are then assigned to another facility.

Intervention Models

Targeted Intervention

Classroom Model as Planned: READ 180 Enterprise Edition, developed by Scholastic Inc, aims to address the individual needs of struggling adolescent readers who are reading below grade level through adaptive and instructional software, teacher-directed instructional rotations, and the use of tailored textbooks and independent or modeled reading of literature intended to be of high interest to adolescents. The program focuses on elements of phonics, fluency, vocabulary, comprehension, spelling, writing and grammar, and aims to promote self-directed learning. Periodic assessments are provided by the READ 180 Topic Software and the Scholastic Reading Inventory (SRI) is used for ongoing progress monitoring.

Professional Development Model as Planned: Teachers who are new to READ 180 are offered an initial two-day training on the model and semi-annual follow up training sessions provided by the model developer for a total of 20 hours. Teachers also are offered semi-annual visits by the model developer and/or the project director. Ongoing classroom support is to be provided as needed by the on-site literacy coach. In subsequent years, teachers continue to be offered the same training schedule as their first year.

Context for Implementation: The READ 180 program is being implemented both as a replacement of the regular English language arts curriculum in the facilities and as a supplement replacing an elective course. All students incarcerated in the seven ODYS facilities who score at a below-grade reading level but above a “below basic” level, as measured by the Scholastic Reading Inventory (SRI), are eligible for the targeted intervention. All special education students who are struggling readers are eligible for the intervention. Over two years, 609 high school-aged students were served by the intervention. Eligible students can receive the intervention for the duration of their stay in the correctional facility (an average of ten months). The targeted intervention will be implemented for a total of five years.

Whole School Intervention

Classroom Model as Planned: Ohio Department of Education’s State Institute for Reading Instruction- Adolescent Literacy (SIRI-AL) professional development program and a modified version of the English Language Arts Writing Academy are being evaluated as the whole school interventions in year 1 (2006-07). Both are professional development models for teachers intended to improve reading and writing instruction by providing teachers with research based national knowledge and skills. The SIRI-AL model is comprised of four factors that affect adolescent literacy: orthographic knowledge, vocabulary knowledge, fluency, and comprehension. The Writing Academy is focused specifically on Ohio’s Writing Academic Content Standards, and is designed so that teachers understand the relationship between writing and learning, learn strategies for before, during, and after lessons, and analyze rubrics and other methods of assessing writing. The two professional development models overlap such that both intend to provide: 1) direct instruction and scaffolded learning, 2) students time to practice reading and writing, and 3) students time to practice comprehension strategies in a meaningful context. In year 2, High Yield Strategies (HYS), developed by R. Marzano, was used to help teachers provide instruction on nine strategies to improve reading comprehension, such as advance organizers, note-taking, summarizing, etc.

Professional Development Model as Planned: New teachers are offered 45 hours of training on SIRI-AL and 18 hours at the Writing Academy, both provided by the literacy coaches. Literacy coaches are also available on-site to provide technical assistance on the whole school model on an as-needed basis. In year 2 of implementation, training modules on HYS are offered by the literacy coaches.

Context for Implementation: All students taught by teachers trained in the whole school model are receiving instruction informed by the whole school intervention. All students in the facilities will be included in the evaluation of the whole school intervention, totaling approximately 3,650 students in a single school year. The whole school intervention will be implemented for a total of five years.

Evaluation Design

Targeted Intervention

Research Questions:

1. How does the experimental/targeted student group compare with the group being instructed with the traditional educational reading program on reading achievement and reading growth?
2. How much growth in reading can be demonstrated by the experimental/ targeted students in one school year (four 10-week educational blocks)?
3. How does the experimental/targeted student group compare with the group being instructed with the traditional educational reading program on self efficacy in reading, engagement, and recidivism?

Research Design and Methods:

Incoming students scoring below grade level but above “below basic”, as measured by the Scholastic Reading Inventory (SRI), are randomly assigned to either the Read 180 class or to a control group. Students maintain their assignment until released from the facility. The impact of Read 180 on student outcomes will be modeled using multilevel models. Models will also be run to disaggregate effects by gender, as well as other demographic subgroups. Growth models will also be estimated for outcomes that are measured at multiple time points to look at reading growth in the treatment group.

Control Condition: Students randomized to the control group receive their regular English language arts curriculum and then transfer to another course (i.e. technology education, mathematics, etc.) while treatment students receive the READ 180 instruction.

Sample Size: Across the first two years of implementation, the impact analysis was conducted on 409 students who were randomized to the treatment group and 347 students randomized to the control group across 7 juvenile correction facilities.

Key Measures of Student Reading Outcomes (Source):

Scholastic Reading Inventory (SRI) Assessment (Scholastic, developer of READ 180)

Whole School Intervention

Research Question:

1. Does the whole school intervention improve student achievement over time in these facilities?

Research Design and Methods: An interrupted time series analysis will be used to compare pre-program student achievement scores with post-program student achievement scores on the SRI. In addition, individual growth modeling will be used to track individual student outcomes over time.

Future evaluation reports will include findings on the impact of the whole school intervention on student achievement. The interrupted time series evaluation design is made more rigorous with the inclusion of more than two years of post-implementation data.

Comparison Group:

All schools in the study participate in the whole school intervention. Therefore, there is no comparison group.

Sample Size: The whole school intervention is being delivered to all students in the 7 detention facilities in the first two years of the program. This sample includes approximately 3,650 high school-aged students.

Key Measures of Student Reading Outcomes (Source):

California Assessment Test (CAT) (State Test)

Scholastic Reading Inventory (SRI) Assessment (Scholastic, developer of READ 180)

Year 2 Evaluation Findings

Targeted Intervention

Fidelity of Implementation of the Targeted Intervention Model: In terms of fidelity of implementation of the *professional development model*, in Year 1 (2006-07), all teachers participated in the READ 180 professional development activities at a high level. The level of participation in professional development remained the same in year two of implementation with 100% of teachers participating at a high level.

In terms of fidelity of implementation of the *classroom model*, fidelity ratings were based on the number of minutes of READ 180 instruction. In year one of implementation, 14% of teachers implemented the model at a high level and 71% implemented at a moderate level. In year 2 of implementation, this proportion changed to 43% of teachers implementing at a high level and 43% at a moderate level.

Impact of the Targeted Intervention on Student Reading Outcomes: There was a significant impact of READ 180 on student scores on the SRI assessment. The effect size was .17.

Whole School Intervention

Fidelity of Implementation of the Whole School Intervention Model: In terms of fidelity of implementation of the *professional development model*, in year 1 (2006-07) none of the facilities implemented the SRI-AL at a high level but 71% implemented at a moderate level. The Writing Academy was implemented at a high level in 100% of the facilities. In year two of implementation, 57% of facilities implemented HYS at a high level and 43% implemented at a moderate level.

Summary of the Strengths and Weaknesses of the Impact Evaluation of the Targeted Intervention:

Strengths

- Eligibility for random assignment was determined systematically, using a predetermined cutoff score on a test of reading achievement (Scholastic Reading Inventory (SRI)).

- Random assignment was faithfully executed, with no evidence of students receiving the intervention after being randomized to the control condition.
- There is no evidence that there are other factors (e.g., other reading programs or district policies) that were implemented in ways that would undermine the evaluators' ability to attribute impacts to Read 180.
- Few students were unable to participate in follow-up data collection, suggesting that the integrity of the original randomized design was preserved, and that treatment and control groups continue to be statistically equivalent on all measured and unmeasured characteristics at follow-up. However, despite low attrition, small, statistically significant differences in pre-study reading achievement favoring the control group were noted on the students included in the analysis at follow-up. The effects of this difference are mitigated by the inclusion of the pre-test measure in the statistical models estimating the impact of the program.
- Estimated impacts reported in Appendix D of the Year 2 Evaluation Report appropriately account for the clustering of students within facilities.

Weaknesses

- The reading test used as an outcome measure, the Scholastic Reading Inventory (SRI), was developed by Scholastic, the developer of Read 180, and periodic assessment with the SRI is an integral part of the curriculum. Although the SRI is intended to be a general measure of reading comprehension, it is possible that students in the treatment (Read 180) group receive instruction that is more closely aligned to the test than the control group's instruction. This reduces the confidence with which the estimated impacts on SRI scores can be considered a true impact of Read 180 on reading comprehension. Future Ohio Striving Readers project evaluation reports will use the scores on the Ohio state assessment as an outcome measure, which will enhance the credibility of the study findings.

Summary of Striving Readers Projects:

Profile of Portland School District's Striving Readers Project and Evaluation

Grantee: Portland Public Schools
Project Director: Ken Brock
Local Evaluator: RMC Research
Principal Investigator: Bonnie Faddis, Ph.D.
Project Website: <http://www.strivingreaders.pps.k12.or.us>

Setting

In the first year of implementation, four high schools and five middle schools participated in the Portland Striving Readers grant. Before the start of the second year of implementation, the district reconfigured two of the middle schools in the study, with the students in those schools allocated to two K – 8 schools. As a result, in Year 2 (2007-08), four high schools, two middle schools, and two K-* schools participated in the grant program. All of these schools receive Title I funding and an average of 65 percent of the students in these schools are identified as low income. All 10 schools have a substantial number of students struggling to read; on average, 28 percent of the students served by these schools are reading at least two years below grade level. None of the schools had achieved Adequate Yearly Progress under No Child Left Behind at the time of the Striving Readers application in 2005. Fifteen percent of the students in the 10 schools are identified as English Language Learners, and 59 percent are non-white. Overall, Striving Readers is expected to affect more than 6,400 students and 450 teachers in the 10 participating schools.

Intervention Models

Targeted Intervention

Classroom Model as Planned: Xtreme Reading, developed by the University of Kansas' Center for Research on Learning as one level of instruction in the Content Literacy Curriculum, a framework within the Strategic Interventions Model (SIM). The Xtreme Reading program focuses on 7 reading strategies: Vocabulary, LINCing, Word Mapping, Word Identification, Self-Questioning, Visual Imagery, Paraphrasing, and Inference. Xtreme Reading's core instructional approaches include direct instruction, teacher modeling, paired student practice, and independent practice. The program provides end-of-unit assessments to track student progress.

In the first 2 years of the project, each Xtreme Reading class was co-taught by two teachers—one reading specialist trained on Xtreme Reading and one content specialist. In a typical high school, the two-teacher team taught Xtreme Reading and Language Arts (2 class periods) to 9th graders in the morning, and Xtreme Reading and Language Arts (2 class periods) to 10th graders in the afternoon. In Year 3 of implementation, classroom staffing was modified so that the Xtreme Reading classes were taught by a single teacher trained on the intervention.

Professional Development Model as Planned: Teachers new to Xtreme Reading are offered approximately 67 hours of professional development, which is provided by Strategic Learning Center (SLC), professional developers under contract to the model developer. The training includes 5 days of initial workshops and 6 follow-up training workshops. In addition, each Xtreme Reading teacher receives 8 in-class visits from the SLC trainer to provide additional technical assistance. In the second year of implementation, teachers do not have an initial set of workshops but are offered 10 monthly meetings from SLC, which together cover approximately 40 hours of training. Teachers are offered 4 in-class visits from the SLC trainer in their second year.

Context for Implementation: Xtreme Reading is offered to struggling readers in middle school and high school (grades 7–10). In Year 1 of implementation, this included 5 middle schools and 4 high schools. In Year 2 (2007-08), the district reconfigured two of the middle schools, resulting in a sample of 3 middle schools, 4 high schools, and 2 K–8 schools. Xtreme Reading is being implemented as a replacement for the district’s regular English Language arts curriculum for students in middle school (grades 7 and 8) and as a supplement that replaces an elective course for students in high school (grades 9 and 10). Eligible students are students reading at least two years below grade level as measured either by the student’s Oregon State Assessment Test (OSAT) total reading score or by his or her Group Reading Assessment and Diagnostic Evaluation (GRADE) total reading score. The previous year’s spring OSAT score is used as the primary criterion for eligibility unless the student was new to the district or a spring OSAT score is not available. Potential targeted intervention participants with no OSAT scores are administered the GRADE to determine eligibility for random assignment. Special education students are included in the sample unless their Individual Education Plans (IEPs) prohibit them from being able to be scheduled for the Xtreme Reading classes. Students are eligible to receive Xtreme Reading for a single school year. In the first year of implementation, approximately 275 students were assigned to Xtreme Reading classes in grades 7-10. In the second year of implementation, approximately 350 students were assigned to Xtreme Reading in these same grades. The targeted intervention will be implemented for a total of four years.

Whole School Intervention

Classroom Model as Planned: The Strategic Instruction Model (SIM) Content Enhancement Routines for Teachers (SIM-CERT) is a school-wide literacy-across-the-curriculum intervention developed by the Center for Research on Learning at the University of Kansas as part of the Content Literacy Continuum (CLC). The intervention, SIM-CERT, is organized around a set of Content Enhancement Routines that teachers are trained to use in their instruction to help ensure mastery of critical content for all students (Level 1 of CLC) and to provide embedded learning strategy instruction in core curriculum courses (Level 2 of CLC). In Year 1 of implementation, language arts and social studies teachers received training on the use of the content enhancement routines: Unit Organizer, Framing, Vocabulary LINCing, and Concept Mastery. In Year 2 of implementation, math teachers were introduced to the Unit Organizer and Framing content enhancement routines, and science teachers were introduced to the Framing, Concept Mastery, and the new Chapter Survey routines. The professional developers also offered optional training on the Concept Anchoring, Concept Comparison, Lesson Organizer, and Course Organizer content enhancement routines.

In Portland, the whole school model is phased in over three years. In Year 1 (2006-07), language arts and social studies teachers are trained to deliver instruction in the whole school model; science and math teachers are trained in Year 2 of implementation; health, PE, and arts teachers are trained in the third year. Special education, ESL, and other subject area teachers could participate in training at their discretion.

Professional Development Model as Planned: Teachers new to SIM-CERT are offered approximately 55 hours of professional development, which is provided by Strategic Learning Center (SLC), a professional developer under contract to the model developer. The training includes group training on the Content Enhancement Routines and ongoing professional development in which teachers select from a menu of training sessions on new content enhancement routines. In addition, SIM-CERT teachers receive in-school coaching from district literacy coaches and the professional developers, which constitutes approximately 44 hours/teacher of individual technical assistance. After the first year of implementation, the amount of group professional development is variable, depending on which Content Enhancement Routines school administrators elect to have their teachers trained on. The in-class coaching continues at the same level in the second year of implementation.

Context for Implementation: The whole school intervention is offered to all students in participating schools, including students in grades 6-12. In Year 1, this included students in 5 middle schools and 4 high schools. In Year 2 of implementation, the district reconfigured some of the schools, resulting in a sample of 3 middle schools, 4 high schools, and 2 K – 8 schools. The total number of students receiving SIM-CERT is approximately 4,200 students in each school year. The whole school intervention will be implemented for a total of five years.

Evaluation Design

Targeted Intervention

Research Questions:

1. What is the impact of Xtreme Reading on student reading achievement for students reading at least two grades below grade level?
2. What is the impact of Xtreme Reading on student motivation and confidence in reading?

Research Design and Methods: Prior to the start of each school year, eligible students in Grades 7–10 are randomly assigned to either the Xtreme Reading group or the control group. The Xtreme Reading curriculum covers one school year; after the treatment year, students originally placed in the control group are eligible to participate in the Xtreme Reading class. The impact of Xtreme Reading on student outcomes will be modeled using ANCOVA. Models will test the effect of Xtreme Reading on achievement score gains, controlling for pre-intervention reading levels and other covariates, as well as school and cohort effects.

Control Condition: Students reading at least two years below grade level who are not randomly assigned to the treatment group receive the district’s regular English language arts

curriculum (Grades 7–8) or an elective course (Grades 9–10). After one year in the control condition, if still eligible, students can enroll in the Xtreme Reading class.

Sample Size: Across Years 1 and 2 of implementation, on the GRADE, in the 5 middle/K-8 schools, the evaluation included 209 7th and 8th grade treatment students and 234 control students. In the 4 high schools, the evaluation included 174 9th and 10th grade treatment students and 232 control students.

Key Measures of Student Reading Outcomes (Source):

Oregon State Assessment Test (OSAT) (State Test)

Group Reading Assessment and Diagnostic Evaluation (GRADE) (External Test Publisher)

Whole School Intervention

Research Questions:

1. What is the effect of the Content Enhancement Routines on student reading achievement for all students in the school?

Research Design and Methods: An interrupted time series approach will be used to estimate the change in reading achievement observed prior to and after the implementation of the Content Enhancement Routines. These models will account for within-student repeated measures over time.

Future evaluation reports will include findings on the impact of the whole school intervention on student achievement. The interrupted time series evaluation design is made more rigorous with the inclusion of more than two years of post-implementation data.

Comparison Group: All schools in the study participate in the whole school intervention. Therefore, there is no comparison group.

Sample Size: All Grade 6–12 students in the 9 participating schools will be included in the evaluation of the whole school intervention, for an overall sample size of between 700 and 800 students per year.

Key Measures of Student Reading Outcomes (Source):

Oregon State Assessment Test (OSAT) (State Test)

Year 2 Evaluation Findings

Targeted Intervention

Fidelity of Implementation of the Targeted Intervention Model: In terms of fidelity of implementation of the *professional development model*, in Year 1 of implementation, 45% of the nine schools had a high level of participation by teachers in the professional development activities. A larger proportion of the middle schools, 60%, compared with 25% of the high schools, were judged to have a high level of participation by teachers. In the second year of implementation, fidelity increased substantially. Nearly all (89%) of schools had a high level of

participation by teachers in the professional development activities, and this included 100% of the middle schools and 75% of the high schools.

In terms of fidelity of implementation of the *classroom model*, fidelity was rated as low, medium, or high, based on a combination of classroom observations and staff surveys. In Year 1 of implementation, most of the schools implemented the Xtreme Reading classroom model with medium (33%) or high fidelity (45%). The overall fidelity of implementation declined somewhat in the second year of implementation, with only 25% of schools at a high level of fidelity and 38% of schools at a medium level of fidelity.

Impact of the Targeted Interventions on Student Reading Outcomes: There was a significant impact of Xtreme Reading on the reading achievement of the 7th and 8th grade struggling readers, on the GRADE and on the Oregon State Assessment Test. The effect sizes of the impacts were .29 and .13, respectively. There were no significant impacts on the reading scores of the 9th and 10th grade struggling readers; on the GRADE, the effect size was .01, and on the Oregon State Assessment Test, the effect size was -.05.

Whole School Intervention

Fidelity of Implementation of the Whole School Intervention Model: In terms of fidelity of implementation of the *professional development model*, in Year 1 of implementation, none of the schools reached a high level of fidelity, although 80% of the middle schools and 75% of the high schools were at a medium level of fidelity. In the second year of implementation, the middle schools had the same level of fidelity, but the fidelity of implementation rose among the high schools. Half of the high schools were at a high level of fidelity and the other half were at a medium level of fidelity.

Summary of the Strengths and Weaknesses of the Impact Evaluation of the Targeted Intervention:

Strengths

- Eligibility for random assignment was determined systematically, using a predetermined cutoff score on a test of reading achievement (Oregon State Assessment Test (OSAT) or Degrees of Reading Power (DRP)).
- Random assignment was faithfully executed, with no evidence of students receiving the intervention after being randomized to the control condition.
- There is no evidence that there are other factors (e.g., other reading programs or district policies) that were implemented in ways that would undermine the evaluators' ability to attribute impacts to Read 180.
- The evaluation employs two reading tests as outcome measures. The first (GRADE) assesses vocabulary, comprehension, and oral language and was developed by an external test publisher. The second (OSAT) assesses reading and literature, and was developed by the state. There is no reason to believe that students assigned to the treatment group have more experience taking the test than do the control group students,

or that the test measures skills specific to the intervention, both of which could undermine confidence in the impact estimates.

- Few students from the sample of middle school students were unable to participate in follow-up data collection, suggesting that the integrity of the original randomized design was preserved, and that the treatment and control groups continue to be statistically equivalent on all measured and unmeasured characteristics at follow-up. However, in the middle school sample, small, statistically significant differences in pre-study reading achievement (GRADE) favoring the treatment group were noted on the students included in the analysis at follow-up. The effects of this difference are mitigated by the inclusion of the pre-test measure in the statistical models estimating the impact of the program.
- When estimating impacts, appropriate analytic steps were taken to account for the clustering of students within schools.

Weaknesses

- In the sample of high school students, 44.5% of the students were unable to participate in follow-up data collection. The rate of attrition was different in the treatment and control group (51.4% versus 38.0% respectively). The 13.4 percentage point difference in the attrition rate is high by convention, suggesting that the integrity of the randomized design may have been damaged, and that treatment and control groups may no longer be statistically equivalent on all measured and unmeasured characteristics at follow-up. With respect to measured characteristics, however, there were no differences on any pre-study measures of reading achievement or demographic characteristics between treatment and control group students in the analytic sample of high school students.
- The year two evaluation report, which includes findings from the first two years of implementation, includes a sample of high school students large enough to detect an impact (in standard deviation units) of the intervention on reading achievement equivalent to .13 on the GRADE and .12 on the OSAT.¹ Because Portland plans to offer the intervention to new groups of students for four school years, future reports will have larger sample sizes and be able to detect smaller impacts.

¹ Abt Associates staff calculated the MDE by multiplying the standard error of the impact estimate by 2.8. This calculation produces the MDE for a two-tailed test with 80% power, and with an alpha level of .05, and accounts for clustering and for the inclusion of the covariates in the model.

Summary of Striving Readers Projects: Profile of San Diego Unified School District's Striving Readers Project and Evaluation

Grantee: San Diego Unified School District, Office of Instructional Support

Project Director: Rosemary Staley, Ph.D.

Local Evaluator: University of California San Diego

Principal Investigator: Carolyn Huie Hofstetter, Ph.D.

Setting

The San Diego Unified School District Striving Readers project is being implemented in four high schools, two of which are small schools in a larger high school complex, and the four middle schools that feed into them.¹ The district serves approximately 138,000 students in 187 schools, making it the eighth largest school district in the nation. In the study schools, 64 percent of students are eligible for free and reduced priced lunch, 39 percent are Hispanic and 16 percent are African American, and 22 percent are identified as English Language Learners.

Intervention Models

Targeted Intervention

Classroom Model as Planned: *Strategies for Literacy Independence across the Curriculum model (SLIC)* is a professional development-based model developed by T. McDonald & C. Thornley, Education Associates in New Zealand, which presents students with a set of literacy strategies to enhance skills in reading and writing. SLIC is based on the theory that comprehension of text requires understanding the ways text forms present particular types of information and how surface features of text (e.g., titles, subtitles, captions, font style, graphics) convey information about meaning. It therefore is designed to teach students strategic reading behaviors such as cross-checking text features and running text to verify understanding, using contextual clues to understand new vocabulary, note-making/other forms of writing to organize text information from readings, and breaking writing prompts into component questions. Students are assumed to gradually build independence in using these through scaffolded instruction and independent reading and writing practice. SLIC uses expository, narrative, and persuasive text, including textbooks, novels, short stories, and magazines that are either provided by the developer or selected by teacher. The program includes periodic administrations (every 2-3 months) of students using an assessment tool aligned with SLIC, the BEAR Literacy Assessment System, which was developed jointly by SLIC developers, San Diego Unified School District, and UC Berkeley/BEAR.

Professional Development Model as Planned: SLIC involves extensive professional development for teachers. The program includes a two-day introductory workshop, three all-day follow-up training sessions, monthly meetings with district staff and teachers to discuss

¹ In Year 1 of the project (2006-07), there were 3 high schools and 2 middle schools.

implementation, and four rounds of discussions between teachers and developers that last between 3 and 4 days per school. Together, these activities total approximately 200 hours of professional development time per teacher. In addition, on-site school literacy coaches are available for daily in-class support and district staff and program consultants provide regular monitoring and support approximately two days a month per school. The same level of professional development activities continues throughout the implementation of SLIC.

Context for Implementation: SLIC is being implemented in middle schools and high schools for students in grades 7-10, as a supplement to the regular English Language Arts classes. SLIC replaces an hour-long elective course for students in treatment schools. Students are eligible for SLIC if they are two years below grade level as measured by the Degrees of Reading Power (DRP) assessment at the end of the prior school year, are reading at a ‘basic’ level or below as measured by the California Standards Test—English Language Arts score, or are labeled ‘intermediate’ or below on the California English Language Development Test (CELDT). Struggling readers can continue to receive SLIC for up to four years. In the first year of the program, SLIC was implemented in two high schools and 3 middle schools, in grades 7 and 9. In the second year (2007-08), SLIC was implemented in 4 middle schools and 4 high schools. In Year 2 of implementation, students were served in grades 7 and 8 in the middle schools and grades 9 and 10 in the high schools. Altogether, in grades 7-10, approximately 600 students were assigned to SLIC classes. The targeted intervention will be implemented for a total of four years.²

Whole School Intervention

Classroom Model as Planned: The whole-school intervention is based on the same SLIC literacy strategies used in the targeted intervention. The SLIC developer provides professional development to content-area teachers in teaching the literacy strategies. The whole school professional development is introduced gradually to content-area teachers, to build momentum and increase teacher buy-in. Priority is given to teachers serving students who are also attending the SLIC supplemental classes and to those teachers who express the most interest in being trained. The program is intended for teachers in all content areas.

Professional Development Model as Planned: The content area teachers who implementing SLIC as a whole school model are offered approximately 25 hours of professional development. This includes 15 to 20 hours of conferences on the whole school program for teachers from all content areas and another 8 hours of smaller group seminars for teachers in the same content areas. In addition, the on-site literacy coaches provide individual in-class support to teachers on an as-needed basis. The same level of professional development activities continues throughout the implementation of SLIC.

Context for Implementation: For the whole school intervention, SLIC is being implemented by all content teachers in the treatment schools (4 middle schools and 4 high schools starting in Year 2 of implementation). Altogether, in grades 6-12, approximately 6,300 students are being

² San Diego Unified School District will implement the targeted intervention for a total of four years, but only three years will be included in the evaluation.

taught by content teachers trained in SLICs. The whole school intervention will be implemented for a total of four years.

Evaluation Design

Evaluation of the Targeted Intervention

Research Questions:

1. Will struggling readers assigned to the SLIC targeted intervention class improve their literacy outcomes, as measured by standardized tests and the project monitoring (SLIC) assessment, significantly more than struggling readers who do not receive the SLIC targeted intervention but who do receive the SLIC whole school intervention?
2. Will students in the SLIC intervention group be more likely to read at grade level, pass the California High School Exit Exam in tenth-grade, enroll and successfully complete AP classes in eleventh/twelfth-grades, graduate from high school, and enroll in college than SLIC-eligible students who do not receive the SLIC targeted intervention but who do receive the SLIC whole school intervention?
3. Will struggling readers classified as English Learners in the SLIC intervention class improve their literacy outcomes compared to those classified as English Learners who do not receive the SLIC targeted intervention but receive the SLIC whole school intervention?

Research Design and Methods: In the second year of the program, eligible incoming seventh and ninth grade students were randomly assigned to participate in the SLIC intervention class or a regular elective class.³ Both treatment and control students also participate in the regular language arts class as well as receive instruction from teachers trained as part of the whole school intervention. New cohorts of students in grades 7-10 will be randomized in each of the first three years of the study. Treatment group students who continue to read at least two years behind grade level can receive the targeted intervention for up to four years (through tenth grade).

Control Condition: Students in the control condition participate in their regular elective classes, regular language arts classes, and receive instruction from teachers trained as part of the whole school intervention.

Sample Size: Across Years 1 and 2 of implementation, on the CST, in the 4 middle schools, the evaluation included 318 7th and 8th grade treatment students and 339 control students. In the 4 high schools, the evaluation included 255 9th and 10th grade treatment students and 291 control students.

Key Measures of Student Reading Outcomes (Source):

Degrees of Reading Power (DRP) – reading comprehension (External Test Publisher)
California Standards Test (CST) (State Test)

³ Due to difficulties implementing random assignment in the 2006-07 school year, this year was considered a pilot year and was subsequently excluded from the evaluation. Therefore, the first school year of implementation is 2006-07 while the first school year of the evaluation is 2007-08.

Evaluation of the Whole School Intervention

Research Questions:

1. Will students attending schools that implemented both the whole school and targeted components of the SLIC intervention program demonstrate more improvement in literacy skills, as measured by student scores on standardized assessments, than will students attending comparison schools that did not implement either component?
2. Will the outcomes of students in schools that implemented both the whole school and targeted components of the SLIC intervention program improve more each year over the course of the study, than will the outcomes of students attending comparison schools that did not implement either component?

Research Design and Methods: An interrupted time series approach with a comparison group will be used to examine reading and other academic outcomes for all students in treatment and comparison schools before and after the implementation of SLIC.

Future evaluation reports will include findings on the impact of the whole school intervention on student achievement. The interrupted time series evaluation design is made more rigorous with the inclusion of more than two years of post-implementation data and comparison schools.

Comparison Group: The evaluation includes a set of 8 similar comparison schools that are not implementing the SLIC model and instead are using the district's regular language arts program. All students in both the treatment and comparison groups of schools are included in the evaluation of the whole school intervention.

Key Measures of Student Reading Outcomes (Source):

Degrees of Reading Power (DRP) (External Test Publisher)

California Standards Test (CST) (State Test)

California English Language Development Test (CELDT) (State Test)

CAHSEE standardized tests (State Test)

Year 2 Evaluation Findings

Targeted Intervention

Fidelity of Implementation of the Targeted Intervention Model: In terms of fidelity of implementation of the *professional development model*, in the first year of implementation, 60% of the schools were at a high level of teacher participation in the professional development training. Sixty per cent of the schools had a high level of implementation of the coach-to-teacher support. In the second year of implementation, the overall level of fidelity declined, with no schools at a high level of participation in the teacher professional development and 13% of schools at a high level of implementation of teacher-to-coach support.

The fidelity of implementation of the *classroom model* was not calculated for the first year of the program. In Year 2 of implementation, none of the schools reached a high level of fidelity of implementation (although all of the schools were at a medium level of fidelity).

Impact of the Targeted Interventions on Student Reading Outcomes: After one year of intervention, there were no significant impacts on the reading achievement of middle school

or high school struggling readers, except for a significant effect size of .15 for high school students on DRP. The non-significant effect size for middle school and high school students on the California Standards Test is .05 and .06, respectively. The non-significant effect size for middle school students on DRP was .03. There were no significant impacts on the reading achievement of the English Language Learners in the sample.

Whole School Intervention

Fidelity of Implementation of the Whole School Intervention Model: In terms of fidelity of implementation of the *professional development model*, in the first and second years of implementation, no school reached a high level of total participation of teachers either in the professional development training or the coaching support.

Summary of the Strengths and Weaknesses of the Impact Evaluation of the Targeted Intervention:

Strengths

- Eligibility for random assignment was determined systematically, using a predetermined cutoff score on one of three tests of reading achievement (CA Standards Test- English Language Arts (CST-ELA), CA English Language Development Test (CELDT) or Degrees of Reading Power (DRP)).
- Random assignment was faithfully executed in Year 2 of the study, and estimated impacts are based only on data collected in Year 2. The authors report there were 29 students in the control condition who received the intervention, and 123 students randomized to the treatment who did not receive it. This represents a minimal amount of crossover.
- There is no evidence that there are other factors (e.g., other reading programs or district policies) that were implemented in ways that would undermine the evaluators' ability to attribute impacts to Read 180.
- The evaluation employs two reading tests as outcome measures. The first (CST-ELA) assesses English and language arts, and was developed by the state. The second (DRP) assesses comprehension, and was developed by an external test publisher. There is no reason to believe that students assigned to the treatment group have more experience taking the tests than do the control group students, or that the tests measures skills specific to the intervention, both of which could undermine confidence in the impact estimates.
- When estimating impacts, appropriate analytic steps were taken to account for the clustering of students within schools.

Weaknesses

- While the overall number of students unable to participate in follow-up data collection was low (15% and 16.8% for the CST and DRP respectively), the rate of attrition differs across the treatment and control groups. The 11 percentage point difference in the attrition rate is considered high by convention, suggesting that the treatment and control

- The year two evaluation report, which includes findings from the first two years of implementation, includes a sample of students large enough to detect an impact (in standard deviation units) of the intervention on reading achievement equivalent to .17 on the CST-ELA and .18 on the DRP for grades 7-8, and .12 on the CST-ELA and .21 on the DRP for grades 9-10.⁴ Because San Diego plans to offer the intervention to new groups of students for three school years, future reports will have larger sample sizes and be able to detect smaller impacts.⁵ In addition, future reports will be able to examine the impact of a student remaining in the targeted intervention for two or three years, which one might hypothesize would be higher than the impact of one year of the intervention.

⁴ Abt Associates staff calculated the MDE by multiplying the standard error of the impact estimate by 2.8. This calculation produces the MDE for a two-tailed test with 80% power, and with an alpha level of .05, and accounts for clustering and for the inclusion of the covariates in the model.

⁵ San Diego plans to implement the targeted intervention for a total of four school years, but only three years will be included in the evaluation.

Summary of Striving Readers Projects: Profile of Springfield and Chicopee Public Schools' Striving Readers Project and Evaluation

Grantee: Springfield Public Schools

Project Directors: Matt Rigney and Ann Ferriter

Local Evaluator: The Education Alliance at Brown University

Principal Investigators: Kimberley Sprague, M.Ed., Deborah Collins, Ph.D.

Setting

The Springfield-Chicopee Striving Readers project is being implemented in two high schools in Chicopee, Massachusetts and three high schools in Springfield, Massachusetts. In Springfield, the high schools serve a majority of non-white students. In the 2006-07 school year, twenty-nine percent of the students were African American, 52 percent were Hispanic, and 14 percent were white. Approximately 71 percent of the students were identified as low-income, and 13 percent were identified as Limited English Proficiency (LEP) students. In Chicopee, the students were largely white (78 percent); three percent of the students were African American and 18 percent were Hispanic. Approximately 35 percent of the students were identified as low-income, and less than 2 percent were identified as LEP students. All five schools were eligible for Title I.

Intervention Models

Targeted Interventions

Classroom Model as Planned: Two targeted interventions for struggling readers are being implemented: READ 180 Enterprise Edition and Xtreme Reading, Level 3 of the Content Literacy Continuum (SIM-CLC). Treatment group students receive either READ 180 or Xtreme Reading, but not both.

The READ 180 program, developed by Scholastic Inc, aims to address the individual needs of struggling adolescent readers who are reading below grade level through adaptive and instructional software, teacher-directed instructional rotations, and the use of tailored textbooks and independent or modeled reading of literature intended to be of high interest to adolescents. The program focuses on elements of phonics, fluency, vocabulary, comprehension, spelling, writing and grammar, and aims to promote self-directed learning. Daily assessments are provided by the READ 180 Topic Software and the Scholastic Achievement Manager (SAM) software provides feedback to teachers on student assessments. In addition, diagnostic testing using the Scholastic Reading Inventory (SRI) is conducted three times a year.

Xtreme Reading is one of the levels of instruction in the Content Literacy Continuum (CLC), a framework within the Strategic Instruction Model (SIM) developed by the University of Kansas Center for Research on Learning. The Xtreme Reading program focuses on 7 reading strategies: Vocabulary/LINCing, Word Mapping, Word Identification, Self-Questioning, Visual Imagery, Paraphrasing, and Inference. Xtreme Reading's core instructional approaches include direct

instruction, teacher modeling, paired student practice, and independent practice. The program provides end-of-unit assessments to track student progress.

Professional Development Model as Planned: Teachers who are new to READ 180 initially are offered a two-day training on the model and eight additional follow-up seminars during the year, both provided by the model developer. Teachers also are encouraged to use the Scholastic online training entitled “Best Practices for Reading Intervention.” Together, these trainings comprise about 42 hours of professional development in a year. Teachers also receive visits by a READ 180 coach eight times during the school year. In subsequent years of implementation, teachers continue to receive visits by the READ 180 coach, but at a slightly less intense schedule of six times during the school year.

Teachers in their first year of implementing Xtreme Reading also are offered about 42 hours of professional development training in an academic year, including a three-day initial training and four workshops during the year. An Xtreme Reading coach also visits teachers monthly over course of the school year. In subsequent years, teachers continue to receive monthly coaching visits from the coach by Strategic Learning Center (SLC), a professional developer under contract to the model developer.

Context for Implementation: Both models are being implemented as supplements to the district regular English language arts curriculum in the schools, replacing an elective course. Ninth-grade students reading at least two levels below grade level (but not lower than a fourth grade reading level) are eligible to be randomly assigned to participate in the one of the two targeted interventions, or to the control condition. Incoming ninth grade students are screened using the Scholastic Reading Inventory (SRI) to determine their reading level and eligibility for the targeted intervention, and eligible students can receive the interventions for up to three years. It is important to note, however, that the evaluation is focused only on ninth graders in their first year of participation in the interventions. Special education students are eligible for the interventions, unless their Individual Educational Plans (IEPs) prohibit them from being assigned to one of the intervention classes or their overall level of functionality precludes them from participating. In Year 1, 72 9th grade students were served by the READ 180 intervention and 70 9th grade students were served by Xtreme Reading. In Year 2, 66 9th grade students were served by the READ 180 intervention and 57 9th grade students were served by Xtreme Reading. The targeted interventions will each be implemented for a total of four years.

Whole School Intervention

Classroom Model as Planned: The Strategic Instruction Model (SIM) Content Enhancement Routines for Teachers (SIM-CERT) is a school-wide literacy-across-the-curriculum intervention developed by the Center for Research on Learning at the University of Kansas as part of the Content Literacy Continuum (CLC). The intervention is organized around a set of Content Enhancement Routines that teachers are trained to use in their instruction to help ensure mastery of critical content for all students (Level 1 of CLC) and to provide embedded learning strategy instruction in core curriculum courses (Level 2 of CLC). The goal of the program is to help teachers implement strategic teaching to ensure mastery of critical content for all students (Level 1 of CLC) and to provide embedded learning strategy instruction

in core curriculum courses (Level 2 of CLC). Content Enhancement routines include unit organizers, framing, vocabulary LINCing, and concept mastery. The professional developers also offered optional training on concept anchoring, concept comparison, lesson organizer, and course organizer.

Professional Development Model as Planned: Teachers new to SIM-CERT are offered about 24 hours of group professional development provided by Strategic Learning Center (SLC), a professional developer under contract to the model developer, which includes 16 hours of training on the Content Enhancement Routines and ongoing professional development where teachers select from a menu of training sessions on new content enhancement routines. In addition, teachers are offered in-school coaching from literacy coaches and by the developers, which altogether constitute approximately 17 hours of coaching for each teacher. After the first year of implementation, the amount of group professional development is variable, depending on which Content Enhancement Routines school administrators elect to have their teachers trained on. The in-class coaching continues at the same level in the second year of implementation.

Context for Implementation: The districts are phasing in SIM-CERT over the five years of the project with the goal of training approximately 90 percent of all teachers by the end of the grant. The districts will train approximately 25 teachers per school, 125 across districts per year beginning first with ELA, social studies, math and science teachers in tenth through twelfth grade. As teachers receive whole school intervention training, all of their students, regardless of their reading ability, receive instruction informed by the whole school intervention. For students assigned to Xtreme Reading, SIM-CERT represents Levels 1 and 2 of an integrated model in which the targeted intervention is Level 3. For students assigned to READ 180, SIM-CERT represents a separate model. The whole school intervention is being delivered to all of the students in the 5 participating high schools. This includes approximately 7,100 students in grades 9-12 in each school year. The whole school intervention will be implemented for a total of four years.

Evaluation Design

Targeted Interventions

Research Questions:

1. Does participation in READ 180 improve ninth-graders' reading achievement as compared to the control group?
2. Does participation in SIM Xtreme Reading improve ninth-graders' reading achievement as compared to the control group?

Research Design and Methods: The effectiveness of each targeted intervention is being tested in ninth grade.¹ Eligible ninth grade students are randomly assigned to participate in one of the two supplemental programs (READ 180 or Xtreme Reading) or to “business-as-usual,” which consists of the standard ELA curriculum. Eligible teachers are also randomly assigned to

¹ Students who continue to read below grade level (including students in the control group in ninth grade) following one year of participation are assigned to continue with READ180 or Xtreme Reading for up to three years, although they are not included in the evaluation of the impacts of the two intervention models.

teach students randomly assigned to READ 180, Xtreme Reading, or the control group. Students in Xtreme Reading also receive instruction from ELA teachers trained as part of the whole school intervention, which is part of the same model as the targeted intervention. The evaluation is designed so that students in READ 180 and in the control group do not receive instruction from ELA or other content teachers who have received training in the whole school model; the whole school model is phased in over the 5 years of the grant, with the teachers serving READ 180 and control students being trained in the last cycle of training. Hierarchical linear models (students nested within schools) will be fit to assess the impact of each targeted intervention on student outcomes.

Control Condition: Students randomized to the control condition receive the regular ninth-grade English language arts curriculum as do students randomized to the targeted conditions. The business-as-usual condition for control students consists of any supplemental support as is normally provided in the district to students struggling in reading, such as tutoring. In the absence of supplemental support, students participate in other electives.

Sample Size: Across Years 1 and 2 of implementation, on READ 180, the evaluation included 128 9th grade treatment students and 114 control students across 5 high schools. On Xtreme Reading, the evaluation included 105 treatment students and 114 control students across 5 high schools.

Key Measures of Student Reading Outcomes (Source):
Stanford Diagnostic Reading Test, 4th Edition (External Test Publisher)

Whole School Intervention

Research Questions:

1. To what extent is the whole-school model (SIM-CERT) associated with improvements in students' reading proficiency each year and over time?
2. To what extent is the whole-school model (SIM-CERT) associated with additional indicators of student success (e.g., improved attendance rates) each year and over time?

Research Design and Methods: An interrupted time series analysis will be used to compare pre-program student achievement scores with post-program student achievement scores. As the whole-school model is phased in, students in the classrooms of trained teachers will receive instruction using this model. Therefore, variation in the timing of the whole school model (SIM-CERT) implementation will be used to identify pre- versus post- differences in student outcomes across the different schools. The outcome analysis will be conducted with cohorts of tenth graders' given the availability of state achievement test data over time. Future evaluation reports will include findings on the impact of the whole school intervention on student achievement. The interrupted time series evaluation design is made more rigorous with the inclusion of more than two years of post-implementation data.

Comparison Group: All schools in the study participate in the whole school intervention. Therefore, there is no comparison group.

Sample Size: In the first year of implementation, districts reported training 110 teachers. Based on anonymous survey responses, 90 teachers indicated that they had received the whole school intervention training (SIM-CERT). Of the 90 teachers, 21 taught Xtreme reading and ELA, 21 taught History and Social Studies, 19 taught Science, 18 taught Math, and 18 taught other content such as Art (7 reported teaching in more than one content area). Each year, the district serves approximately 2,400 students in grade 9. The interrupted time series will include all 9th grade students in the five participating schools in each of the school years included in the analysis.

Key Measures of Student Reading Outcomes (Source):

Massachusetts Comprehensive Assessment System: English Language Arts (State Test)

Year 2 Evaluation Findings

Targeted Interventions

Fidelity of Implementation of the Targeted Intervention Model: In terms of fidelity of implementation of the *professional development model*, in Year 1 of implementation, fewer than half of the schools reached an adequate level of staff participation in the professional development activities provided for each of the targeted intervention models; a third of the READ 180 teachers and 40% of the Xtreme Reading teachers had adequate participation in training and professional development. The level of participation in professional development rose in Year 2 of implementation, up to 40% of READ 180 with adequate staff participation in training and 80% of Xtreme Reading teachers.

In terms of fidelity of implementation of the *classroom model*, fidelity was rated as low, moderate or adequate, based on a combination of classroom observations and staff surveys. For READ 180 classrooms, half of the teachers were rated as implementing at an adequate level of fidelity in Year 1 of implementation while no additional teachers were rated at a moderate level of fidelity. In Year 2 (2007-08), the majority of READ 180 teachers were rated as implementing with either adequate or moderate fidelity. For Xtreme Reading, in Year 1 of implementation, 60% of teachers implemented at an adequate level and 20% at a moderate level of fidelity; these proportions decreased in the second year, to 40% of teachers implementing at a moderate level of fidelity and no teachers implementing at an adequate level of fidelity.

Impact of the Targeted Interventions on Student Reading Outcomes: Neither of the targeted interventions, READ 180 or Xtreme Reading, had statistically significant impacts on student reading scores at the end of 9th grade. The overall effect size for READ 180 was .11; for Xtreme Reading, the effect size was .16.

Whole School Intervention

Fidelity of Implementation of the Whole School Intervention Model: In terms of fidelity of implementation of the *professional development model*, in Year 1 of implementation, nearly all of the teachers who were designated to be trained on the model (92%) attended the initial training, and 84% participated fully in the follow-up training seminars during the year. In Year 2 of the program, comparable numbers of new teachers participated in the initial training

(98%) and ongoing training (24%). Among teachers in their second year of implementation, 65% participated in the follow-up training.

Summary of the Strengths and Weaknesses of the Impact Evaluation of the Targeted Intervention:

Strengths

- Eligibility for random assignment was determined systematically, using a predetermined cutoff score on a test of reading achievement (Scholastic Reading Inventory (SRI)).
- Random assignment was faithfully executed, with no evidence of students receiving the intervention after being randomized to the control condition.
- There is no evidence that there are other factors (e.g., other reading programs or district policies) that were implemented in ways that would undermine the evaluators' ability to attribute impacts to Read 180 or Xtreme Reading.
- The reading tests used as outcome measure, the SDRT-4, assess decoding, vocabulary, and reading comprehension, and was developed by an external test publisher. There is no reason to believe that students assigned to the treatment group have more experience taking the test than do the control group students, or that the test measures skills specific to the intervention, both of which could undermine confidence in the impact estimates.
- Few students were unable to participate in follow-up data collection, suggesting that the integrity of the original randomized design was preserved, and that treatment and control groups continue to be statistically equivalent on all measured and unmeasured characteristics at follow-up. No differences in pre-study reading achievement or other demographic characteristics were noted on the students included in the analysis at follow-up.
- When estimating impacts, appropriate analytic steps were taken to account for the clustering of students within schools. A pre-study measure of reading achievement was included in the statistical models to increase the precision of the impact estimate.

Weaknesses

- The year two evaluation report, which includes findings from the first two years of implementation, includes a sample of students large enough to detect an impact (in standard deviation units) of the intervention on reading achievement equivalent to .18 on the standardized test (Stanford Diagnostic Reading Tests – 4th Ed. (SDRT-4) for grade 9.² Because Springfield-Chicopee plans to offer the interventions to new groups of students for four school years, future reports will have larger sample sizes and be able to detect smaller impacts.

² Abt Associates staff calculated the MDE by multiplying the standard error of the impact estimate by 2.8. This calculation produces the MDE for a two-tailed test with 80% power, and with an alpha level of .05, and accounts for clustering and for the inclusion of the covariates in the model.

