

Summary of 2006 Striving Readers Projects

Implementation and Evaluation of Targeted Interventions for Struggling Readers and Whole School Interventions for All Readers: Years 1—5

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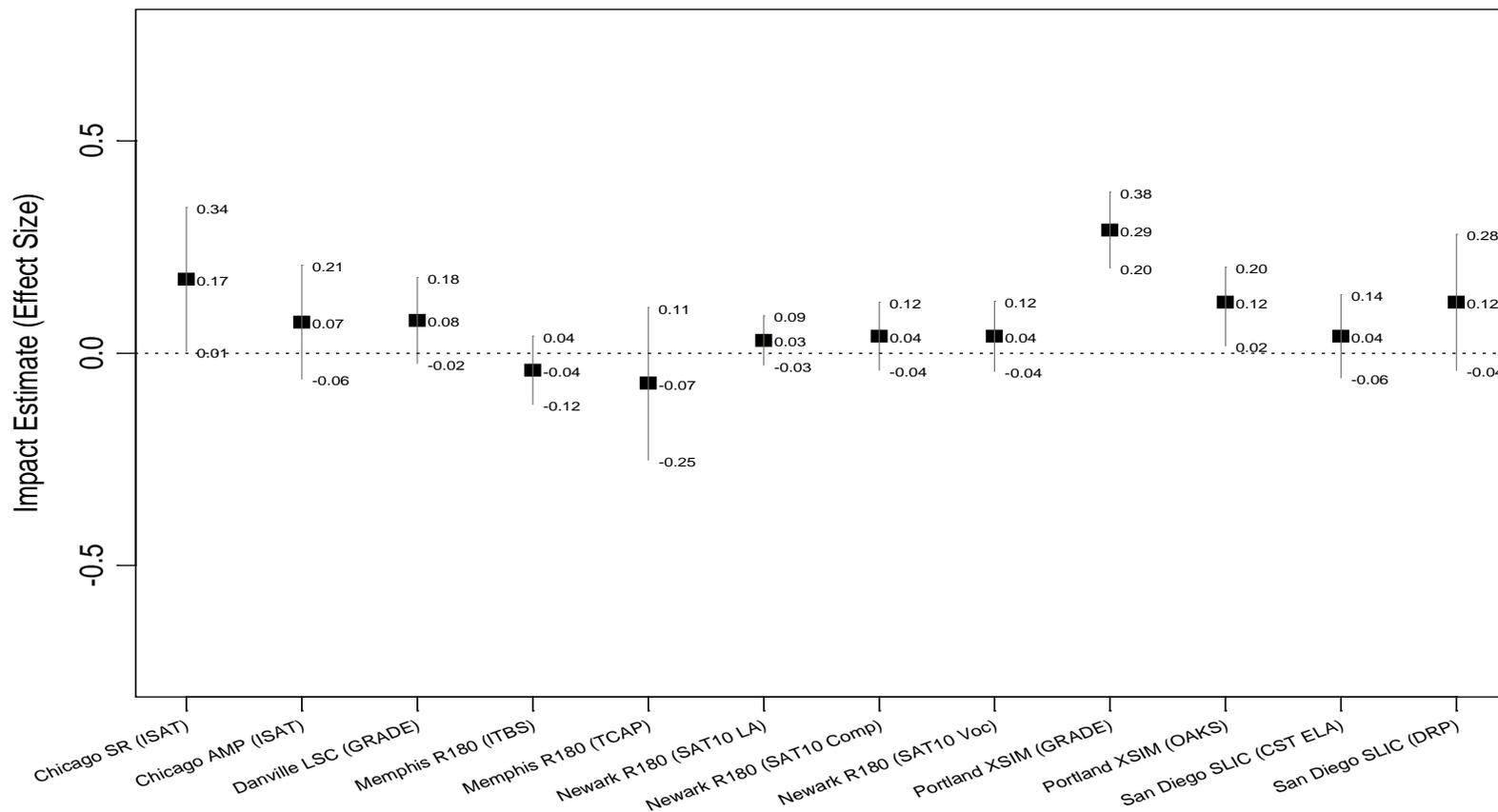
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Summary of 2006 Striving Readers Projects: Targeted Interventions for Struggling Readers

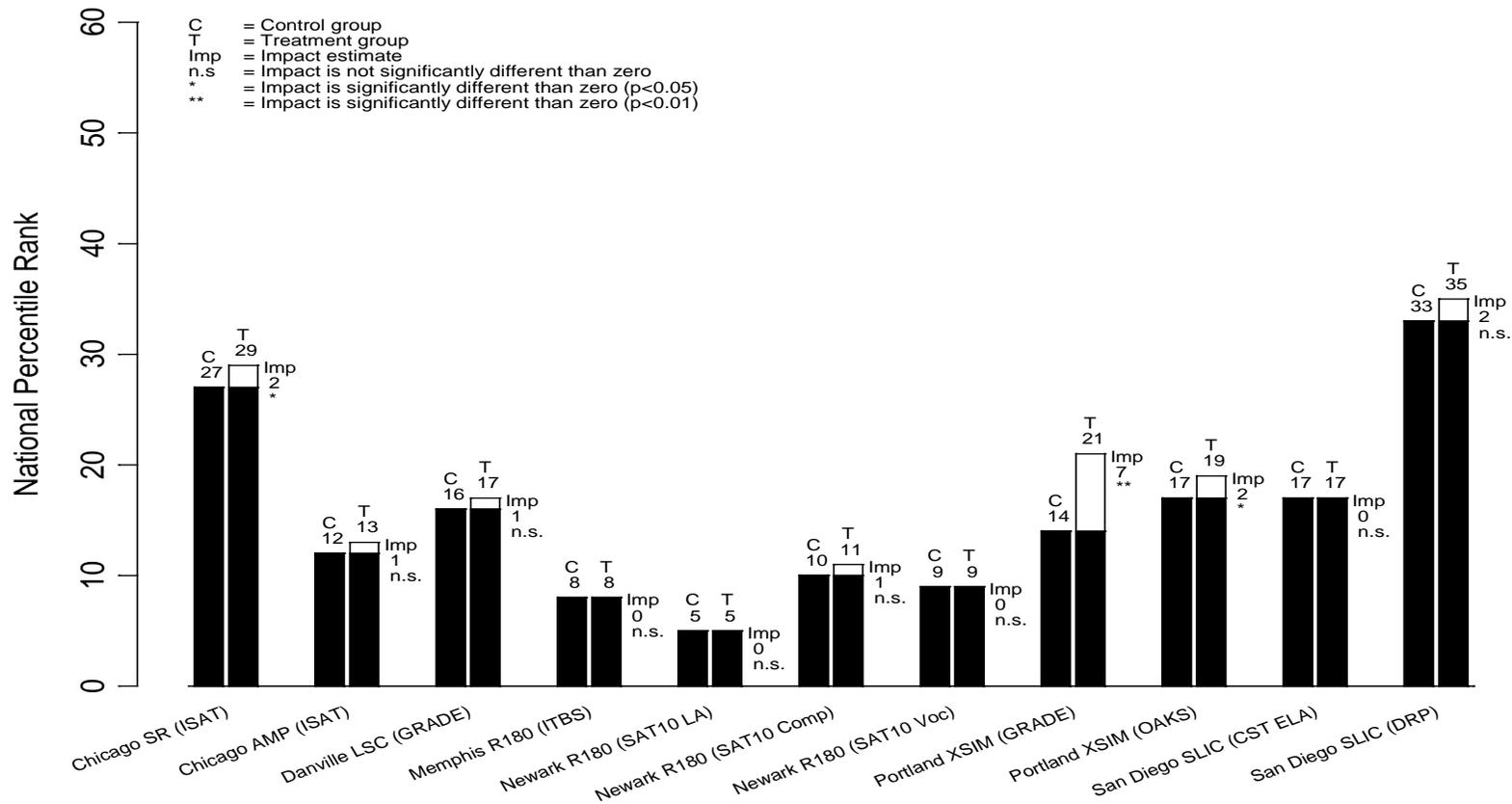
Exhibit 1: Targeted Interventions: Impact of One Year of the Interventions on Reading Test Scores in Standard Deviation Units for Middle School Students



Source: Striving Readers Year 4 and Year 5 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 dashed line), the estimated impact is not statistically significant. All of the studies met WWC evidence standards, with the exception of Chicago which met WWC evidence standards with reservations, because there was insufficient data to determine attrition rates.

Exhibit 2: Targeted Interventions: Impact of One Year of the Interventions on Reading Test Scores in Percentile Units for Middle School Students

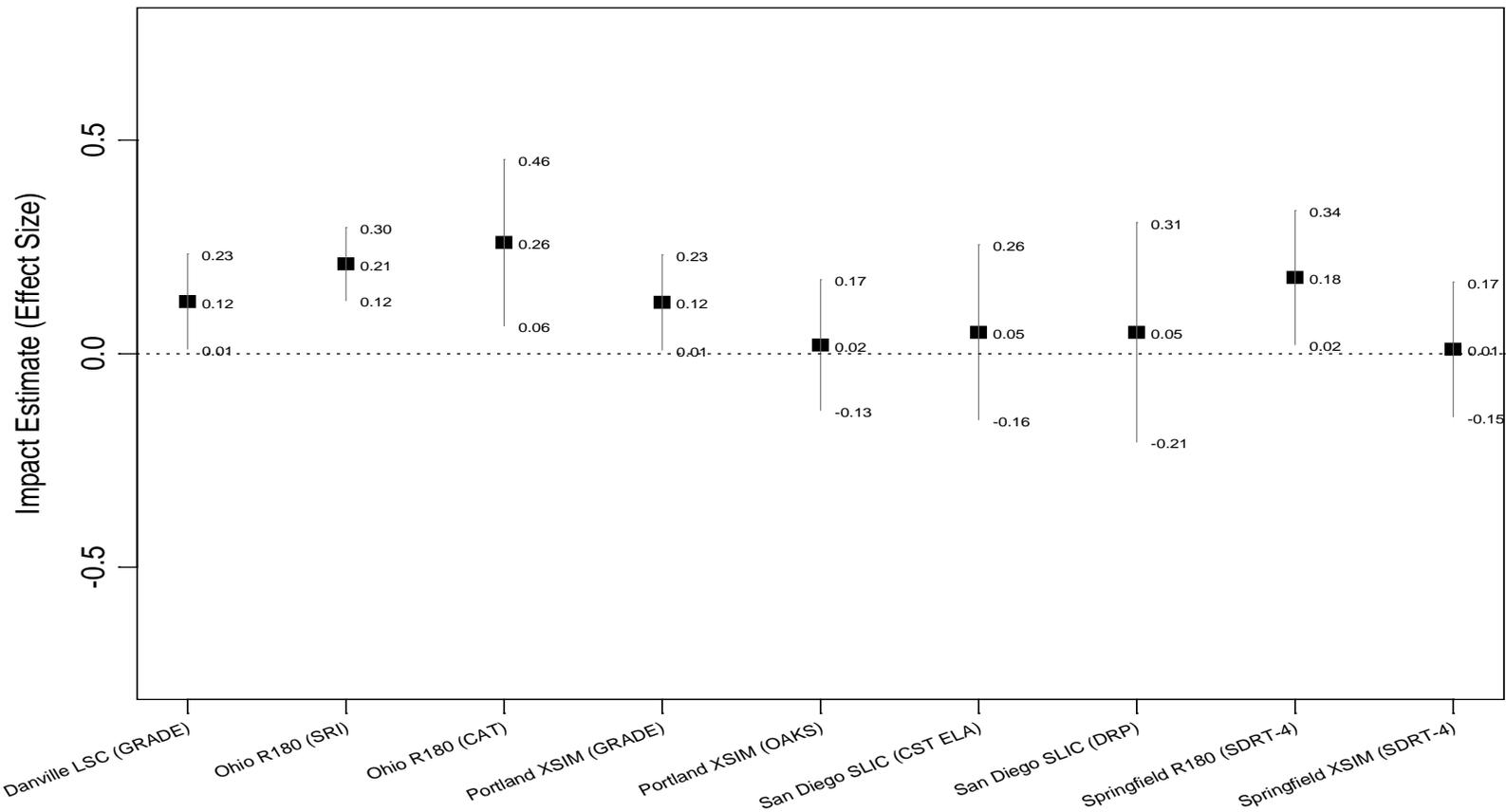


Source: Striving Readers Year 4 and Year 5 Evaluation Reports (available at: <http://www.ed.gov/programs/strivingreaders/performance.html>)

Note: The 'C' bar is the reading achievement (in percentile units) of the control group. The 'T' bar is the reading achievement of the treatment group. The difference between the bars is indicated by the white area at the top of the 'T' bar; this is the estimate of the impact of the intervention on reading achievement. Percentile units for Memphis TCAP are not available. All of the studies met WWC evidence standards, with the exception of Chicago which met WWC evidence standards with reservations, because there was insufficient data to determine attrition rates.

Summary of 2006 Striving Readers Projects: Targeted Interventions for Struggling Readers

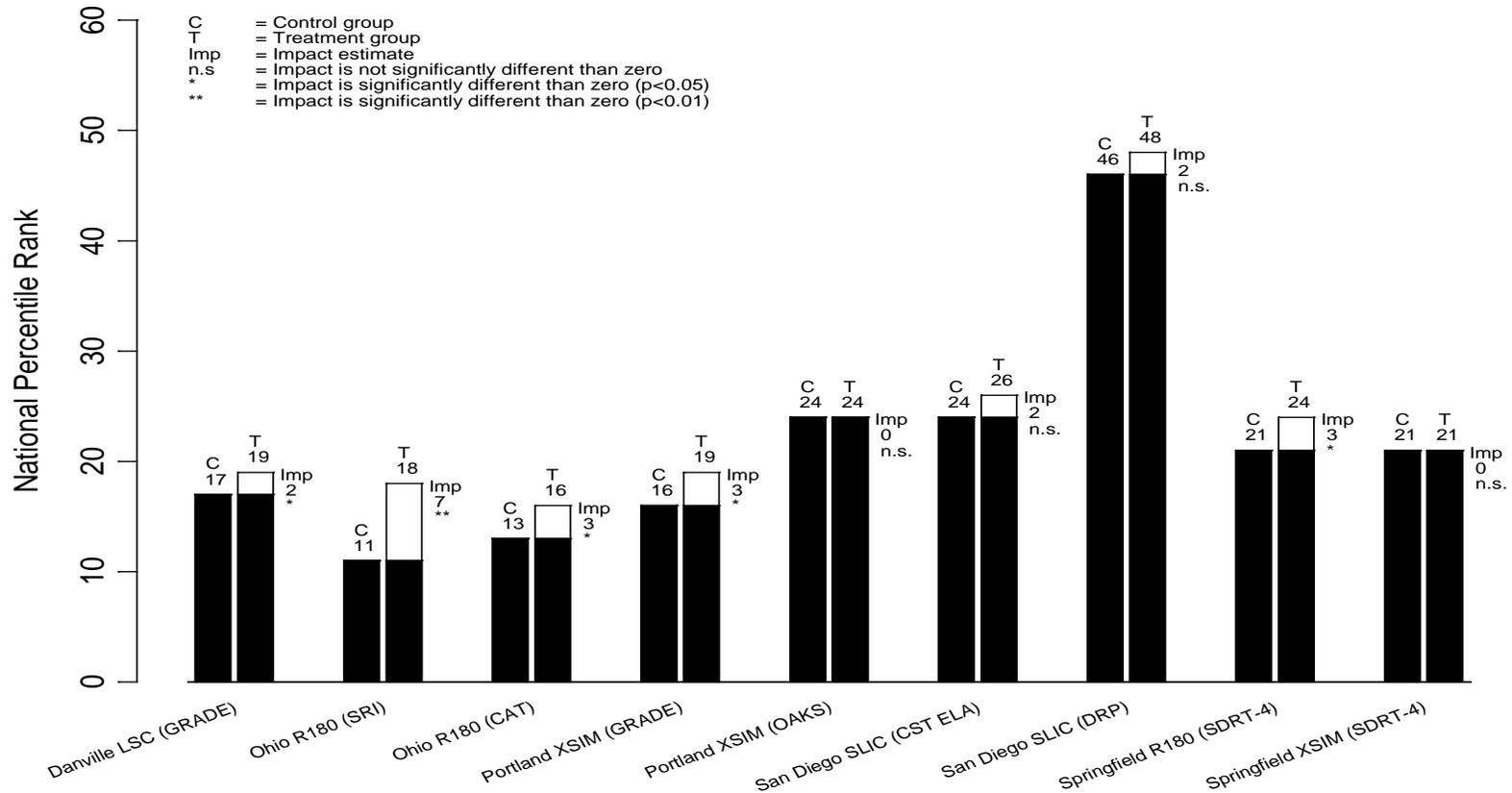
Exhibit 3: Targeted Interventions: Impact of One Year of the Interventions on Reading Test Scores in Standard Deviation Units for High School Students



Source: Striving Readers Year 4 and Year 5 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 dashed line), the estimated impact is not statistically significant. Ohio R180 (SRI) does not meet WWC standards because of over-alignment. Ohio R180 (CAT) meets WWC standards with reservations because there was high attrition but the baseline equivalence of the analytic sample was established. All other impacts shown meet WWC evidence standards without reservation.

Exhibit 4: Targeted Interventions: Impact of One Year of the Interventions on Reading Test Scores in Percentile Units for High School Students



Source: Striving Readers Year 4 and Year 5 Evaluation Reports (available at: <http://www.ed.gov/programs/strivingreaders/performance.html>)

Note: The 'C' bar is the reading achievement (in percentile units) of the control group. The 'T' bar is the reading achievement of the treatment group. The difference between the bars is indicated by the white area at the top of the 'T' bar; this is the estimate of the impact of the intervention on reading achievement. Ohio R180 (SRI) does not meet WWC standards because of over-alignment. Ohio R180 (CAT) meets WWC standards with reservations because there was high attrition but the baseline equivalence of the analytic sample was established. All other impacts shown meet WWC evidence standards without reservation.

Summary of 2006 Striving Readers Projects: Targeted Interventions for Struggling Readers

Table 1: Targeted Interventions: Implementation Context

Model/Developer	Grades Served by Intervention	Number of Years Students Eligible to Receive Intervention	Amount of Student Exposure to Intervention	How Intervention Teachers Were Selected
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 English Language Arts Curriculum</i></p> <p>Developed by Chicago Public Schools with input from D. Ogle of National Louis University and Chicago Public Schools</p> <p>Tiered intervention: Tier 1: Students reading at or above grade level Tier 2: Students reading up to 1.5 years below grade level Tier 3: Students reading > 1.5 years and ≤ 3 years below grade level</p> <p>All students receive Whole School Intervention <i>Tiers 2 & 3</i> receive Targeted Intervention (small group, differentiated instruction in ELA classes) <i>Tier 3</i> also receives Intensive Intervention: Achieving Maximum Potential (AMP)¹ based on instructional model developed by T. Shanahan of University of Illinois at Chicago; distributed by Pearson Education, Inc.</p>	Grades 6–8	Struggling readers could continue to receive intervention for up to 3 years (grades 6–8) ²	<p>Targeted: small group instruction blended in subject area classes for at least 20 minutes/day</p> <p>Intensive: AMP supplements Targeted Intervention after school for an additional 1 hour/day, 4 days/week for a total additional time of 240 minutes/week</p>	<p>Literacy Intervention teachers (LITs), who were selected from existing teachers, coaches and literacy specialists recommended by principals, responsible for targeted instruction in ELA classrooms and AMP with grade 6 students</p> <p>AMP for students in grades 7, 8 provided by classroom teachers to the extent possible</p>

Model/Developer	Grades Served by Intervention	Number of Years Students Eligible to Receive Intervention	Amount of Student Exposure to Intervention	How Intervention Teachers Were Selected
Danville School District, KY³				
<i>Learning Strategies Curriculum</i>				
<i>Learning Strategies Curriculum--Strategic Intervention Model</i> Published by the University of Kansas Center for Research on Learning (Tralli, Colombo, Deshler, & Schumaker, 1996)	Grades 6 & 9 ⁴	Struggling readers could receive intervention for 1 year (grade 6 or 9)	Supplement to regular ELA, replacing an elective: 50–60 additional minutes/day	Intervention delivered by literacy coaches hired for the position to teach only intervention classes and to coach content teachers in implementing the whole-school intervention
Memphis City Schools, TN				
<i>READ 180 Enterprise Edition</i>				
<i>READ 180 Enterprise Edition</i> Published by Scholastic, Inc. http://teacher.scholastic.com/products/read180	Grades 6–8	Struggling readers could continue to receive intervention for up to 2 years (grades 6–7 or grades 7–8)	Supplement to regular ELA, replacing an elective: 90 additional minutes/day	Intervention delivered by teachers selected by principals from among existing staff (including newly hired teachers)
Newark Public Schools, NJ				
<i>READ 180 Enterprise Edition</i>				
<i>READ 180 Enterprise Edition</i> Published by Scholastic, Inc. http://teacher.scholastic.com/products/read180	Grades 6–8	Struggling readers could continue to receive intervention for up to 3 years	Replacement for regular ELA: 90 minutes/day	Intervention delivered by teachers selected from existing staff by school principals, who followed typical placement procedures when assigning teachers to intervention classrooms
Ohio Department of Youth Services (operating as public school education district for youth in juvenile correction facilities)				
<i>READ 180 Enterprise Edition</i>				
<i>READ 180 Enterprise Edition</i> Published by Scholastic, Inc. http://teacher.scholastic.com/products/read180	Grades 7–12 (Majority of students between 15–21 years of age)	Struggling readers could continue to receive intervention for the duration of their stay in correctional facility (average = 10.5 months)	Replacement for regular ELA and supplement replacing an elective course: 90 minutes/day	Intervention delivered by existing staff at Ohio Dept. of Youth Services or were hired for the study

Model/Developer	Grades Served by Intervention	Number of Years Students Eligible to Receive Intervention	Amount of Student Exposure to Intervention	How Intervention Teachers Were Selected
Portland School District, OR				
<i>Xtreme Reading Strategic Instruction Model</i>				
<p><i>Xtreme Reading Strategic Instruction Model</i></p> <p>Published by the University of Kansas, Center for Research on Learning http://www.xtremereading.com</p>	Grades 7–10	Struggling readers could receive intervention for 1 year	<p>Supplement to regular ELA, replacing an elective in high schools: 45 additional minutes/day (grades 9, 10)</p> <p>Replacement for regular ELA in middle schools: 45 minutes/day (grades 7, 8)</p>	<p>Intervention delivered by reading specialists, who were hired by school administrators following guidelines in the teachers' contract</p> <p>In years 1 and 2 only, reading specialist was paired with a teacher; the reading specialist taught the targeted intervention and the 2nd teacher worked with the same intervention students in either language arts or social studies</p>
San Diego Unified School District, CA				
<i>Strategies for Literacy Independence across the Curriculum</i>				
<p><i>Strategies for Literacy Independence across the Curriculum model (SLIC)</i></p> <p>Developed by T. McDonald & C. Thornley, Education Associates, New Zealand</p>	Grades 7–10	Struggling readers could continue to receive intervention for up to 4 years	Supplement to regular ELA, replacing an elective: 47–58 additional minutes/day	Intervention delivered by teachers selected primarily by school principals from the existing English/language arts staff
Springfield Public Schools and Chicopee Public Schools, MA				
<i>READ 180 Enterprise Edition</i>				
<p><i>READ 180 Enterprise Edition</i></p> <p>Published by Scholastic, Inc. http://teacher.scholastic.com/products/read180</p>	Grade 9	Struggling readers could receive intervention for 1 year ⁵	Supplement to regular ELA, replacing an elective: 90 additional minutes/day	<p>Intervention delivered by teachers hired by school districts to be new and separate from regular ELA teachers in schools. Hiring based on reading/teaching experience.</p> <p>Teachers were randomly assigned to READ 180, control or other targeted intervention (Xtreme Reading)</p>

Model/Developer	Grades Served by Intervention	Number of Years Students Eligible to Receive Intervention	Amount of Student Exposure to Intervention	How Intervention Teachers Were Selected
Springfield Public Schools and Chicopee Public Schools, MA (continued)				
<i>Xtreme Reading Strategic Instruction Model</i>				
<i>Xtreme Reading Strategic Instruction Model</i> Published by the University of Kansas, Center for Research on Learning. http://www.xtremereading.com	Grade 9	Struggling readers could receive intervention for 1 year ⁴	Supplement to regular ELA, replacing an elective: 45 additional minutes/day	Intervention delivered by teachers hired by school districts to be new and separate from regular ELA teachers in schools. Hiring based on reading/teaching experience. Teachers were randomly assigned to Xtreme Reading, control or other targeted intervention (READ 180)

Source: Striving Readers Year 5 Evaluation Reports (available at: <http://www.ed.gov/programs/strivingreaders/performance.html>)

- ¹ The focus of the after-school program changed in Year 5. In Years 1 – 4, the classes for the intensive intervention were built around the AMP literacy program. Instructor concerns about the program being overly-scripted and not covering all of the key reading strategies led the program to change the focus of the after-school program from AMP to school-developed instruction build around the same key program components being used for the targeted interventions.
- ² Targeted and Intensive interventions for students in grades 7, 8 varied by school; it was provided to the extent that the LIT had sufficient time to work in the higher grades.
- ³ The six other participating districts are: Bullitt County School District, Eminence Independent, Jessamine County, Pike County, Rowan County, and Washington County.
- ⁴ In Year 5, only students in grades 7 and 10 who were eligible for a second year of the intervention were served.
- ⁵ Struggling readers can continue to receive READ 180 for up to two years (in any grade 9th - 12th), as determined by the districts. Only grade 9 students in their first year of the intervention are included in the evaluation.

Summary of 2006 Striving Readers Projects: Targeted Interventions for Struggling Readers

Table 2: Targeted Interventions: Overall Sample

Year ¹	Number of Schools/Grades in Intervention	Number of Intervention Teachers	Total Number of Students Randomized to Intervention	Student Reading Level for Eligibility for Intervention	Student Eligibility Exclusions
Chicago Public Schools, IL					
<i>Chicago Striving Readers English Language Arts Curriculum and Achieving Maximum Potential (AMP) After-School Program</i>					
Year 1	Cohort 1 16 K-8 schools Grades 6, 7, 8 in the study in each school	Total = 16 Literacy Intervention Teachers	1,007 Tier 2 students in grades 6, 7, 8 705 Tier 3 students in grades 6, 7, 8	Students who scored up to one year below grade level (Tier 2) or one or more years below grade level (Tier 3) ² on the SAT-10. ³ For students missing SAT-10 scores, preliminary assignment based on BRI ⁴ and adjusted when SAT-10 data available. ELL students lacking SAT-10 scores assigned based on BRI results	Special education students whose IEPs precluded them from participation in the intervention
Year 2	Cohort 1 16 K-8 schools Grades 6, 7, 8 in the study in each school Cohort 2 15 new K-8 schools Grades 6, 7, 8 in the study in each school	Total = 31 Literacy Intervention Teachers	New cohort of grade 6 students Tier 2 = 285 students Tier 3 = 570 students Grade 7 students ⁵ Tier 2 = 417 students Tier 3 = 442 students Grade 8 students ⁵ Tier 2 = 152 students Tier 3 = 607 students	Same as year 1 except for ELL students who did not have SAT-10 scores were assigned based on IMAGE ⁶ results	Same as year 1

Year ¹	Number of Schools/Grades in Intervention	Number of Intervention Teachers	Total Number of Students Randomized to Intervention	Student Reading Level for Eligibility for Intervention	Student Eligibility Exclusions
Chicago Public Schools, IL (continued)					
<i>Chicago Striving Readers English Language Arts Curriculum and Achieving Maximum Potential (AMP) After-School Program (continued)</i>					
Year 3	Same as year 2	Total = 31 Literacy Intervention Teachers	<p>New cohort of grade 6 students Tier 2 = 369 students Tier 3 = 370 students</p> <p>Grade 7 students in their 2nd year of the program⁷ Tier 2 = 258 students Tier 3 = 491 students</p> <p>Grade 7 students new to the program Tier 2 = 46 students Tier 3 = 25 students</p> <p>Grade 8 students in their 2nd or 3rd year of the program⁸ Tier 2 = 362 students Tier 3 = 389 students</p> <p>Grade 8 students new to the program Tier 2 = 29 students Tier 3 = 20 students</p>	<p>Students who scored up to 1.5 years below grade level (Tier 2) or 1.5 – 3.0 years below grade level (Tier 3), based on ISAT⁹ scores converted to grade-level equivalents.¹⁰ For students missing ISAT scores, preliminary assignment based on BRI⁴ and adjusted when ISAT data available.</p> <p>All special education students assigned based on ISAT scores converted to grade-level equivalents</p> <p>ELL students assigned based on ACCESS for ELLs¹¹ and ISAT scores.</p>	Students who scored more than 3 years below grade level

Year ¹	Number of Schools/Grades in Intervention	Number of Intervention Teachers	Total Number of Students Randomized to Intervention	Student Reading Level for Eligibility for Intervention	Student Eligibility Exclusions
Chicago Public Schools, IL (continued)					
<i>Chicago Striving Readers English Language Arts Curriculum and Achieving Maximum Potential (AMP) After-School Program (continued)</i>					
Year 4	<p>Cohort 1 16 K-8 schools Grades 6, 7, 8 in the study in each school</p> <p>Cohort 2 13 K-8 schools Grades 6, 7, 8 in the study in each school</p>	Total = 29 Literacy Intervention Teachers	<p>New cohort of grade 6 students Tier 2 = 313 students Tier 3 = 286 students</p> <p>Grade 7 students in their 2nd year of the program¹² Tier 2 = 301 students Tier 3 = 252 students</p> <p>Grade 7 students new to the program Tier 2 = 49 students Tier 3 = 38 students</p> <p>Grade 8 students in their 2nd or 3rd year of the program¹³ Tier 2 = 358 students Tier 3 = 156 students</p> <p>Grade 8 students new to the program Tier 2 = 21 students Tier 3 = 20 students</p>	Same as year 3	Same as year 3
Year 5	<p>Cohort 1 16 K-8 schools Grades 6, 7, 8 in the study in each school</p> <p>Cohort 2 7 K-8 schools Grades 6, 7, 8 in the study in each school¹⁴</p>	Total = 23 Literacy Intervention Teachers	Total = 3,833 students in grades 6 – 8	Same as year 3	Same as year 3

Year ¹	Number of Schools/Grades in Intervention	Number of Intervention Teachers	Total Number of Students Randomized to Intervention	Student Reading Level for Eligibility for Intervention	Student Eligibility Exclusions
Danville School District, KY¹⁵					
<i>Learning Strategies Curriculum</i>					
Year 1	<p>10 middle schools (grades 6-8) Grade 6 in the study in each school</p> <p>9 high schools (grades 9-12) Grade 9 in the study in each school</p> <p>2 schools grades 6-12 Grades 6, 9 in the study in each school¹⁶</p>	<p>Total = 24 Literacy Intervention Teachers</p> <p>10 in middle schools 12 in high schools 2 in Grade 6-12 schools</p>	<p>Total = 442 students</p> <p>Grade 6 = 192</p> <p>Grade 9 = 250</p>	<p>Students who scored at least 2 grades below grade level (NCE¹⁷ of 33 or lower) on the GRADE¹⁸</p>	<p>Special education students:</p> <ul style="list-style-type: none"> • Categorized as functionally mentally disabled • Enrolled in special education for all core classes
Year 2	Same as year 1	<p>Same as year 1</p> <p>20 of 24 in their 2nd year of intervention</p>	<p>Total = 391 students</p> <p>New cohort of grade 6 students = 179</p> <p>New cohort of grade 9 students = 212</p>	Same as year 1	Same as year 1
Year 3	Same as year 1	<p>Same as year 1</p> <p>14 teachers in their 3rd year of intervention</p> <p>5 teachers in their 2nd year of intervention</p> <p>5 teachers in their 1st year of intervention</p>	<p>Total = 336 students</p> <p>New cohort of grade 6 students = 152</p> <p>New cohort of grade 9 students = 184</p>	Same as year 1	Same as year 1

Year ¹	Number of Schools/Grades in Intervention	Number of Intervention Teachers	Total Number of Students Randomized to Intervention	Student Reading Level for Eligibility for Intervention	Student Eligibility Exclusions
Danville School District, KY¹⁹ (continued)					
<i>Learning Strategies Curriculum (continued)</i>					
Year 4	Same as year 1	Same as year 1 12 teachers in their 4 th year of intervention 4 teachers in their 3 rd year of intervention 4 teachers in their 2 nd year of intervention 4 teachers in their 1 st year of intervention	Total = 258 students New cohort of grade 6 students = 160 New cohort of grade 9 students = 98	Same as year 1	Same as year 1
Year 5	Subset of schools identified as having high implementation in Years 1 - 4 6 middle schools Grade 7 in each school 2 high schools Grade 10 in each school 1 school grades 6-12 Grade 7	15 returning teachers— 1 in each participating school	No new students randomized	Students who scored at least 2 grades below grade level (NCE ²⁰ of 33 or lower) on the GRADE ²¹ after one year of the targeted intervention	Same as year 1

Year ¹	Number of Schools/Grades in Intervention	Number of Intervention Teachers	Total Number of Students Randomized to Intervention	Student Reading Level for Eligibility for Intervention	Student Eligibility Exclusions
Memphis City Schools, TN					
<i>READ 180 Enterprise Edition</i>					
Year 1	8 middle schools (grades 6-8) Grades 6, 7, 8 in the study in each school	Total = 19 teachers	Total = 698 students Grade 6 = 239 students Grade 7 = 233 students Grade 8 = 226 students	Students who scored in the bottom quartile on the TCAP ²²	<ul style="list-style-type: none"> • Assignment to self-contained classrooms for special education services • Case-by-case opt-outs (conducted prior to randomization) based on teacher judgment that student TCAP scores were not representative of actual achievement levels
Year 2	Same as year 1	Same as year 1 12 returning teachers	Total = 761 students (608 remaining in spring year 2) New cohort of grade 6 students = 289 Students in their 2 nd year: Grade 7 = 239 students (160 remaining in spring year 2) Grade 8 = 233 students (159 remaining in spring year 2)	Same as year 1	Same as year 1

Year ¹	Number of Schools/Grades in Intervention	Number of Intervention Teachers	Total Number of Students Randomized to Intervention	Student Reading Level for Eligibility for Intervention	Student Eligibility Exclusions
Memphis City Schools, TN (continued)					
<i>READ 180 Enterprise Edition (continued)</i>					
Year 3	Same as year 1	<p>Same as year 1</p> <p>11 of the original 19 teachers taught in years 1 and 2</p> <p>2 teachers taught in year 2</p> <p>1 teacher taught in year 1</p>	<p>Total = 802 students (688 remaining in spring year 3)</p> <p>New cohort of grade 6 students = 274</p> <p>Students in their 2nd year: Grade 7 = 289 students (251 remaining in spring year 3)</p> <p>Students in their 3rd year: Grade 8 = 239 students (163 remaining in spring year 3)</p>	Same as year 1	Same as year 1
Year 4	Same as year 1	<p>Total = 16 teachers</p> <p>9 of the original 19 teachers taught all 4 years</p> <p>2 teachers taught years 2, 3, and 4</p> <p>1 teacher taught years 3 and 4</p>	<p>Total = 512 students (409 remaining in spring year 4)</p> <p>New cohort of grade 6 students = 238</p> <p>Students in their 2nd year: Grade 7 = 274 students (171 remaining in spring of year 4)</p>	Same as year 1	Same as year 1
Year 5	Intervention was not implemented	NA	NA	NA	NA

Year ¹	Number of Schools/Grades in Intervention	Number of Intervention Teachers	Total Number of Students Randomized to Intervention	Student Reading Level for Eligibility for Intervention	Student Eligibility Exclusions
Newark Public Schools, NJ					
<i>READ 180 Enterprise Edition</i>					
Year 1	10 middle schools (grades 6-8) Grades 6, 7, 8 in the study in each school	Total = 23 teachers 11 teachers left after year 1	Total = 708 students Grade 6 = 262 students Grade 7 = 213 students Grade 8 = 233 students	Students who scored at least 1 standard deviation below the grade-standardized mean on the NJASK ²³	Students who transferred into a study school and do not have NJASK scores
Year 2	Same as year 1	Total = 25 teachers (2 classrooms taught by team of 2 teachers) 13 new teachers	Total = 648 students New cohort of Grade 6 students = 226 Grade 7 students in 2 nd year of intervention = 233 Grade 8 students in 2 nd year of intervention = 189	Same as year 1	Same as year 1
Year 3	Same as year 1	Total = 30 teachers (8 classrooms taught by team of 2 teachers) 9 new teachers 10 of the original 23 teachers remained for all 3 years	Total = 638 students New cohort of Grade 6 students = 226 Grade 7 students in 2 nd year of intervention = 206 Grade 8 students in 3 rd year of intervention = 206	Same as year 1	Same as year 1

Year ¹	Number of Schools/Grades in Intervention	Number of Intervention Teachers	Total Number of Students Randomized to Intervention	Student Reading Level for Eligibility for Intervention	Student Eligibility Exclusions
Newark Public Schools, NJ (continued)					
<i>READ 180 Enterprise Edition (continued)</i>					
Year 4	Same as year 1	Total = 24 teachers (3 classrooms taught by team of 2 teachers) 5 new teachers 8 teachers in their 4 th year of intervention 8 teachers in their 3 rd year of intervention 11 teachers in their 2 nd year of intervention 23 teachers in their 1 st year of intervention	Total = 577 students New cohort of Grade 6 students = 202 Grade 7 students in 2 nd year of intervention = 196 Grade 8 students in 3 rd year of intervention = 179	Same as year 1	Same as year 1
Year 5	Same as year 1	Total = 22 teachers	Total = 643 Grade 8 students in 3 rd year of intervention New cohort of 8 th grade students = 170	Same as year 1	Same as year 1, but only students eligible for a 3 rd year of the intervention were studied
Ohio Department of Youth Services (operating as public school education district for youth in juvenile correction facilities)					
<i>READ 180 Enterprise Edition</i>					
Year 1	7 youth detention facilities Grades 7–12 in each facility (Majority of students between 15–21 years of age)	Total = 7 teachers	Total = 329 students in grades 8–12 (including new and remaining students)	Students who scored below grade level (a score of approximately 1000 Lexile points) but above “below basic” level (a Lexile score of 200 or less) on the SRI ²⁴	<ul style="list-style-type: none"> • Students who had graduated/were beyond high school age • Students with a planned release date of < 6 months

Year ¹	Number of Schools/Grades in Intervention	Number of Intervention Teachers	Total Number of Students Randomized to Intervention	Student Reading Level for Eligibility for Intervention	Student Eligibility Exclusions
Ohio Department of Youth Services (operating as public school education district for youth in juvenile correction facilities)					
<i>READ 180 Enterprise Edition (continued)</i>					
Year 2	7 youth detention facilities Grades 7–12 in each facility (Majority of students between 15 –21 years of age)	Same as year 1 2 new teachers	Total = 409 students in grades 8–12 (including new and remaining students)	Same as year 1	Same as year 1
Year 3	6 youth detention facilities ²⁵ Grades 7–12 in each facility (Majority of students between 15–21 years of age)	Total = 6 teachers 3 new teachers 3 teachers in 3 rd year of intervention	Total = 814 students in grades 8–12 (including new and remaining students)	Same as year 1	Same as year 1
Year 4	5 youth detention facilities ²⁶ Grades 7–12 in each facility (Majority of students between 15–21 years of age)	Total = 5 teachers 3 new teachers 2 teachers in 4 th year of intervention	Total = 977 students in grades 8–12 (including new and remaining students)	Same as year 1	Same as year 1
Year 5	5 youth detention facilities ²⁷ Grades 7 - 12 in each facility (Majority of students between 15 - 21 years of age)	Total = 5 teachers 0 new teachers 2 teachers in 5 th year of intervention 1 teacher in 4 th year of intervention 1 teacher in 3 rd year of intervention 1 teacher in 2 nd year of intervention	Total = 1,058 students in grades 8 – 12 (including new and remaining students) Total = 1,245 students in grades 8 – 12 across 5 years	Same as year 1	Same as year 1

Year ¹	Number of Schools/Grades in Intervention	Number of Intervention Teachers	Total Number of Students Randomized to Intervention	Student Reading Level for Eligibility for Intervention	Student Eligibility Exclusions
Portland School District, OR					
<i>Xtreme Reading Strategic Instruction Model</i>					
Year 1	<p>10 schools 5 middle schools (grades 6–8) Grades 7, 8 in the study in each school</p> <p>4 9–12 high schools Grades 9, 10 in the study in each school</p>	<p>Total = 18 teachers—9 pairs</p>	<p>Total = 659 students</p> <p>Grade 7 = 146 students</p> <p>Grade 8 = 142 students</p> <p>Grade 9 = 188 students</p> <p>Grade 10 = 183 students</p>	<p>Students who scored at least 2 grades below grade level but not lower than a 4th grade on the total reading score of the OSAT²⁸ (or, for grade 10 only, the DRP²⁹)</p>	<p>Students whose IEP or ELL requirements prohibited them from being able to be scheduled for Xtreme classes</p>
Year 2	<p>9 schools 1 middle school (grades 6-8)³⁰ Grades 7, 8 in the study in each school</p> <p>1 all-girls middle school (grades 6-9) Grades 7, 8, 9 in the study</p> <p>2 K-8 schools Grades 7, 8 in the study in each school</p> <p>1 8th grade academy Grade 8 in the study</p> <p>4 high schools (grades 9–12) Grades 9, 10 in the study in each school</p>	<p>Total = 18 teachers—8 pairs, 2 individual</p> <p>2 new teachers</p>	<p>Total = 219 new students</p> <p>Grade 7 = 36 students</p> <p>Grade 8 = 39 students</p> <p>Grade 9 = 86 students</p> <p>Grade 10 = 58 students</p>	<p>Same as year 1</p>	<p>Same as year 1</p>

Year ¹	Number of Schools/Grades in Intervention	Number of Intervention Teachers	Total Number of Students Randomized to Intervention	Student Reading Level for Eligibility for Intervention	Student Eligibility Exclusions
Portland School District, OR (continued)					
<i>Xtreme Reading Strategic Instruction Model (continued)</i>					
Year 3	<p>10 schools 2 middle schools (grades 6–8)³¹ Grades 7,8 in the study in each school</p> <p>1 all-girls middle school (grades 6–10) Grades 7, 8 in the study</p> <p>3 K-8 schools Grades 7,8 in the study in each school</p> <p>4 high schools (grades 9–12) Grades 9,10 in the study in each school</p>	<p>Total = 13 teachers – all individual (1 high school has 3 teachers; 1 high school has 2 teachers)</p> <p>5 new teachers</p>	<p>Total = 345 students</p> <p>Grade 7 = 92 students</p> <p>Grade 8 = 71 students</p> <p>Grade 9 = 111 students</p> <p>Grade 10 = 71 students</p>	Same as year 1	Same as year 1
Year 4	Same as year 3	<p>Total = 11 teachers – all individual (1 school has 2 teachers)</p> <p>3 new teachers</p>	<p>Total = 230 students</p> <p>Grade 7 = 76 students</p> <p>Grade 8 = 32 students</p> <p>Grade 9 = 82 students</p> <p>Grade 10 = 40 students</p>	Same as year 1	Same as year 1

Year ¹	Number of Schools/Grades in Intervention	Number of Intervention Teachers	Total Number of Students Randomized to Intervention	Student Reading Level for Eligibility for Intervention	Student Eligibility Exclusions
Portland School District, OR (continued)					
<i>Xtreme Reading Strategic Instruction Model (continued)</i>					
Year 5	District discontinued original experimental design 20 schools in district funded to implement the targeted intervention with any student who met eligibility criteria (10 original SR middle and high schools plus 9 new K-8 schools and 1 new middle school)	23 teachers 8 teachers with ≥ 2 years experience with intervention 15 new teachers	NA	Same as year 1	Same as year 1
San Diego Unified School District, CA					
<i>Strategies for Literacy Independence across the Curriculum</i>					
Year 1	3 middle schools (grades 6-8) Grade 7 in the study in each school 2 high schools (grades 9-12) Grade 9 in the study in each school; Grade 10 in the study in one school	Total = 7 teachers 1 teacher replaced mid-year	Total = 233 students Grade 7 = 122 students Grade 9 = 94 students Grade 10 = 17 students	Students who were: <ul style="list-style-type: none"> • At least 2 grades below grade level on the DRP³² • “Basic” or below on CST-ELAs³³ • “Intermediate” or “Early Intermediate” on the CELDT³⁴ 	<ul style="list-style-type: none"> • Middle school students in special education English classes • 7th grade students in elementary special day classes • Special education students designated as deaf/hard of hearing • ELL students with CELDT scores of “beginning” English speaker and projected to be enrolled <1 year • ELLs pre-enrolled in high school and non-diploma bound

Year ¹	Number of Schools/Grades in Intervention	Number of Intervention Teachers	Total Number of Students Randomized to Intervention	Student Reading Level for Eligibility for Intervention	Student Eligibility Exclusions
San Diego Unified School District, CA (continued)					
<i>Strategies for Literacy Independence across the Curriculum (continued)</i>					
Year 2	<p>4 middle schools (grades 6-8)</p> <p>Grades 7, 8 in the study in each school</p> <p>4 high schools (grades 9-12)³⁵</p> <p>Grades 9, 10 in the study in each school</p>	<p>Total = 19 teachers (89% of teachers new to the program based on new schools and turnover)</p> <p>4 teachers left after year 1; 1 teacher left during year 1 and was replaced</p>	<p>Total = 754 new students in grades 7 – 10</p> <p>Grade 7 = 199 students Grade 8 = 103 students</p> <p>Grade 9 = 293 students Grade 10 = 159 students</p> <p>Students in 2nd year of intervention = 122</p> <p>Grade 8 = 68 students Grade 9 = 10 students Grade 10 = 44 students</p>	<p>Same as year 1 but students scoring “Beginning” on CELDT also included if they had been in the district for > 1 year</p>	<p>Same as year 1 but schools could also exempt eligible students prior to random assignments for a variety of reasons, including the desire to enroll students in alternate interventions and the belief that low test scores did not accurately reflect a given student’s ability</p>
Year 3	<p>4 middle schools (grades 6-8)³⁶</p> <p>Grades 7, 8 in the study in each school</p> <p>4 high schools (grades 9-12)</p> <p>Grades 9, 10 in the study in each school</p>	<p>Total = 16 teachers</p> <p>3 new teachers (2, 25%, new to the program; and 1 who was a coach in years 2 and 3 but new to SLIC teaching)</p>	<p>Total = 424 new students in grades 7 - 11</p> <p>Grade 7 = 177 students Grade 8 = 83 students</p> <p>Grade 9 = 96 students Grade 10 = 51 students Grade 11 = 17 students</p> <p>Students in 3rd year of intervention = 37</p> <p>Students in 2nd year of intervention = 319</p>	<p>Same as year 2</p>	<p>Same as year 2, but students newly qualifying on the basis of late-summer test scores were not identified</p>

Year ¹	Number of Schools/Grades in Intervention	Number of Intervention Teachers	Total Number of Students Randomized to Intervention	Student Reading Level for Eligibility for Intervention	Student Eligibility Exclusions
San Diego Unified School District, CA (continued)					
<i>Strategies for Literacy Independence across the Curriculum (continued)</i>					
Year 4	Same as year 3	Total = 16 teachers 5 new teachers; 1 teacher left during year 4 and was replaced	Total = 623 continuing students in grades 8 - 11 Grade 8 = 135 students Grade 9 = 131 students Grade 10 = 177 students Grade 11 = 180 students Students in 3 rd year of intervention = 168 Students in 2 nd year of intervention = 566	Same as year 3	Same as year 3
Year 5	Same as year 3	Total = 13 teachers 4 new teachers	Total = 460 continuing students in grades 9 - 11; 143 tested out, leaving 295 students eligible to continue in the intervention Grade 9 = 118 students (47 additional tested out) Grade 10 = 171 students (80 additional tested out) Grade 11 = 6 students (16 additional tested out)	Same as year 3	Same as year 3

Year ¹	Number of Schools/Grades in Intervention	Number of Intervention Teachers	Total Number of Students Randomized to Intervention	Student Reading Level for Eligibility for Intervention	Student Eligibility Exclusions
Springfield Public Schools and Chicopee Public Schools, MA					
<i>READ 180 Enterprise Edition</i>					
Year 1	5 high schools (grades 9–12) 3 in Springfield, 2 in Chicopee Grade 9 in the study in each school	Total = 6 teachers • 1 of 6 was a co-teacher	Total = 70 students placed in grade 9 (out of 77 students assigned)	Students who scored at least two grades below grade level but not lower than a 4 th grade level on the SRI ³⁷	<ul style="list-style-type: none"> • Special education students whose IEPs explicitly specified a different form of required support • Students who lacked the necessary English language or comprehension skills as per interventions • Students enrolled in an off-campus “twilight school” or early college high school • Students with histories of scoring proficient or advanced on the MCAS
Year 2	Same as year 1	Total = 5 teachers 2 new teachers 3 returning teachers • 3 of 3 in second year	Total = 66 students in placed in grade 9 (new cohort) out of 78 students assigned	Same as year 1	Same as year 1
Year 3	Same as year 1	Total = 5 teachers 5 returning teachers • 4 of 5 in second year • 1 of 5 in third year	Total = 49 students placed in grade 9 (new cohort) out of 57 students assigned	Same as year 1	Same as year 1
Year 4	Same as year 1	Total = 5 teachers 5 returning teachers • 4 of 5 in third year • 1 of 5 in fourth year	Total = 49 students placed in grade 9 (new cohort) out of 54 students assigned	Same as year 1	Same as year 1

Year ¹	Number of Schools/Grades in Intervention	Number of Intervention Teachers	Total Number of Students Randomized to Intervention	Student Reading Level for Eligibility for Intervention	Student Eligibility Exclusions
Springfield Public Schools and Chicopee Public Schools, MA (continued)					
<i>READ 180 Enterprise Edition (continued)</i>					
Year 5	Same as year 1	Total = 5 teachers 4 returning teachers <ul style="list-style-type: none">• 3 of 4 in third year• 1 of 4 in fourth year	Total = 81 students randomized and placed in grade 9 (new cohort) Total = 315 students placed in grade 9 across 5 cohorts out of 347 students assigned	Same as year 1	Same as year 1
<i>Xtreme Reading Strategic Instruction Model</i>					
Year 1	5 high schools (grades 9–12)--3 in Springfield, 2 in Chicopee Grade 9 in the study in each school	Total = 5 teachers	Total = 72 students in grade 9 out of 75 students randomized	Students who scored at least two grades below grade level but not lower than a 4 th grade level on the SRI ³²	<ul style="list-style-type: none"> • Special education students whose IEPs explicitly specified a different form of required support • Students who lacked the necessary English language or comprehension skills as per interventions • Students enrolled in an off-campus “twilight school” or early college high school • Students with histories of scoring at least proficient on the MCAS

Year ¹	Number of Schools/Grades in Intervention	Number of Intervention Teachers	Total Number of Students Randomized to Intervention	Student Reading Level for Eligibility for Intervention	Student Eligibility Exclusions
Springfield Public Schools and Chicopee Public Schools, MA (continued)					
<i>Xtreme Reading Strategic Instruction Model (continued)</i>					
Year 2	Same as year 1	Total = 5 teachers 2 new teachers 3 returning teachers	Total = 57 students placed in grade 9 (new cohort) out of 65 students assigned	Same as year 1	Same as year 1
Year 3	Same as year 1	Total = 5 teachers 1 new teacher 4 returning teachers • 2 of 4 in third year • 2 of 4 in second year	Total = 49 students placed in grade 9 (new cohort) out of 59 students assigned	Same as year 1	Same as year 1
Year 4	Same as year 1	Total = 5 teachers 5 returning teachers • 1 of 5 in second year • 1 of 5 in third year • 3 of 5 in fourth year	Total = 52 students placed in grade 9 (new cohort) out of 58 students assigned	Same as year 1	Same as year 1
Year 5	Same as year 1	Total = 5 teachers 3 returning teachers (other 2 teachers only new to Xtreme at 9 th grade level)	Total = 81 students assigned and placed in grade 9 (new cohort) Total = 311 students placed in grade 9 across 5 cohorts out of 338 students assigned	Same as year 1	Same as year 1
Source: Striving Readers Year 5 Evaluation Reports (available at: http://www.ed.gov/programs/strivingreaders/performance.html)					

¹ Year refers to implementation year. Year 1- 2006-07 school year; Year 2- 2007-08 school year; Year 3- 2008-09 school year; Year 4-2009-10 school year; Year 5- 2010-11 school year

² In Year 1, intervention assignments were based on incorrectly calculated tiers.

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- ³ SAT 10- Stanford Achievement Test series 10
- ⁴ BRI- Basic Reading Inventory
- ⁵ Most students were in their 2nd year of the intervention, but some were new to the school and the program. Because of the change in evaluators during Year 2, comparisons to the Year 1 records were not readily available to determine this number.
- ⁶ IMAGE - English language proficiency test
- ⁷ Tiers for these students are based on their Year 2 assignments.
- ⁸ Most were in their 3rd year of the intervention, but some had entered the school and program in Year 2. Because of the change in evaluators during Year 2, comparisons to the Year 1 records were not readily available to determine this number. Tiers for both groups of students are based on their Year 2 assignments.
- ⁹ ISAT – Illinois Standards Achievement Test- state proficiency test
- ¹⁰ SAT-10 scores were not available at the time tier assignments were being made. Because grade-level equivalents were not provided for the ISAT scores, they were inferred by determining the ISAT scores equivalent to each SAT-10 grade-equivalent cutoff, as predicted using a conversion from SAT-10 to ISAT derived from a bridge study aligning the two measures.
- ¹¹ ACCESS for ELLs- Assessing Comprehension and Communication in English State-to-State for English Language Learners
- ¹² Tiers for these students are based on their assignments in project Year 3.
- ¹³ Most were in their 3rd year of the intervention, but approximately 60 students had entered the school and program in project Year 3. Tiers for both groups of students are based on their assignments in project year 3.
- ¹⁴ The Cohort 2 schools that were lost from the study included primarily the smaller schools that were unable to provide funding for their literacy intervention teacher and continued implementation at a diminished level.
- ¹⁵ The six other participating districts are: Bullitt County School District, Eminence Independent, Jessamine County, Pike County, Rowan County, and Washington County.
- ¹⁶ One of these schools was an alternative school for students who had not succeeded in traditional middle and high school settings.
- ¹⁷ NCE- Normal Curve Equivalent
- ¹⁸ GRADE- Group Reading Assessment and Diagnostic Examination
- ¹⁹ The six other participating districts are: Bullitt County School District, Eminence Independent, Jessamine County, Pike County, Rowan County, and Washington County.
- ²⁰ NCE- Normal Curve Equivalent
- ²¹ GRADE- Group Reading Assessment and Diagnostic Examination
- ²² TCAP- Tennessee Comprehensive Assessment Program (reading/language arts subtest)
- ²³ NJASK- New Jersey Assessment of Skills and Knowledge
- ²⁴ SRI – Scholastic Reading Inventory
- ²⁵ One all-male facility closed and individuals (staff and youth) were reassigned.
- ²⁶ One facility was closed and individuals (staff and youth) were reassigned.
- ²⁷ One facility was closed and individuals (staff and youth) were reassigned.
- ²⁸ OSAT- Oregon State Assessment Test
- ²⁹ DRP- Degrees of Reading Power
- ³⁰ In Year 2, two middle schools merged with K–5 schools, another middle school closed and the final grade 8 class joined an 8th grade academy at a participating high school, and a fourth middle school became an all-girls school serving grades 6-9 with new Striving Readers teachers.
- ³¹ In Year 3, an original middle school merged with a K–5 school to become a K-8 school and 2 new middle schools were added to Striving Readers. The Year 2 8th grade academy closed and a new 8th grade academy joined another high school.
- ³² DRP- Degrees of Reading Power
- ³³ CST-ELA- California Standards Test- English Language Arts
- ³⁴ CELDT- California English Language Development Test (English language proficiency test for students whose primary language is not English)
- ³⁵ One additional middle school and two additional high schools were added to the study in Year 2.
- ³⁶ One new middle school replaced a Year 2 school that closed for failure to meet AYP. The new school used the same building but most of the staff was replaced.
- ³⁷ SRI- Scholastic Reading Inventory. Floor set as dictated by Xtreme Reading.

Summary of 2006 Striving Readers Projects: Targeted Interventions for Struggling Readers

Table 3: Targeted Interventions: Elements of Planned Professional Development and Coaching Models and Definitions of Adequate Implementation

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Chicago Public Schools, IL				
<i>Chicago Striving Readers English Language Arts Curriculum and Achieving Maximum Potential (AMP) After-School Program</i>				
Year 1	<p>Total = 54 - 57 hours/teacher plus school-based training</p> <ul style="list-style-type: none"> • 5 day Summer Institute (6 hours/day) • Quarterly follow-up trainings (3 hours/day) • Saturday Seminars (monthly, 3 hours/day for 4-5 sessions) <p><i>Other district/school staff</i></p> <ul style="list-style-type: none"> • Principal Leadership Seminars (3 hours/day each month) • Weekly LIT meetings (6 hours/meeting for 20 sessions) • National-Louis University LIT/teacher graduate coursework: 4 terms over 2 years <p>Training by SR team, developer and literacy consultants</p>	Not calculated	In-class mentoring/teacher and additional technical assistance as needed by SR district team, school-based literacy teams.	Not calculated

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Chicago Public Schools, IL (continued)				
<i>Chicago Striving Readers English Language Arts Curriculum and Achieving Maximum Potential (AMP) After-School Program (continued)</i>				
Year 2	<p><i>New teachers</i> Same as year 1 but added technology training (6 hours)</p> <p><i>Returning teachers</i> Total = 48 hours/teacher plus school-based training</p> <ul style="list-style-type: none"> • 3 day Summer Institute (6 hours/day) • Quarterly follow-up trainings (3 hours/day for 3 sessions) • Saturday Seminars (3 hours/session for 5 sessions) • Technology training, including use of <i>GoKnow</i> (6 hours) <p><i>Other district/school staff</i></p> <ul style="list-style-type: none"> • Principal Leadership Seminars (3 hours/day each month) • Weekly LIT meetings (6 hours/meeting: 20 sessions for returning LITs, 24 for new LITs) • National-Louis University LIT/teacher graduate coursework: 4 terms over 2 years • Technology training for LITs, including use of <i>GoKnow</i> (6 hours) <p>Training by SR team, developer and <i>GoKnow</i> Technology consultants</p>	<p><i>Adequate implementation</i> High = high attendance (>80% for teachers and principals, >90% for LITs) at 5 of 5 core types of professional development activities (initial and 2 types of ongoing training, weekly LIT meetings, Principal Seminars)</p> <p>Medium = high attendance at some types/moderate attendance (51-79% for teachers, 60-79% for principals, 75-89% for LITs) at 5 types of professional development</p> <p>Overall PD calculated at school-level on scale of 0 – 10 (including whole school plus targeted/intensive intervention training)</p> <p>High = score of 8 – 10 out of 10</p> <p>Medium = score 5.0 - 7.9 out of 10</p>	Same as year 1 with additional support from school-based grade level teams	Not calculated

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Chicago Public Schools, IL (continued)				
<i>Chicago Striving Readers English Language Arts Curriculum and Achieving Maximum Potential (AMP) After-School Program (continued)</i>				
Year 3	<p>Total = 48 hours/teacher plus school-based training</p> <ul style="list-style-type: none"> • 3 day Summer Institute (6 hours/day) • Quarterly follow-up trainings (3 hours/day) • General technology training (12 hours) <p><i>Other district/school staff</i></p> <ul style="list-style-type: none"> • Principal Leadership Seminars reduced to half day bi-monthly • Weekly LIT meetings (6 hours/meeting: 20 sessions for returning LITs, 24 for new LITs) • Monthly NLU-Librarian workshop • Bi-monthly coordinator training (5 half day plus 2 full day sessions) • Project director training as needed • LITs technology training including <i>GoKnow</i> (6 hours) <p>Training by SR team, developer and literacy and <i>GoKnow</i> Technology consultants</p>	<p><i>Adequate implementation:</i></p> <p>High = high attendance (>80% for teachers and principals, >90% for LITs) at 4 of 4 core types of professional development activities (initial and follow-up training, weekly LIT meetings, Principal Seminars)</p> <p>Medium = high attendance at some types/moderate attendance at 4 types of professional development (51-79% for teachers, 60-79% for principals, 75-89% for LITs)</p> <p>Overall PD calculated at school-level on scale of 0 – 10 (including whole school plus targeted/intensive intervention training)</p> <p>High = score of 8 – 10 out of 10</p> <p>Medium = score 5.0 - 7.9 out of 10</p>	Same as year 1 with additional support from school-based grade level teams, study groups and cross-site visitations	Not calculated

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Chicago Public Schools, IL (continued)				
<i>Chicago Striving Readers English Language Arts Curriculum and Achieving Maximum Potential (AMP) After-School Program (continued)</i>				
Year 4	<p>Total = 32.5 - 37 hours/teacher plus school-based training</p> <ul style="list-style-type: none"> • 3 day Summer Institute (14 hours) • Quarterly follow-up trainings (18.5 - 23 hours) <p><i>Other district/school staff</i></p> <ul style="list-style-type: none"> • Principal Leadership Seminars half day bi-monthly (3 hours each) • Bi-weekly LIT meetings (6 hours/meeting) • Monthly NLU-Librarian workshop • Bi-monthly coordinator training (5 half day plus 2 full day sessions) • Project director training as needed <p>Training by SR team, developer and literacy consultants</p>	Same as year 3	Same as year 3	Not calculated

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Chicago Public Schools, IL (continued)				
<i>Chicago Striving Readers English Language Arts Curriculum and Achieving Maximum Potential (AMP) After-School Program (continued)</i>				
Year 5	<p>Total = 12 hours/teacher plus school-based training</p> <ul style="list-style-type: none"> Quarterly follow-up trainings focused on working with student data and differentiating instruction, writing Customized on-site training on using laptops, media centers <p><i>Other district/school staff</i></p> <ul style="list-style-type: none"> Principal Leadership Seminars 4 half day sessions (3 - 6 hours each) Coursework series for language arts, content-area teachers NLU <p>Training by SR team, developer and literacy consultants</p>	Not calculated	Same as year 3	Not calculated
Danville School District, KY ²				
<i>Learning Strategies Curriculum</i>				
Year 1	<p>Total = 42 hours/teacher</p> <ul style="list-style-type: none"> 5 half-day summer workshops (3 hours/workshop) 9 half-day follow-up training workshops (3 hours/workshop) <p><i>Other district/school staff</i></p> <ul style="list-style-type: none"> 2 days Leadership Training throughout the school year (6 hours/day) <p>Training by LSC-certified trainer from University of Louisville</p>	<i>Adequate implementation:</i> Full participation = 7 days	<p>Total = up to 60 hours/teacher</p> <ul style="list-style-type: none"> Monthly on-site coaching meeting with certified trainer and CTL mentor coach (6 hours/visit) Mentor coaches provide ongoing support via email, telephone calls, formal distance support 	<i>Adequate implementation:</i> Adequate = 2 visits

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Danville School District, KY ² (continued)				
<i>Learning Strategies Curriculum (continued)</i>				
Year 2	<p><i>New and returning teachers</i> Total = 45 hours/teacher</p> <ul style="list-style-type: none"> • 2 day summer workshops (6 hours/workshop) • 11 half-day follow-up training workshops (3 hours/workshop) <p><i>Other district/school staff</i></p> <ul style="list-style-type: none"> • 1.5 days Leadership Training throughout the school year (6 hours/day) <p>Training by LSC-certified trainer from University of Louisville</p>	<p><i>Adequate implementation:</i> Full participation = 7.5 days</p>	<p>Total = up to 48 hours/teacher</p> <ul style="list-style-type: none"> • 3 - 4 days on-site coaching meeting with certified trainer and CTL mentor coach (6 hours/visit) • Bimonthly distance learning support from CTL mentor coach (est. 1 hour/session) 	Same as year 1
Year 3	<p><i>New and returning teachers</i> Total = 42 hours/teacher</p> <ul style="list-style-type: none"> • 2 day summer workshops (6 hours/workshop) • 10 half-day follow-up training workshops (3 hours/workshop) <p><i>Other district/school staff</i> Same as year 2</p> <p>Training by LSC-certified trainer from University of Louisville</p>	<p><i>Adequate implementation:</i> Full participation = 7 days</p>	<p>Total = up to 72 hours/teacher</p> <ul style="list-style-type: none"> • 1 - 2 days on-site coaching meeting with certified trainer and CTL mentor coach (6 hours/visit) • Bimonthly distance learning support from CTL mentor coach 	Same as year 1
Year 4	<p><i>New and returning teachers</i> Total = 30 hours/teacher</p> <ul style="list-style-type: none"> • 10 half-day follow-up training workshops (3 hours/workshop) <p><i>Other district/school staff</i> Same as year 2</p> <p>Training by LSC-certified trainer from University of Louisville</p>	<p><i>Adequate implementation:</i> Full participation = 4.5 days</p>	<p>Total = up to 60 hours/teacher</p> <ul style="list-style-type: none"> • 1 - 2 days on-site coaching meeting with certified trainer and CTL mentor coach (6 hours/visit) • Bimonthly distance learning support from CTL mentor coach 	Same as year 1

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Danville School District, KY² (continued)				
<i>Learning Strategies Curriculum (continued)</i>				
Year 5	<p><i>New and returning teachers</i> Total = 18 hours/teacher</p> <ul style="list-style-type: none"> • 3 days training <p><i>Other district/school staff</i> Same as year 2</p> <p>Training by LSC-certified trainer from University of Louisville</p>	<p><i>Adequate implementation:</i> Full participation = 3 days</p>	Same as year 4	Same as year 1
Memphis City Schools, TN				
<i>READ 180 Enterprise Edition</i>				
Year 1	<p>Total = 32 hours/teacher</p> <ul style="list-style-type: none"> • 2 days initial training (7 hours/day) • 1 day follow-up training (6 hours) • 6 networking meetings (2 hours/meeting) <p>Training by developer</p>	<p><i>Adequate implementation:</i> Excellent participation (score of 4) = 10 or more points</p> <p>Good participation (score of 3) = 7 - 9 points</p> <p>Participation score = 18 points total</p> <ul style="list-style-type: none"> • 2 points for each of 3 group training days • 1 point for each of 6 networking meetings <p>2 points for each year of READ180 experience (up to 6 points)</p>	None	Not calculated

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Memphis City Schools, TN (continued)				
<i>READ 180 Enterprise Edition (continued)</i>				
Year 2	<p><i>New teachers</i> Total = 28 hours/teacher</p> <ul style="list-style-type: none"> • 2 day initial training (7 hours/day) • Added incentives for Scholastic online training “Best Practices for Reading Intervention” (6 hours) • 4 networking meetings (2 hours/ meeting) <p><i>Returning teachers</i> Total = 21 hours/teacher</p> <ul style="list-style-type: none"> • 1 day of group training (7 hours) • Added incentives for Scholastic online training “Best Practices for Reading Intervention” (6 hours) • 4 networking meetings (2 hours/ meeting) <p>Training by developer</p>	<p><i>Adequate implementation:</i> Excellent participation (score of 4) = 10 or more points</p> <p>Good participation (score of 3) = 7 - 9 points</p> <p>Participation score = 12 points total</p> <ul style="list-style-type: none"> • 1 point for each of 2 training days • 1 point for each of 4 networking meetings • 2 points for one year of READ180 experience (2 or more years = 3 points) • 3 points for completion of online course before Oct 31, 2007 (1.5 points if completed before Jan 31, 2008) 	<p><i>New and returning teachers</i> Total = 4.5 hours/teacher</p> <ul style="list-style-type: none"> • At least 1 class period observation with follow-up meeting by developer or district staff (1.5 hours/session) 	Not calculated
Year 3	<p><i>New teachers</i> Total = 22 hours/teacher</p> <ul style="list-style-type: none"> • 2 days initial training (7 hours/ day) • 4 networking meetings (2 hours/ meeting) <p><i>(continued of following page)</i></p>	<p><i>Adequate implementation:</i> Excellent participation (score of 4) = 10 or more points</p> <p>Good participation (score of 3) = 7–9 points</p> <p><i>(continued of following page)</i></p>	Same as year 2	Not calculated

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Memphis City Schools, TN (continued)				
<i>READ 180 Enterprise Edition (continued)</i>				
Year 3	<p><i>(continued from previous page)</i></p> <p><i>Returning teachers</i> Total = 15 hours/teacher</p> <ul style="list-style-type: none"> • 1 day initial training (7 hours) • 4 networking meetings (2 hours/ meeting) <p><i>Other district/school staff</i> Half-day training for administrators (4 hours)</p> <p>Training by developer</p>	<p><i>(continued from previous page)</i></p> <p>Participation score</p> <p><i>New teachers</i></p> <ul style="list-style-type: none"> • 2 points for each of 2 training days • 1 point for each of 4 networking meetings • 2 points for each year of READ180 experience (2 or more years = 3 points) • 3 points for previously completing online course • 1 point if administrator of school attended training <p><i>Returning teachers</i></p> <ul style="list-style-type: none"> • 2 points for each of 2 training days (also credited with 1 point for each all-day session in prior year) • 1 point for each of 4 networking meetings (also credited with .5 point for each meeting attended in prior year) • 2 points for each year of READ180 experience (2 or more years = 3 points) • 3 points for previously completing online course <p>1 point if administrator of school attended training</p>		

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Memphis City Schools, TN (continued)				
<i>READ 180 Enterprise Edition (continued)</i>				
Year 4	Same as year 3	Same as year 3	At least 1 class period observation with follow-up meeting by district staff (1.5 hours/session)	Not calculated
Year 5	Intervention was not implemented	NA	NA	NA
Newark Public Schools, NJ				
<i>READ 180 Enterprise Edition</i>				
Year 1	<p>Total = 16.5 hours/teacher</p> <ul style="list-style-type: none"> • 2 days initial training (4 hours/day) • 1 follow-up session on use of data (5.5 hours) • 1 conference (2 hours) <p><i>Other district/school staff</i></p> <ul style="list-style-type: none"> • Principal training (2 hours) • Training for school technology coordinators (½ day) <p>Training by developer</p>	<p><i>Adequate implementation:</i></p> <p>Full participation = attend all 4 group training days offered</p> <p>Adequate participation = attend 3 of 4 group training days offered</p>	<ul style="list-style-type: none"> • In-class technical assistance sessions by developer as needed • Ongoing technical assistance by district Resource Teacher Coordinators as needed 	Not calculated

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Newark Public Schools, NJ (continued)				
<i>READ 180 Enterprise Edition (continued)</i>				
Year 2	<p><i>New and returning teachers</i> Total = 13.5 hours/teacher</p> <ul style="list-style-type: none"> • 1 day summer institute (8 hours) • 1 follow-up session on use of data (5.5 hours) <p><i>Other district/school staff</i> Same as year 1</p> <p>Training by developer</p>	Same as year 1	Ongoing technical assistance from district Resource Teacher Coordinators and developer as needed	Not calculated
Year 3	<p><i>New teachers</i> Total = 5.5 hours</p> <ul style="list-style-type: none"> • 1 day group training (5.5 hours) <p><i>Returning teachers</i> None</p> <p>Training by developer</p>	<p><i>Adequate implementation:</i> Full participation = attend group training day offered</p>	Same as year 2	Not calculated
Year 4	<p><i>New teachers</i> Total = 11 hours</p> <ul style="list-style-type: none"> • 2 1-day group training (5.5 hours) <p><i>Returning teachers</i> None</p> <p>Training by developer</p>	<p><i>Adequate implementation:</i> Full participation = attend both group training days offered</p> <p>Adequate participation = attend 1 of 2 group training days offered</p>	Same as year 2	Not calculated
Year 5	<p><i>New teachers</i> Total = 5.5 hours</p> <ul style="list-style-type: none"> • 1 day group training <p><i>Returning teachers</i> None</p> <p>Training by developer</p>	Not calculated	Same as year 2	Not calculated

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Ohio Department of Youth Services (operating as public school education district for youth in juvenile correction facilities)				
<i>READ 180 Enterprise Edition</i>				
Year 1	<p>Total = 15 hours/teacher</p> <ul style="list-style-type: none"> • 2 days initial training (5 hours/day) • Semi-annual follow up training sessions (5 hours) <p>Training by developer</p> <p><i>Other district/school staff</i></p> <ul style="list-style-type: none"> • Principals attend leadership training (5 hours) <p>Training by Ohio Department of Education</p>	<p><i>Adequate implementation:</i></p> <p>High = 75 - 100% of PD activities attended</p> <p>Moderate = 50 - 74% of PD activities attended</p>	<p>Total = 2 visits/teacher</p> <ul style="list-style-type: none"> • Semi-annual visits to each class by developer 	Not calculated
Year 2	<p><i>New and returning teachers</i></p> <p>Total = 10 hours/teacher</p> <ul style="list-style-type: none"> • 2 days initial training (5 hours/day) <p>Training by developer</p>	Same as year 1	Same as year 1	Not calculated
Year 3	<p><i>New and returning teachers</i></p> <p>Total = 11.5 hours/teacher</p> <ul style="list-style-type: none"> • 2 days initial training (5.5 hours one day; 6 hours other day) <p>Training by developer</p>	Same as year 1	Same as year 1	Not calculated
Year 4	<p><i>New and returning teachers</i></p> <p>Total = 6 hours/teacher</p> <ul style="list-style-type: none"> • 2 days group training (3 hours/session) <p>Training by developer</p>	Same as year 1	Same as year 1	Not calculated

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Ohio Department of Youth Services (operating as public school education district for youth in juvenile correction facilities) (continued)				
<i>READ 180 Enterprise Edition (continued)</i>				
Year 5	<i>New and returning teachers</i> Total = 4 hours/teacher <ul style="list-style-type: none"> • Interactive session Training by OSU evaluation team	Same as year 1	Same as year 1	Not calculated
Portland School District, OR				
<i>Xtreme Reading Strategic Instruction Model</i>				
Year 1	Total = 67 hours/teacher <ul style="list-style-type: none"> • 5 days initial summer training with fall makeup (37 hours) • 6 follow-up workshops (30 hours total) <i>Other district/school staff</i> <ul style="list-style-type: none"> • 3 sessions for administrators (7.5 hours total) Training by Strategic Learning Center (SLC) of Seattle, WA, professional trainers hired as consultants to developer	<i>Adequate implementation:</i> High = score of 4 - 5 for participation in PD Medium = score of 3 for participation in PD Participation in PD: 4 = participation in 76 - 100% of PD sessions 3 = participation in 51 - 75% of PD sessions 1 point added to PD attendance score for the absence/presence of a reading endorsement	Total = 28 hours/teacher <ul style="list-style-type: none"> • 14 hours in-class visits by SLC trainer • 14 hours in-class visits by professional developers 	Not calculated
Year 2	<i>New and returning teachers</i> Total = 37 hours/teacher <ul style="list-style-type: none"> • Summer training with fall make-up (37 hours) <i>Other district/school staff</i> <ul style="list-style-type: none"> • Administrator training (6+ hours) Training by SLC	Same as year 1	Same as year 1	Not calculated

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Portland School District, OR (continued)				
<i>Xtreme Reading Strategic Instruction Model (continued)</i>				
Year 3	<p><i>New and returning teachers</i> Total = 76 hours/teacher</p> <ul style="list-style-type: none"> • Summer training (37 hours) • 10 monthly meetings led by district team (3.9 hours/meeting) <p><i>Other district/school staff</i> Same as year 2</p> <p>Training by SLC</p>	Same as year 1	Same as year 1	Not calculated
Year 4	<p><i>New teachers</i> Total = 82.5 hours/teacher</p> <ul style="list-style-type: none"> • Summer training: 22.5 hours • 8 monthly meetings led by district team (7.5 hours per meeting for total of 60 hours) <p><i>Returning teachers</i> Total = 39 hours/teacher</p> <ul style="list-style-type: none"> • Summer training: 15 hours • 8 monthly meetings led by district team (3 hours per meeting for total of 24 hours) <p><i>Other district/school staff</i> Same as year 2</p> <p>Training by SLC and certified district trainers</p>	Same as year 1	Same as year 1	Same as year 1

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Portland School District, OR (continued)				
<i>Xtreme Reading Strategic Instruction Model (continued)</i>				
Year 5	<p><i>New teachers</i> Total = 67.5 hours/teacher</p> <ul style="list-style-type: none"> • Summer training: 22.5 hours • 6 monthly meetings led by district team (7.5 hours per meeting for total of 45 hours) <p><i>Returning teachers</i></p> <ul style="list-style-type: none"> • None required <p>Training by SLC and certified district trainers</p>	Same as year 1	Coaching on an as-needed basis	Not calculated
San Diego Unified School District, CA				
<i>Strategies for Literacy Independence across the Curriculum</i>				
Year 1	<p>Total = 200 hours/teacher</p> <ul style="list-style-type: none"> • Introductory workshops (16 hours) • 3 follow-up training workshops (8 hours/workshop) • Monthly meetings with district staff on implementation (3 hours/month) • 4 rounds of discussions with program consultants (3 – 4 days/round) <p>Training by developers and district leadership</p>	<p><i>Adequate implementation:</i></p> <p>High (score of 3) = attended > 160 of 200 hours of professional development offered</p> <p>Medium (score of 2) = attended 120 – 160 of 200 hours of professional development offered</p>	<p>Total = 360 hours/teacher</p> <ul style="list-style-type: none"> • In-class support by school literacy coaches (2 hours/day; 1 hour observation, 1 hour planning) 	<p><i>Adequate implementation:</i></p> <p>High (score of 3) = received > 288 of 360 hours of planned coaching</p> <p>Medium (score of 2) = received 216 – 288 of 360 hours of planned coaching</p>
Year 2	Same as year 1	Same as year 1	Same as year 1	Same as year 1

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
San Diego Unified School District, CA (continued)				
<i>Strategies for Literacy Independence across the Curriculum (continued)</i>				
Year 3	Same as year 1	Same as year 1	Same as year 1	Same as year 1
Year 4	Same as year 1	Same as year 1	Not calculated	Not calculated
Year 5	District followed a “sustainability” model which meant that there was little or no formal professional development for teachers	Not calculated	Not calculated	Not calculated
Springfield Public Schools and Chicopee Public Schools, MA				
<i>READ 180 Enterprise Edition</i>				
Year 1	<p><i>New teachers</i> Total = 36 hours/teacher</p> <ul style="list-style-type: none"> • 2 days initial training (6 hours/day) • 6 follow-up seminars (3 hours/seminar) • Scholastic online course (7 sessions, 6 hours total) <p><i>Other district/school staff</i></p> <ul style="list-style-type: none"> • Administrator training (1 day) • Facilitator training for online RED courses (½ day) <p>Training by Scholastic, the developer</p>	<p><i>Adequate implementation:</i> Adequate = participated in all professional development activities offered</p>	<p>Total = 16 hours/teacher</p> <ul style="list-style-type: none"> • 8 in-class coaching sessions by developer (1/month, 2 hours/visit) 	<p><i>Adequate implementation:</i> Adequate = participated in all professional development activities offered</p>

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Springfield Public Schools and Chicopee Public Schools, MA (continued)				
<i>READ 180 Enterprise Edition (continued)</i>				
Year 2	<p><i>New teachers</i> Same as year 1</p> <p><i>Returning teachers with 1 year of experience</i> Total = 6 hours/teacher</p> <ul style="list-style-type: none"> • Scholastic online course (7 sessions) <p>Training by Scholastic, the developer</p>	Same as year 1	Same as year 1	Same as year 1
Year 3	<p><i>New teachers</i> Same as year 1</p> <p><i>Returning teachers with 1 year of experience</i> Same as year 2</p> <p><i>Returning teachers with 2 years of experience</i> Total = 12 hours/teacher</p> <ul style="list-style-type: none"> • 2 follow-up seminars (3 hours each) • Scholastic online course (7 sessions, 6 hours total) <p>Training by Scholastic, the developer</p>	Same as year 1	<p><i>New teachers and returning teachers with 1 year of experience</i> Same as year 1</p> <p><i>Returning teachers with 2 years of experience</i> Total = 8 hours/teacher</p> <ul style="list-style-type: none"> • 4 in-class coaching sessions by developer (2 hours/visit) 	Same as year 1

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Springfield Public Schools and Chicopee Public Schools, MA (continued)				
<i>READ 180 Enterprise Edition (continued)</i>				
Year 4	<p><i>New teachers</i> Same as year 1</p> <p><i>Returning teachers with 1 year of experience</i> Same as year 2</p> <p><i>Returning teachers with 2 years of experience</i> Same as year 3</p> <p><i>Returning teachers with 3 years of experience</i> No required activities</p> <p>Training by Scholastic, the developer</p>	Same as year 1	<p><i>New teachers and returning teachers with 1 year of experience</i> Same as year 1</p> <p><i>Returning teachers with 2 years of experience</i> Same as year 2</p> <p><i>Returning teachers with 3 years of experience</i> No coaching required; provided needed</p>	Same as year 1
Year 5	<p><i>New teachers</i> No new teachers</p> <p><i>Returning teachers</i> No required professional development</p>	NA	No coaching provided since there were no new teachers.	Same as year 1
Springfield Public Schools and Chicopee Public Schools, MA (continued)				
<i>Xtreme Reading Strategic Instruction Model</i>				
Year 1	<p>Total = 42 hours/teacher</p> <ul style="list-style-type: none"> 3 days initial training (6 hours/day) 4 full-day quarterly workshops (6 hours/day) <p><i>Other district/school staff</i></p> <ul style="list-style-type: none"> Administrator training (1.5 days) <p><i>(continued on following page)</i></p>	<p><i>Adequate implementation:</i> Adequate = participated in all professional development activities offered</p>	<p>Total = 16 hours/teacher</p> <ul style="list-style-type: none"> 8 in-class visits (1/month, 2 hours/visit) by SLC trainer 	<p><i>Adequate implementation:</i> Adequate = participated in all professional development activities offered</p>

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Springfield Public Schools and Chicopee Public Schools, MA (continued)				
<i>Xtreme Reading Strategic Instruction Model (continued)</i>				
Year 1	<i>(continued from previous page)</i> Training by Strategic Learning Center (SLC) of Seattle, WA, professional trainers hired as consultants to developer			
Year 2	<i>New teachers</i> Total = 42 hours/teacher • 2 days initial training covering same material (6 hours/day) • 5 full-day quarterly workshops (6 hours/day) <i>Returning teachers</i> Total = 6 hours/teacher • 1 full-day workshop (6 hours) Training by SLC	Same as year 1	Total = 18 hours/teacher • 9 in-class visits (1/month, 2 hours/visit) by SLC trainer	Same as year 1
Year 3	<i>New teachers</i> Total = 36 hours/teacher Same as year 2 but 4 full-day workshops instead of 5 (6 hours/day) <i>Returning teachers</i> None	Same as year 1	Same as year 2	Same as year 1
Year 4	No required training; only, provided as needed according to criteria developed by trainers	Not calculated	No required coaching; up to 9 visits provided as needed.	Not calculated
Year 5	No required training; only, provided as needed according to criteria developed in Year 4	Not calculated	No required coaching; up to 9 visits provided as needed.	Not calculated
Source: Striving Readers Year 5 Evaluation Reports (available at: http://www.ed.gov/programs/strivingreaders/performance.html)				

¹ Year refers to implementation year. Year 1- 2006-07 school year; Year 2- 2007-08 school year; Year 3- 2008-09 school year; Year 4-2009-10 school year; Year 5- 2010-11 school year.

² The six other participating districts are: Bullitt County School District, Eminence Independent, Jessamine County, Pike County, Rowan County, and Washington County.

Summary of 2006 Striving Readers Projects: Targeted Interventions for Struggling Readers

Table 4: Targeted Interventions: Elements of Planned Classroom Instruction Model and Definitions of *Adequate Implementation*

Elements of Planned Classroom Model	Level Required for Adequate Implementation
Chicago Public Schools, IL	
<i>Chicago Striving Readers English Language Arts Curriculum and Achieving Maximum Potential (AMP) After-School Program</i>	
Years 1 - 5	<p>Elements in rating:</p> <ul style="list-style-type: none"> • Teacher/LIT collaboration • Direct instruction in comprehension • Purposeful assessment & data driven instruction • Increased instructional time • Small-group setting • Materials
	<p><i>Adequate implementation:</i></p> <p>High implementation= average score of 8 – 10 out of 10</p> <p>Medium implementation = average score of 5.0 – 7.9 out of 10</p> <p>Fidelity = presence of 6 components each rated on a 10-point scale, where low scores indicate that none of key program characteristics are being implemented and 10 indicates all key components are being implemented with expected regularity. Scores averaged to create total fidelity across components</p> <p>Not calculated in Year 5</p>
Danville School District, KY ¹	
<i>Learning Strategies Curriculum</i>	
Years 1 - 5	<p>Elements in rating:</p> <ul style="list-style-type: none"> • Minutes engaged in intervention activities • Time students received instruction by trained LSC teacher (measured by teacher attendance)
	<p>No criterion established for adequacy; average % of time in LSC activities is reported</p>

Elements of Planned Classroom Model	Level Required for Adequate Implementation
Memphis City Schools, TN	
<i>READ 180 Enterprise Edition</i>	
<p style="text-align: center; color: #0056b3;">Years 1 - 4</p> <p>Elements in rating:</p> <ul style="list-style-type: none"> • Data from Scholastic Achievement Manager (SAM) <ul style="list-style-type: none"> – Student time on READ 180 software (daily and weekly) • Data from classroom observations <ul style="list-style-type: none"> – Timing of the class (4, twenty minute segments and 1, ten minute segment) – Size of small groups – Classroom space and layout – Content and student engagement in whole group instruction, small group instruction, computer and independent reading rotations – Use of Scholastic <i>flexBook/rBook²</i> and/or other <i>READ180</i> materials for instruction – Class atmosphere • Data from teacher surveys (Year 1 only) <ul style="list-style-type: none"> – use of Red Routines, SAM reports, purposeful strategies for forming small groups – when CD player, READ 180 teacher supplies, computers, software, eBooks were received – availability of working computers, software, other technology • Data from student surveys (Years 2 and 3) <ul style="list-style-type: none"> – # of books read during independent reading – # of workshops 	<p><i>Adequate implementation:</i></p> <p>High implementation = average score of 3.1 - 4</p> <p>Medium implementation = average score of 2.1 - 3</p> <p>Implementation scored on 4-point scale separately for observations and SAM data (years 1-4), student surveys (years 2-3), and teacher survey (year 1)</p>
<p style="text-align: center; color: #0056b3;">Year 5</p> <p>Intervention was not implemented</p>	<p>NA</p>

Elements of Planned Classroom Model		Level Required for Adequate Implementation
Newark Public Schools, NJ		
<i>READ 180 Enterprise Edition</i>		
Years 1 - 4	<p>Elements in rating:</p> <ul style="list-style-type: none"> • Class size (% of sections meeting class size requirement of no more than 21 students) • Ongoing student assessments (% of students with ≥ 3 administrations of SRI) • Use of instructional software by students (% of students with required exposure of at least 3 times/week for 15 minutes each session) 	<p><i>Adequate implementation:</i></p> <p><i>Class size:</i> High implementation (score of 4) = 75 - 100% of sections meeting size requirements</p> <p>Moderate-to-High implementation (score of 3) = 50 - 74% of sections meeting size requirements</p> <p><i>Student assessments:</i> High implementation (score of 4) = 75 - 100% of students with adequate number of assessments</p> <p>Moderate-to-High implementation (score of 3) = 50 - 74% of students with adequate number of assessments</p> <p><i>Instructional software:</i> High implementation (score of 4) = 75 - 100% of students with adequate exposure to software</p> <p>Moderate-to-High implementation (score of 3) = 50 - 74% of students with adequate exposure to software</p>
Year 5	Implementation not studied	Not calculated
Ohio Department of Youth Services (operating as public school education district for youth in juvenile correction facilities)		
<i>READ 180 Enterprise Edition</i>		
Years 1 - 5	<p>Elements in rating:</p> <ul style="list-style-type: none"> • Overall instructional time spent on READ 180 each day 	<p><i>Adequate implementation:</i></p> <p>High implementation = 80 or more minutes of instruction</p> <p>Moderate implementation = 74 – 79 minutes of instruction</p>

Elements of Planned Classroom Model		Level Required for Adequate Implementation
Portland School District, OR		
<i>Xtreme Reading Strategic Instruction Model</i>		
Years 1 - 5	<p>Elements in rating:</p> <ul style="list-style-type: none"> • Percent of expected activities completed during an Xtreme reading lesson <ul style="list-style-type: none"> – Year 1: 1 observation/classroom – Years 2-3: 3-5 observations/classroom – Year 4: 4-8 observations/classroom 	<p><i>Adequate implementation:</i> High implementation (score of 4) = 90% or more of expected activities completed</p> <p>Medium implementation (score of 3) = 80 – 89% of expected activities completed</p> <p>Percentages for each observation averaged to determine an implementation fidelity rating for each school</p>
San Diego Unified School District, CA		
<i>Strategies for Literacy Independence across the Curriculum</i>		
Years 1 - 5	<p>Elements in rating:</p> <ul style="list-style-type: none"> • Use of grade-level texts • Scaffolding to independence • Coverage of curriculum (SLIC Scope and Sequence) • Assessment of student needs/differentiation of instruction • Metacognition 	<p><i>Adequate implementation:</i> High implementation = average score of 2.5 out of 3</p> <p>Medium implementation = average score of 1.5 – 2.5 out of 3</p> <p>Score based on ratings of each of 5 components on a 3-point scale. Years 2 -4 only, based on observations in different subsets of classrooms (different observation measure each year).</p> <p>Not calculated in Year 5</p>
Springfield Public Schools and Chicopee Public Schools, MA		
<i>READ 180 Enterprise Edition</i>		
Years 1 - 5	<p>Elements in rating:</p> <ul style="list-style-type: none"> • Instructional practices (use of structured content, research-based instructional methods, responsive teaching) • Dosage (use of rotations, pacing over year, amount of instructional time) • Use of materials and/or technology • Use of assessments to inform instruction 	<p><i>Adequate implementation:</i> Adequate implementation (score of 4) = average score on adequacy $\geq 75\%$</p> <p>Moderate implementation (score of 3) = average score on adequacy 50 – 74%</p> <p>Overall implementation score is the sum of binary ratings for each of 4 components (1 = adequate, 0 = not adequate)</p>

Elements of Planned Classroom Model	Level Required for Adequate Implementation
Springfield Public Schools and Chicopee Public Schools, MA	
<i>Xtreme Reading Strategic Instruction Model</i>	
Years 1 - 5	<p>Elements in rating:</p> <ul style="list-style-type: none"> • Instructional practices (use of structured content, research-based instructional methods, responsive teaching) • Dosage (pacing over year, amount of instructional time) • Use of materials and/or technology • Use of assessments to inform instruction <p><i>Adequate implementation:</i> Adequate implementation (score of 4) = average score on adequacy $\geq 75\%$</p> <p>Moderate implementation (score of 3) = average score on adequacy 50 – 74%</p> <p>Overall implementation score is the sum of binary ratings for each of 4 components (1 = adequate, 0 = not adequate)</p>
<p>Source: Striving Readers Year 5 Evaluation Reports (available at: http://www.ed.gov/programs/strivingreaders/performance.html)</p>	

¹ The six other participating districts are: Bullitt County School District, Eminence Independent, Jessamine County, Pike County, Rowan County, and Washington County.

² Classes alternated eBooks and flexBooks so students did not get same textbook twice.

Summary of 2006 Striving Readers Projects: Targeted Interventions for Struggling Readers

Table 5: Targeted Interventions: Actual Levels of Implementation of Professional Development, Coaching, and Classroom Instruction Models and Combined Model

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Chicago Public Schools, IL				
<i>Chicago Striving Readers English Language Arts Curriculum and Achieving Maximum Potential (AMP) After-School Program</i>				
Year 1	Attendance rates by component: Summer Institute ~ 87% Follow-up trainings (school year institutes) = 79% Saturday Seminars = 67%	Not calculated	Not calculated	Not calculated
Year 2	<p><i>Overall²</i> 3% of schools with high participation 71% of schools with medium participation</p> <p><i>Cohort 1</i> 6% with high participation 75% with medium participation</p> <ul style="list-style-type: none"> • Summer Institute, 87% • Follow-up trainings, 33% • Saturday Seminars, 22% • Principal Seminars, 61% • LIT weekly meetings, 69% <p><i>(continued on following page)</i></p>	Not calculated	<p><i>Targeted Intervention Overall</i> 0% of schools with high implementation 84% of schools with medium implementation</p> <p><i>Cohort 1</i> 0% with high implementation 81% with medium implementation</p> <p><i>Cohort 2</i> 0% with high implementation 87% with medium implementation</p> <p><i>(continued on following page)</i></p>	Not calculated ³

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Chicago Public Schools, IL (continued)				
<i>Chicago Striving Readers English Language Arts Curriculum and Achieving Maximum Potential (AMP) After-School Program (continued)</i>				
Year 2	<p><i>(continued from previous page)</i></p> <p><i>Cohort 2</i> 0% with high participation 67% with medium participation</p> <ul style="list-style-type: none"> • Summer Institute, 79% • Follow-up trainings, 53% • Saturday Seminars, 32% • Principal Seminars, 55% • LIT weekly meetings, 66% 	Not calculated	<p><i>(continued from previous page)</i></p> <p><i>Intensive Intervention Overall</i> 42% of schools with high implementation 55% of schools with medium implementation</p> <p><i>Cohort 1</i> 63% with high implementation 37% with medium implementation</p> <p><i>Cohort 2</i> 20% with high implementation 73% with medium implementation</p>	Not calculated ⁴
Year 3	<p><i>Overall²</i> 0% of schools with high participation 87% of schools with medium participation</p> <p><i>Cohort 1</i> 0% with high participation 75% with medium participation</p> <p><i>Cohort 2</i> 0% with high participation 100% with medium participation</p>	Not calculated	<p><i>Targeted Intervention Overall (% of schools)</i> 64% with high implementation 36% with medium implementation</p> <p><i>Cohort 1</i> 75% with high implementation 25% with medium implementation</p> <p><i>Cohort 2</i> 53% with high implementation 47% with medium implementation</p> <p><i>(continued on following page)</i></p>	Not calculated ⁵

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Chicago Public Schools, IL (continued)				
<i>Chicago Striving Readers English Language Arts Curriculum and Achieving Maximum Potential (AMP) After-School Program (continued)</i>				
Year 3			<p><i>(continued from previous page)</i></p> <p><i>Intensive Intervention (% of schools)</i> <i>Overall</i> 68% with high implementation 32% with medium implementation</p> <p><i>Cohort 1</i> 63% with high implementation 37% with medium implementation</p> <p><i>Cohort 2</i> 74% with high implementation 27% with medium implementation</p>	
Year 4	<p><i>Overall² (% of schools)</i> 62% with high participation 38% with medium participation</p> <p><i>Cohort 1</i> 81% with high participation 19% with medium participation</p> <p><i>Cohort 2</i> 38% with high participation 62% with medium participation</p>	Not calculated	<p><i>Targeted Intervention Overall (% of schools)</i> 0% with high implementation 84% with medium implementation</p> <p><i>Cohort 1</i> 0% with high implementation 81% with medium implementation</p> <p><i>(continued on following page)</i></p>	Not calculated ⁶

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Chicago Public Schools, IL (continued)				
<i>Chicago Striving Readers English Language Arts Curriculum and Achieving Maximum Potential (AMP) After-School Program (continued)</i>				
Year 4			<p><i>(continued from previous page)</i></p> <p><i>Cohort 2</i> 0% with high implementation 87% with medium implementation</p> <p><i>Intensive Intervention (% of schools)</i> <i>Overall</i> 42% with high implementation 55% with medium implementation</p> <p><i>Cohort 1</i> 63% with high implementation 37% with medium implementation</p> <p><i>Cohort 2</i> 20% with high implementation 73% with medium implementation</p>	Not calculated ^f
Year 5	Not calculated	Not calculated	Not calculated	Not calculated

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Danville School District, KY⁸				
<i>Learning Strategies Curriculum</i>				
Year 1	<p><i>All schools</i> 100% of teachers with full participation</p> <p><i>Middle schools</i> 100% of teachers with full participation</p> <p><i>High schools</i> 100% of teachers with full participation</p> <p><i>Schools with grades 6–12</i> 100% of teachers with full participation</p>	<p><i>All schools</i> 100% of teachers with full participation</p> <p><i>Middle schools</i> 100% of teachers with full participation</p> <p><i>High schools</i> 100% of teachers with full participation</p> <p><i>Schools with grades 6–12</i> 100% of teachers with full participation</p>	<p><i>Grade 6</i> Average % time in LSC activities = 59%</p> <p>Average % teacher attendance = 91%</p> <p><i>Grade 9</i> Average % time in LSC activities = 70%</p> <p>Average % teacher attendance = 91%</p>	Not calculated
Year 2	<p><i>All schools</i> 100% of teachers with full participation</p> <p><i>Middle schools</i> 100% of teachers with full participation</p> <p><i>High schools</i> 100% of teachers with full participation</p> <p><i>Schools with grades 6–12</i> 100% of teachers with full participation</p>	<p><i>All schools</i> 100% of teachers with full participation</p> <p><i>Middle schools</i> 100% of teachers with full participation</p> <p><i>High schools</i> 100% of teachers with full participation</p> <p><i>Schools with grades 6–12</i> 100% of teachers with full participation</p>	<p><i>Grade 6</i> Average % time in LSC activities = 80%</p> <p>Average % teacher attendance = 78%</p> <p><i>Grade 9</i> Average % time in LSC activities = 79%</p> <p>Average % teacher attendance = 88%</p>	Not calculated

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Danville School District, KY⁹ (continued)				
<i>Learning Strategies Curriculum (continued)</i>				
Year 3	<p><i>All schools</i> 100% of teachers with full participation</p> <p><i>Middle schools</i> 100% of teachers with full participation</p> <p><i>High schools</i> 100% of teachers with full participation</p> <p><i>Schools with grades 6–12</i> 100% of teachers with full participation</p>	<p><i>All schools</i> 100% of teachers with full participation</p> <p><i>Middle schools</i> 100% of teachers with full participation</p> <p><i>High schools</i> 100% of teachers with full participation</p> <p><i>Schools with grades 6–12</i> 100% of teachers with full participation</p>	<p><i>Grade 6</i> Average % time in LSC activities = 87%</p> <p>Average % teacher attendance = 82%</p> <p><i>Grade 9</i> Average % time in LSC activities = 87%</p> <p>Average % teacher attendance = 87%</p>	Not calculated
Year 4	<p><i>All schools</i> 100% of teachers with full participation</p> <p><i>Middle schools (grade 7)</i> 100% of teachers with full participation</p> <p><i>High schools (grade 10)</i> 100% of teachers with full participation</p> <p><i>Schools with grades 6–12</i> 100% of teachers with full participation</p>	<p><i>All schools</i> 100% of teachers with full participation</p> <p><i>Middle schools (grade 7)</i> 100% of teachers with full participation</p> <p><i>High schools (grade 10)</i> 100% of teachers with full participation</p> <p><i>Schools with grades 6–12</i> 100% of teachers with full participation</p>	<p><i>Middle schools (grade 7)</i> Average % time in LSC activities = 88%</p> <p>Average % teacher attendance = 84%</p> <p><i>High schools (grade 10)</i> Average % time in LSC activities = 83%</p> <p>Average % teacher attendance = 85%</p>	Not calculated

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Danville School District, KY¹⁰ (continued)				
<i>Learning Strategies Curriculum (continued)</i>				
Year 5	<p><i>All schools</i> 100% of teachers with full participation</p> <p><i>Middle schools</i> 100% of teachers with full participation</p> <p><i>High schools</i> 100% of teachers with full participation</p> <p><i>School with grades 6–12</i> 100% of teachers with full participation</p>	<p><i>All schools</i> 67% of teachers with full participation</p> <p><i>Middle schools</i> 50% of teachers with full participation</p> <p><i>High schools</i> 100% of teachers with full participation</p> <p><i>School with grades 6–12</i> 100% of teachers with full participation</p>	<p><i>Grade 7</i> 76% of teachers with adequate time in supplemental class</p> <p>Average % teacher attendance = 88%</p> <p><i>Grade 10</i> 100% of teachers with adequate time in supplemental class</p> <p>Average % teacher attendance = 87%</p>	Not calculated
Memphis City Schools, TN				
<i>READ 180 Enterprise Edition</i>				
Year 1	68% of teachers with adequate participation	Not calculated	<p>63% of teachers adequate (observation data)</p> <p>79% of teachers adequate (teacher survey data)</p> <p>42% of teachers adequate (SAM computerized data)</p>	<p><i>Overall implementation rating (% teachers):</i> (includes PD, observation, teacher survey, SAM ratings)</p> <p>42% with adequate fidelity</p>
Year 2	74% of teachers with adequate participation	Not calculated	<p>78% of teachers adequate (observation data)</p> <p>84% of teachers adequate (teacher survey data)</p> <p>53% of teachers adequate (SAM computerized data)</p>	<p><i>Overall implementation rating (% teachers):</i> 63% with adequate fidelity</p>

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Memphis City Schools, TN (continued)				
<i>READ 180 Enterprise Edition (continued)</i>				
Year 3	79% of teachers with adequate participation	Not calculated	79% of teachers adequate (observation data) 84% of teachers adequate (teacher survey data) 58% of teachers adequate (SAM computerized data)	<i>Overall implementation rating (% teachers):</i> 74% with adequate fidelity
Year 4	88% of teachers with adequate participation	Not calculated	88% of teachers adequate (observation data) 69% of teachers adequate (SAM computerized data)	<i>Overall implementation rating (% teachers):</i> (no teacher data) 81% adequate fidelity
Year 5	Intervention not implemented	NA	NA	NA
Newark Public Schools, NJ				
<i>READ 180 Enterprise Edition</i>				
Year 1	56% of teachers with high participation 22% of teachers with moderate-to-high participation	Not calculated	<i>Class size</i> 74% of classrooms with high implementation 13% of classrooms with moderate-to-high implementation <i>Student assessments</i> 91% of classrooms with high implementation (continued on following page)	Not calculated

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Newark Public Schools, NJ (continued)				
<i>READ 180 Enterprise Edition (continued)</i>				
Year 1			<p><i>(continued from previous page)</i></p> <p>5% of classrooms with moderate-to-high implementation</p> <p><i>Instructional software</i> 65% of classrooms with high implementation</p> <p>26% of classrooms with moderate-to-high implementation</p>	
Year 2	<p>8% of teachers with high participation</p> <p>24% of teachers with moderate-to-high participation</p>	Not calculated	<p><i>Class size</i> 100% of classrooms with high implementation</p> <p><i>Student assessments</i> 100% of classrooms with high implementation</p> <p><i>Instructional software</i> 9% of classrooms with high implementation</p> <p>0% of classrooms with moderate-to-high implementation</p>	Not calculated

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Newark Public Schools, NJ				
<i>READ 180 Enterprise Edition</i>				
Year 3	Not calculated ¹¹	Not calculated	<p><i>Overall</i> 90% of schools with high implementation</p> <p>10% of schools with moderate-to-high implementation</p> <p><i>Class size</i> 95% of classrooms with high implementation</p> <p>0% of classrooms with moderate-to-high implementation</p> <p><i>Student assessments</i> 100% of classrooms with high implementation</p> <p><i>Instructional software</i> 18% of classrooms with high implementation</p> <p>32% of classrooms with moderate-to-high implementation</p>	Not calculated

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Newark Public Schools, NJ (continued)				
<i>READ 180 Enterprise Edition (continued)</i>				
Year 4	<p><i>Returning teachers</i> Not calculated for returning teachers (no PD offered)</p> <p><i>New teachers</i> 40% of teachers with high participation 60% of teachers with moderate participation</p>	Not calculated	<p><i>Overall</i> 40% of schools with high implementation 60% of schools with moderate-to-high implementation</p> <p><i>Class size</i> 100% of classrooms with high implementation</p> <p><i>Student assessments</i> 100% of classrooms with high implementation</p> <p><i>Instructional software</i> 0% of classrooms with high implementation 10% of classrooms with moderate-to-high implementation</p>	Not calculated
Year 5	No additional professional development for new or returning teachers—not calculated	Not calculated	Not calculated	Not calculated
Ohio Department of Youth Services (operating as public school education district for youth in juvenile correction facilities)				
<i>READ 180 Enterprise Edition</i>				
Year 1	<p>71% of teachers with high staff participation in professional development</p> <p>29% of teachers with moderate staff participation in professional development</p>	Not calculated	<p>14% of teachers with high implementation</p> <p>71% of teachers with moderate implementation</p>	Not calculated

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Ohio Department of Youth Services (operating as public school education district for youth in juvenile correction facilities) (continued)				
<i>READ 180 Enterprise Edition (continued)</i>				
Year 2	100% of teachers with high staff participation in professional development	Not calculated	43% of teachers with high implementation 43% of teachers with moderate implementation	Not calculated
Year 3	28% of teachers with high staff participation in professional development 28% of teachers with moderate staff participation in professional development	Not calculated	43% of teachers with high implementation 28% of teachers with moderate implementation	Not calculated
Year 4	80% of teachers with high staff participation in professional development 0% of teachers with moderate staff participation in professional development	Not calculated	20% of teachers with high implementation 40% of teachers with moderate implementation	Not calculated
Year 5	80% of teachers with high staff participation in professional development 20% of teachers with moderate staff participation in professional development	Not calculated	20% of teachers with high implementation 20% of teachers with moderate implementation	Not calculated

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Portland School District, OR				
<i>Xtreme Reading Strategic Instruction Model</i>				
Year 1	<p><i>All schools</i> 44% of teachers with high participation</p> <p>33% of teachers with moderate participation</p> <p><i>Middle schools</i> 60% of teachers with high participation</p> <p>40% of teachers with moderate participation</p> <p><i>High schools</i> 25% of teachers with high participation</p> <p>25% of teachers with moderate participation</p>	Not calculated	<p><i>All schools</i> 44% of teachers with high implementation</p> <p>33% of teachers with moderate implementation</p> <p><i>Middle schools</i> 80% of teachers with high implementation</p> <p>0% of teachers with moderate implementation</p> <p><i>High schools</i> 0% of teachers with high implementation</p> <p>75% of teachers with moderate implementation</p>	<p><i>Overall implementation (includes PD, classroom implementation and teacher buy-in¹²)</i></p> <p><i>All schools</i> 22% of schools with high implementation scores in 3 areas</p> <p>33% of schools with moderate-high implementation in 3 areas</p> <p>11% of schools with moderate implementation scores in 3 areas</p> <p><i>Middle schools</i> 40% of schools with high implementation in 3 areas</p> <p>40% of schools with moderate - high implementation in 3 areas</p> <p>0% with moderate implementation in 3 areas</p> <p><i>High schools</i> 25% of schools with moderate - high implementation in 3 areas</p> <p>25% of schools with moderate implementation in 3 areas</p>

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Portland School District, OR (continued)				
<i>Xtreme Reading Strategic Instruction Model (continued)</i>				
Year 2	<p><i>All schools</i> 89% of teachers with high participation</p> <p>11% of teachers with moderate participation</p> <p><i>Middle schools</i> 100% of teachers with high participation</p> <p><i>High schools</i> 75% of teachers with high participation</p> <p>25% of teachers with moderate participation</p>	Not calculated	<p><i>All schools</i> 25% of teachers with high implementation</p> <p>38% of teachers with moderate implementation</p> <p><i>Middle schools</i> 40% of teachers with high implementation</p> <p>60% of teachers with moderate implementation</p> <p><i>High schools</i> 0% of teachers with high implementation</p> <p>0% of teachers with moderate implementation</p>	<p><i>Overall implementation (includes PD, classroom implementation and teacher buy-in⁸)</i></p> <p><i>All schools</i> 50% of schools with high implementation in 3 areas</p> <p>30% of schools with moderate-high implementation in 3 areas</p> <p>0% of schools with moderate implementation in 3 areas</p> <p><i>Middle schools</i> 67% of schools with high implementation in 3 areas</p> <p>17% of schools with moderate - high implementation in 3 areas</p> <p>0% with moderate implementation in 3 areas</p> <p><i>High schools</i> 0% of schools with high implementation in 3 areas</p> <p>0% of schools with moderate - high implementation in 3 areas</p> <p>0% of schools with moderate implementation in 3 areas</p>

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Portland School District, OR (continued)				
<i>Xtreme Reading Strategic Instruction Model (continued)</i>				
Year 3	<p><i>All schools</i> 85% of teachers with high participation</p> <p>8% of teachers with moderate participation</p> <p><i>Middle schools</i> 100% of teachers with high participation</p> <p><i>High schools</i> 75% of teachers with high participation</p> <p>25% of teachers with moderate participation</p>	Not calculated	<p><i>All schools</i> 50% of teachers with high implementation</p> <p>30% of teachers with moderate implementation</p> <p><i>Middle schools</i> 67% of teachers with high implementation</p> <p>17% of teachers with moderate implementation</p> <p><i>High schools</i> 25% of teachers with high implementation</p> <p>50% of teachers with moderate implementation</p>	<p><i>Overall implementation (includes PD, classroom implementation and teacher buy-in⁸)</i></p> <p><i>All schools</i> 50% of schools with high implementation in 3 areas</p> <p>30% of schools with moderate-high implementation in 3 areas</p> <p>0% of schools with moderate implementation in 3 areas</p> <p><i>Middle schools</i> 67% of schools with high implementation in 3 areas</p> <p>17% of schools with moderate - high implementation in 3 areas</p> <p>0% with moderate implementation in 3 areas</p> <p><i>High schools</i> 0% of schools with high implementation in 3 areas</p> <p>0% of schools with moderate - high implementation in 3 areas</p> <p>0% of schools with moderate implementation in 3 areas</p>

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Portland School District, OR (continued)				
<i>Xtreme Reading Strategic Instruction Model (continued)</i>				
Year 4	<p><i>All schools</i> 90% of teachers with high participation</p> <p>10% of teachers with moderate participation</p> <p><i>Middle schools</i> 100% of teachers with high participation</p> <p><i>High schools</i> 75% of teachers with high participation</p> <p>25% of teachers with moderate participation</p>	Not calculated	<p><i>All schools</i> 40% of teachers with high implementation</p> <p>30% of teachers with moderate implementation</p> <p><i>Middle schools</i> 50% of teachers with high implementation</p> <p>33% of teachers with moderate implementation</p> <p><i>High schools</i> 25% of teachers with high implementation</p> <p>25% of teachers with moderate implementation</p>	<p><i>Overall implementation (includes PD, classroom implementation and teacher buy-in⁸)</i></p> <p><i>All schools</i> 20% of schools with high implementation in 3 areas</p> <p>50% of schools with moderate-to-high implementation in 3 areas</p> <p><i>Middle schools</i> 33% of schools with high implementation in 3 areas</p> <p>50% with moderate-to-high implementation in 3 areas</p> <p><i>High schools</i> 0% of schools with high implementation in 3 areas</p> <p>50% of schools with moderate-to-high implementation in 3 areas</p>

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Portland School District, OR (continued)				
<i>Xtreme Reading Strategic Instruction Model (continued)</i>				
Year 5	<p><i>All Striving Readers schools (n=10)</i> 90% of teachers with high participation</p> <p>10% of teachers with moderate participation</p> <p><i>Middle schools</i> 100% of teachers with high participation</p> <p><i>High schools</i> 75% of teachers with high participation</p> <p>25% of teachers with moderate participation</p> <p><i>New Year 5 schools (n=10 schools all serving middle school grades)</i> 70% of teachers with high participation</p> <p>30% of teachers with moderate participation</p>	Not calculated	<p><i>All Striving Readers schools (n = 10)</i> 20% of teachers with high implementation</p> <p>50% of teachers with moderate implementation</p> <p><i>Middle schools</i> 33% of teachers with high implementation</p> <p>50% of teachers with moderate implementation</p> <p><i>High schools</i> 0% of teachers with high implementation</p> <p>50% of teachers with moderate implementation</p> <p><i>New Year 5 schools (n=10 schools all serving middle school grades)</i> 30% of teachers with high implementation</p> <p>40% of teachers with moderate implementation</p>	Not calculated

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
San Diego Unified School District, CA				
<i>Strategies for Literacy Independence across the Curriculum</i>				
Year 1	<p><i>All schools</i> 60% of schools with high participation</p> <p>40% of schools with medium participation</p> <p><i>Middle schools</i> 67% of schools with high participation</p> <p>33% of schools with medium participation</p> <p><i>High schools</i> 50% of schools with high participation</p> <p>50% of schools with medium participation</p>	<p><i>All schools</i> 60% of schools with high participation</p> <p>40% of schools with medium participation</p> <p><i>Middle schools</i> 67% of schools with high participation</p> <p>33% of schools with medium participation</p> <p><i>High schools</i> 50% of schools with high participation</p> <p>50% of schools with medium participation</p>	Not calculated	Not calculated
Year 2	<p><i>All schools</i> 0% of schools with high participation</p> <p>13% of schools with medium participation</p> <p><i>Continued next page</i></p>	<p><i>All schools</i> 13% of schools with high participation</p> <p>88% of schools with medium participation</p> <p><i>Continued next page</i></p>	<p><i>All schools</i> 0% of schools with high implementation</p> <p>88% of schools with medium implementation</p> <p><i>Continued next page</i></p>	<p><i>Overall implementation rating:</i> (average of PD adequacy and classroom adequacy scores)</p> <p>0% of schools with high fidelity</p> <p>75% of schools with medium fidelity</p>

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
San Diego Unified School District, CA (continued)				
<i>Strategies for Literacy Independence across the Curriculum (continued)</i>				
Year 2	<i>Continued from previous page</i>	<i>Continued from previous page</i>	<i>Continued from previous page</i>	
	<i>Middle schools</i> 0% of schools with high participation	<i>Middle schools</i> 0% of schools with high participation	<i>Middle schools</i> 0% of schools with high implementation	
	0% of schools with medium participation	100% of schools with medium participation	75% of schools with medium implementation	
	<i>High schools</i> 0% of schools with high participation	<i>High schools</i> 25% of schools with high participation	<i>High schools</i> 0% of schools with high implementation	
25% of schools with medium participation	75% of schools with medium participation	100% of schools with medium implementation		
Year 3	<i>All schools</i> 0% of schools with high participation	<i>All schools</i> 25% of schools with high participation	<i>All schools</i> 0% of schools with high implementation	<i>Overall implementation rating:</i> (average of PD adequacy and classroom adequacy scores) 0% of schools with high fidelity 100% of schools with medium fidelity
	25% of schools with medium participation	75% of schools with medium participation	100% of schools with medium implementation	
	<i>Middle schools</i> 0% of schools with high participation	<i>Middle schools</i> 25% of schools with high participation	<i>Middle schools</i> 0% of schools with high implementation	
	25% of schools with medium participation	75% of schools with medium participation	100% of schools with medium implementation	
	<i>Continued next page</i>	<i>Continued next page</i>	<i>Continued next page</i>	

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
San Diego Unified School District, CA (continued)				
<i>Strategies for Literacy Independence across the Curriculum (continued)</i>				
Year 3	<p><i>Continued from previous page</i></p> <p><i>High schools</i> 0% of schools with high participation</p> <p>25% of schools with medium participation</p>	<p><i>Continued from previous page</i></p> <p><i>High schools</i> 25% of schools with high participation</p> <p>75% of schools with medium participation</p>	<p><i>Continued from previous page</i></p> <p><i>High schools</i> 0% of schools with high implementation</p> <p>100% of schools with medium implementation</p>	
Year 4	<p><i>All schools</i> 12% of schools with high participation</p> <p>37% of schools with medium participation</p> <p><i>Middle schools</i> 0% of schools with high participation</p> <p>50% of schools with medium participation</p> <p><i>High schools</i> 25% of schools with high participation</p> <p>25% of schools with medium participation</p>	Not calculated ¹³	<p><i>All schools</i> 0% of schools with high implementation</p> <p>100% of schools with medium implementation</p> <p><i>Middle schools</i> 0% of schools with high implementation</p> <p>100% of schools with medium implementation</p> <p><i>High schools</i> 0% of schools with high implementation</p> <p>100% of schools with medium implementation</p>	<p><i>Overall implementation rating:</i> (average of PD adequacy and classroom adequacy scores—year 4 does not include coaching adequacy in overall rating)</p> <p>0% of schools with high fidelity</p> <p>100% of schools with medium fidelity</p>

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
San Diego Unified School District, CA (continued)				
<i>Strategies for Literacy Independence across the Curriculum (continued)</i>				
Year 5	Developer and leadership PD support differed considerably by school	Not calculated	Among high school teachers' use of SLIC instructional strategies, there was "little overall drop in fidelity of classroom instruction." Considerable variation among SLIC teachers, with experienced SLIC teachers giving consistently high ratings on their SLIC practices.	Not calculated
Springfield Public Schools and Chicopee Public Schools, MA				
<i>READ 180 Enterprise Edition</i>				
Year 1	<p><i>Overall professional development:</i> 33% of teachers with adequate participation</p> <p>33% of teachers with moderate participation</p> <p><i>Initial training:</i> 100% of teachers with adequate participation</p> <p><i>Ongoing workshops:</i> 50% of teachers with adequate participation</p>	0% of teachers with adequate participation	<p>50% of teachers with adequate implementation</p> <p>0% of teachers with moderate implementation</p>	<p><i>Overall score for inputs (3 factors each scored on 1-4 scale: (a) participation in PD; (b) materials, technology, assessments; (c) class organization, structure, content)</i></p> <p>67% of teachers at adequate level</p> <p>33% of teachers at moderate level</p>

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Springfield Public Schools and Chicopee Public Schools, MA (continued)				
<i>READ 180 Enterprise Edition (continued)</i>				
Year 2	<p><i>Overall professional development:</i> 40% of teachers with adequate participation</p> <p>60% of teachers with moderate participation</p> <p><i>Initial training:</i> 100% of teachers with adequate participation</p> <p><i>Ongoing workshops:</i> 100% of teachers with adequate participation</p>	40% of teachers with adequate participation	<p>40% of teachers with adequate implementation</p> <p>40% of teachers with moderate implementation</p>	<p><i>Overall score for inputs (3 factors each scored on 1-4 scale: (a) participation in PD; (b) materials, technology, assessments; (c) class organization, structure, content)</i></p> <p>80% of teachers at adequate level</p> <p>20% of teachers at moderate level</p>
Year 3	<p><i>Overall professional development:</i> 80% of teachers with adequate participation</p> <p>20% of teachers with moderate participation</p> <p><i>Ongoing workshops:</i> 80% of teachers with adequate participation</p>	100% of teachers with adequate participation	<p>20% of teachers with adequate implementation</p> <p>60% of teachers with moderate implementation</p>	<p><i>Overall score for inputs (3 factors each scored on 1-4 scale: (a) participation in PD; (b) materials, technology, assessments; (c) class organization, structure, content)</i></p> <p>40% of teachers at adequate level</p> <p>60% of teachers at moderate level</p>

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Springfield Public Schools and Chicopee Public Schools, MA (continued)				
<i>READ 180 Enterprise Edition (continued)</i>				
Year 4	<p><i>Overall professional development:</i> 75% of teachers with adequate participation</p> <p>25% of teachers with moderate participation</p> <p><i>Ongoing workshops:</i> 75% of teachers with adequate participation</p>	100% of teachers with adequate participation	<p>40% of teachers with adequate implementation</p> <p>60% of teachers with moderate implementation</p>	<p><i>Overall score for inputs (3 factors each scored on 1-4 scale: (a) participation in PD; (b) materials, technology, assessments; (c) class organization, structure, content)</i></p> <p>80% of teachers at adequate level</p> <p>20% of teachers at moderate level</p>
Year 5	No required professional development	Not calculated	<p>80% of teachers with adequate implementation</p> <p>0% of teachers with moderate implementation</p>	<p><i>Overall score for inputs (3 factors each scored on 1-4 scale: (a) participation in PD; (b) materials, technology, assessments; (c) class organization, structure, content)</i></p> <p>100% of teachers at adequate level</p>

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Springfield Public Schools and Chicopee Public Schools, MA (continued)				
<i>Xtreme Reading Strategic Instruction Model</i>				
Year 1	<p><i>Overall professional development:</i> 40% of teachers with adequate participation</p> <p>40% of teachers with moderate participation</p> <p><i>Initial training:</i> 80% of teachers with adequate participation</p> <p><i>Ongoing workshops:</i> 80% of teachers with adequate participation</p>	67% of teachers with adequate participation	<p>60% of teachers with adequate implementation</p> <p>20% of teachers with moderate implementation</p>	<p><i>Overall score for inputs (3 factors each scored on 1-4 scale: (a) participation in PD; (b) materials, technology, assessments; (c) class organization, structure, content)</i></p> <p>80% of teachers at adequate level</p> <p>20% of teachers at moderate level</p>
Year 2	<p><i>Overall professional development:</i> 80% of teachers with adequate participation</p> <p>0% of teachers with moderate participation</p> <p><i>Initial training:</i> 50% of teachers with adequate participation</p> <p><i>Ongoing workshops:</i> 80% of teachers with adequate participation</p>	80% of teachers with adequate participation	<p>0% of teachers with adequate implementation</p> <p>40% of teachers with moderate implementation</p>	<p><i>Overall score for inputs (3 factors each scored on 1-4 scale: (a) participation in PD; (b) materials, technology, assessments; (c) class organization, structure, content)</i></p> <p>40% of teachers at adequate level</p> <p>40% of teachers at moderate level</p>

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Springfield Public Schools and Chicopee Public Schools, MA (continued)				
<i>Xtreme Reading Strategic Instruction Model (continued)</i>				
Year 3	<p><i>Overall professional development:</i> 100% of teachers with adequate participation</p> <p><i>Initial training:</i> 100% of teachers with adequate participation</p> <p><i>Ongoing workshops:</i> 100% of teachers with adequate participation</p>	100% of teachers with adequate participation	<p>40% of teachers with adequate implementation</p> <p>40% of teachers with moderate implementation</p>	<p><i>Overall score for inputs (3 factors each scored on 1-4 scale: (a) participation in PD; (b) materials, technology, assessments; (c) class organization, structure, content)</i></p> <p>100% of teachers at adequate level</p>
Year 4	Not calculated (<i>no required professional development in year 4</i>)	Not calculated	<p>40% of teachers with adequate implementation</p> <p>40% of teachers with moderate implementation</p>	<p><i>Overall score for inputs (3 factors each scored on 1-4 scale: (a) participation in PD; (b) materials, technology, assessments; (c) class organization, structure, content)</i></p> <p>100% of teachers at adequate level</p>
Year 5	No new teachers—no required professional development	Not calculated	<p>40% of teachers with adequate implementation</p> <p>60% of teachers with moderate implementation</p>	<p><i>Overall score for inputs (3 factors each scored on 1-4 scale: (a) participation in PD; (b) materials, technology, assessments; (c) class organization, structure, content)</i></p> <p>80% of teachers at adequate level</p> <p>20% of teachers at moderate level</p>
Source: Striving Readers Year 5 Evaluation Reports (available at: http://www.ed.gov/programs/strivingreaders/performance.html)				

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- ¹ Year refers to implementation year. Year 1- 2006-07 school year; Year 2- 2007-08 school year; Year 3- 2008-09 school year; Year 4-2009-10 school year; Year 5- 2010-11 school year.
 - ² Since all professional development includes some focus on whole school, targeted and intensive intervention models, these scores reflect all of the core professional development activities.
 - ³ The overall score was not calculated for targeted and intensive interventions separate from whole school (blended) intervention.
 - ⁴ The overall score was not calculated for targeted and intensive interventions separate from whole school (blended) intervention.
 - ⁵ The overall score was not calculated for targeted and intensive interventions separate from whole school (blended) intervention.
 - ⁶ The overall score was not calculated for targeted and intensive interventions separate from whole school (blended) intervention.
 - ⁷ The overall score was not calculated for targeted and intensive interventions separate from whole school (blended) intervention.
 - ⁸ The six other participating districts are: Bullitt County School District, Eminence Independent, Jessamine County, Pike County, Rowan County, and Washington County.
 - ⁹ The six other participating districts are: Bullitt County School District, Eminence Independent, Jessamine County, Pike County, Rowan County, and Washington County.
 - ¹⁰ The six other participating districts are: Bullitt County School District, Eminence Independent, Jessamine County, Pike County, Rowan County, and Washington County.
 - ¹¹ No training was planned for returning teachers in year 3. Only one new teacher was hired early enough to attend training and the others were hired later and did not attend training. For this reason, year 3 PD scores cannot be compared to years 1 and 2.
 - ¹² Teacher perceptions of the usefulness of: (a) the group professional development and in-school coaching provided by the professional developers, and (b) the effectiveness of Xtreme Reading strategies, both on a 5-point scale.
 - ¹³ Fidelity of in-class support not calculated for year 4 because of substantial changes in delivery strategy.

Summary of 2006 Striving Readers Projects: Targeted Interventions for Struggling Readers

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

Evaluation Design (at time of initial randomization in Year 1 ¹)	Number of School Years Included in Final Impact Analysis	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 schools (31 treatment, 32 control over two cohorts)	4	Students in control schools who were equivalent to Tier 2 and 3 students in treatment schools continued 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 ²	4	Control students continued 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 continued 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) number of eligible students in each school, 2) proportion of ELL students, 3) proportion of students with special needs, and 4) AYP status	5	Control students continued to receive the regular English language arts curriculum.

Evaluation Design (at time of initial randomization in Year 1 ¹)	Number of School Years Included in Final Impact Analysis	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 5 - 7 youth detention facilities (years 1 & 2 = 7; year 3 = 6; years 4 & 5 = 5)	5	Control students continued to receive the regular English language arts curriculum for 45 minutes and then transfer to another class (e.g., technology education, mathematics) for 45 minutes.
Portland School District, OR		
<i>Xtreme Reading Strategic Instruction Model</i>		
Within-school student-level random assignment in 10 schools (years 1 – 5; in Year 5, all eligible students were offered the intervention)	4	Control students continued 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	Control students continued 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	5	Control students continued 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	5	Control students continued to receive regular elective courses in place of the treatment class.
<i>Source: Striving Readers Year 5 Evaluation Reports (available at: http://www.ed.gov/programs/strivingreaders/performance.html)</i>		

¹ Year refers to implementation year. Year 1- 2006-07 school year; Year 2- 2007-08 school year; Year 3- 2008-09 school year; Year 4-2009-10 school year; Year 5- 2010-11 school year.

² Subsample of 9 schools purposively selected for study in Year 5; original randomization of students maintained.

Summary of 2006 Striving Readers Projects: Targeted Interventions for Struggling Readers

Table 7: Targeted Interventions: Impacts of One-Year Interventions on All Struggling Readers by Site ^{1,2}

Reading Test (Source)	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ³	Impact on Reading Test Scores in Percentile Units ⁴	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁵	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁶	Grade Level of Students in Impact Analysis	Sample Size in Impact Analysis
Chicago Public Schools, IL							
<i>Chicago Striving Readers English Language Arts Curriculum ⁷</i>							
Illinois Standard Achievement Test (State)	Vocabulary, Reading Strategies, Comprehension, and Literature	.17 ⁸	Treatment students in 29 th percentile, control students in 27 th percentile of state normed sample	Yes	.24	6 th	660 treatment students in Tier 2 and 628 control students in Tier 2 in 63 schools
<i>Chicago Striving Readers English Language Arts Curriculum and Achieving Maximum Potential (AMP) After School Program ⁹</i>							
Illinois Standard Achievement Test (State)	Vocabulary, Reading Strategies, Comprehension, and Literature	.07 ⁸	Treatment students in 13 th percentile, control students in 12 th percentile of state normed sample	No	.19	6 th	602 treatment students in Tier 3 and 632 control students in Tier 3 in 63 schools
Danville School District, KY							
<i>Learning Strategies Curriculum</i>							
Group Reading Assessment Diagnostic Evaluation (External test publisher)	Total Reading (Vocabulary, Comprehension)	.08	Treatment students in 17 th percentile, control students in 16 th percentile of nationally normed sample	No	.14	6 th	605 treatment and 530 control students in 12 schools

Reading Test (Source)	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ³	Impact on Reading Test Scores in Percentile Units ⁴	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁵	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁶	Grade Level of Students in Impact Analysis	Sample Size in Impact Analysis
Danville School District, KY (continued)							
<i>Learning Strategies Curriculum (continued)</i>							
Group Reading Assessment Diagnostic Evaluation (External test publisher)	Total Reading (Vocabulary, Comprehension)	.12	Treatment students in 19 th percentile, control students in 17 th percentile of nationally normed sample	Yes	.16	9 th	593 treatment and 535 control students in 11 schools
Memphis City Schools, TN							
<i>READ 180 Enterprise Edition</i>							
Iowa Test of Basic Skills (External test publisher)	Total Reading	-.04	Treatment and control students in 8 th percentile of nationally normed sample	No	.11	6 th –8 th	1090 treatment and 1384 control students in 8 schools
Tennessee Comprehensive Assessment Program (State)	Reading and Language Arts	-.07	Not available ¹⁰	No	.26	6 th	211 treatment and 234 control students in 8 schools
Newark Public Schools, NJ							
<i>READ 180 Enterprise Edition</i>							
Stanford Achievement Test (External test publisher)	Vocabulary	.04	Treatment students in 9 th percentile, control students in 9 th percentile of nationally normed sample	No	.12	6 th –8 th	1350 treatment students in 10 schools and 1205 control students in 9 schools

Reading Test (Source)	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ³	Impact on Reading Test Scores in Percentile Units ⁴	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁵	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁶	Grade Level of Students in Impact Analysis	Sample Size in Impact Analysis
Newark Public Schools, NJ (continued)							
<i>READ 180 Enterprise Edition (continued)</i>							
Stanford Achievement Test (External test publisher)	Comprehension	.04	Treatment students in 11 th percentile, control students in 10 th percentile of nationally normed sample	No	.11	6 th –8 th	1350 treatment students in 10 schools and 1205 control students in 9 schools
Stanford Achievement Test (External test publisher)	Language	.03	Treatment and control students in 5 th percentile of nationally normed sample	No	.08	6 th –8 th	1350 treatment students in 10 schools and 1205 control students in 9 schools
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	.21 ¹¹	Treatment students in 18 th percentile, control students in 11 th percentile of nationally normed sample	Yes	.12	9 th –12 th	677 treatment and 568 control students in 7 facilities
California Achievement Test (External test publisher)	Reading Comprehension	.26 ¹²	Treatment students in 16 th percentile, control students in 13 th percentile of nationally normed sample	Yes	.28	9 th –12 th	133 treatment and 110 control students in 7 facilities

Reading Test (Source)	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ³	Impact on Reading Test Scores in Percentile Units ⁴	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁵	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁶	Grade Level of Students in Impact Analysis	Sample Size in Impact Analysis
Portland School District, OR							
<i>Xtreme Reading Strategic Instruction Model</i>							
Group Reading Assessment Diagnostic Evaluation (External test publisher)	Total Reading (Vocabulary, Comprehension)	.29	Treatment students in 21 st percentile, control students in 14 th percentile of nationally normed sample	Yes	.13	7 th -8 th	401 treatment and 421 control students in 5 schools (Years 1 and 2) or 6 schools (Years 3 and 4)
Group Reading Assessment Diagnostic Evaluation (External test publisher)	Total Reading (Vocabulary, Comprehension)	.12	Treatment students in 19 th percentile, control students in 16 th percentile of nationally normed sample	Yes	.16	9 th -10 th	355 treatment and 402 control students in 4 schools
Oregon Assessment of Knowledge and Skills (State)	Reading and Literature	.12	Treatment students in 19 th percentile, control students in 17 th percentile of state normed sample	Yes	.14	7 th -8 th	472 treatment and 482 control students in 5 schools (Years 1 and 2) or 6 schools (Years 3 and 4)
Oregon Assessment of Knowledge and Skills (State)	Reading and Literature	.02	Treatment and control students in 24 th percentile of state normed sample	No	.21	10 th	260 treatment and 254 control students in 4 schools

Reading Test (Source)	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ³	Impact on Reading Test Scores in Percentile Units ⁴	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁵	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁶	Grade Level of Students in Impact Analysis	Sample Size in Impact Analysis
San Diego Unified School District, CA							
<i>Strategies for Literacy Independence across the Curriculum</i>							
California Standards Test (State)	English Language Arts	.04	Treatment and control students in 17 th percentile of state normed sample	No	.14	7 th -8 th	503 treatment and 533 control students in 4 middle schools
California Standards Test (State)	English Language Arts	.05	Treatment students in 26 th percentile, control students in 24 th percentile of state normed sample	No	.29	9 th -10 th	371 treatment and 405 control students in 4 high schools
Degrees of Reading Power (External test publisher)	Reading Comprehension	.12	Treatment students in 35 th percentile, control students in 33 rd percentile of nationally normed sample	No	.14	7 th -8 th	495 treatment and 532 control students in 4 middle schools
Degrees of Reading Power (External test publisher)	Reading Comprehension	.05	Treatment students in 48 th percentile, control students in 46 th percentile of nationally normed sample	No	.37	9 th -10 th	248 treatment and 234 control students in 4 high schools

Reading Test (Source)	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ³	Impact on Reading Test Scores in Percentile Units ⁴	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁵	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁶	Grade Level of Students in Impact Analysis	Sample Size in Impact Analysis
Springfield and Chicopee Public Schools, MA							
<i>READ 180 Enterprise Edition</i>							
Stanford Diagnostic Reading Test, 4 th Edition (External test publisher)	Reading Achievement	.18 ¹³	Treatment students in 24 th percentile, control students in 21 st percentile of nationally normed sample	Yes	.22	9 th	231 treatment and 225 control students in 5 schools
Springfield and Chicopee Public Schools, MA							
<i>Xtreme Reading Strategic Instruction Model</i>							
Stanford Diagnostic Reading Test, 4 th Edition (External test publisher)	Reading Achievement	.01 ¹³	Treatment and control students in 21 st percentile of nationally normed sample	No	.23	9 th	223 treatment and 225 control students in 5 schools
Source: Striving Readers Evaluation Reports (available at: http://www.ed.gov/programs/strivingreaders/performance.html)							

¹ Impact estimates for one year of intervention services include students provided the opportunity to receive the interventions in the 2006-07, 2007-08, 2008-09, 2009-10 or 2010-11 school years, except in San Diego, where impact estimates are for one year of intervention services for students who started in the study in the 2007-08 or 2008-09 school years.

² Except where noted, estimates are from studies that meet WWC standards without reservations.

³ 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.

⁴ 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.

⁵ Statistical significance is measured at the 95% confidence level, which is a conventional standard set for social science research.

⁶ Abt Associates staff calculated the MDE by multiplying the standard error of the impact estimate by 2.8 and converting to standardized units. 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.

⁷ Impact estimate for Chicago's Striving Readers English Language Arts Curriculum is for students reading one year or less below grade level (Tier 2).

⁸ This impact estimate met WWC evidence standards with reservations, because there was insufficient data to determine attrition rates.

⁹ Impact estimate for Chicago Striving Readers Language Arts Curriculum and After School Program (Achieving Maximum Potential) is for 6th grade students reading more than one year below grade level (Tier 3).

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- ¹⁰ The Tennessee Comprehensive Assessment Program assessments changed between the spring of 2009 and 2010; therefore, the spring 2010 assessment data were not combined with assessment data from prior years. The results shown on this row are for 6th graders who were assessed in the spring of 2010 only. Neither state nor district level population means or standard deviations of these assessments were available. Therefore impacts could not be converted to percentile units.
- ¹¹ This impact estimate did not meet WWC standards because of over-alignment of the SRI with the intervention.
- ¹² This impact estimate did not meet WWC standards without reservations because of high attrition; however, the estimate did meet standards with reservations because the baseline equivalence of the analytic sample was established.
- ¹³ Impact estimate differs from reported standardized impact estimate; impact estimate in table was calculated by dividing reported impact estimate by reported standard deviation from the control group.

Summary of 2006 Striving Readers Projects: Targeted Interventions for Struggling Readers

Table 8: Targeted Interventions: Impacts of Multi-Year Interventions on All Struggling Readers by Site ^{1,2}

Reading Test (Source)	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ³	Impact on Reading Test Scores in Percentile Units ⁴	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁵	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁶	Grade Level in Impact Analysis	Sample Size in Impact Analysis
Chicago Public Schools, IL: Two Years							
<i>Chicago Striving Readers English Language Arts Curriculum⁷</i>							
Illinois Standard Achievement Test (State)	Vocabulary, Reading Strategies, Comprehension, and Literature	-.09 ⁸	Treatment students in 30 th percentile, control students in 31 st percentile of state normed sample	No	.28	7 th	331 treatment students in Tier 2 and 319 control students in Tier 2 in 63 schools
<i>Chicago Striving Readers English Language Arts Curriculum and Achieving Maximum Potential (AMP) After School Program⁹</i>							
Illinois Standard Achievement Test (State)	Vocabulary, Reading Strategies, Comprehension, and Literature	-.11 ⁸	Treatment students in 15 th percentile, control students in 17 th percentile of state normed sample	No	.26	7 th	298 treatment students in Tier 3 and 284 control students in Tier 3 in 63 schools
Chicago Public Schools, IL: Three Years							
<i>Chicago Striving Readers English Language Arts Curriculum¹⁰</i>							
Illinois Standard Achievement Test (State)	Vocabulary, Reading Strategies, Comprehension, and Literature	-.06 ⁸	Treatment students in 35 th percentile, control students in 36 th percentile of state normed sample	No	.30	8 th	214 treatment students in Tier 2 and 219 control students in Tier 2 in 63 schools

Reading Test (Source)	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ³	Impact on Reading Test Scores in Percentile Units ⁴	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁵	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁶	Grade Level in Impact Analysis	Sample Size in Impact Analysis
Chicago Public Schools, IL: Three Years (continued)							
<i>Chicago Striving Readers English Language Arts Curriculum and Achieving Maximum Potential (AMP) After School Program¹¹</i>							
Illinois Standard Achievement Test (State)	Vocabulary, Reading Strategies, Comprehension, and Literature	.00 ⁸	Treatment students in 15 th percentile, control students in 17 th percentile of state normed sample	No	.17	8 th	452 treatment students in Tier 3 and 452 control students in Tier 3 in 63 schools
Memphis City Schools, TN: Two Years							
<i>READ 180 Enterprise Edition</i>							
Iowa Test of Basic Skills (External test publisher)	Total Reading	.02	Treatment and control students in 9 th percentile of nationally normed sample	No	.17	7 th –8 th	545 treatment and 728 control students in 8 schools
Tennessee Comprehensive Assessment Program (State)	Reading and Language Arts	-.02	Not available ¹²	No	.27	7 th	171 treatment and 141 control students in 8 schools
Newark Public Schools, NJ: Two Years							
<i>READ 180 Enterprise Edition</i>							
Stanford Achievement Test (External test publisher)	Vocabulary	.06	Treatment and control students in 4 th percentile of nationally normed sample	No	.12	7 th –8 th	814 treatment students in 10 schools and 706 control students in 9 schools

Reading Test (Source)	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ³	Impact on Reading Test Scores in Percentile Units ⁴	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁵	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁶	Grade Level in Impact Analysis	Sample Size in Impact Analysis
Newark Public Schools, NJ: Two Years (continued)							
<i>READ 180 Enterprise Edition (continued)</i>							
Stanford Achievement Test (External test publisher)	Comprehension	.14	Treatment students in 6 th percentile, control students in 5 th percentile of nationally normed sample	Yes	.14	7 th –8 th	814 treatment students in 10 schools and 706 control students in 9 schools
Stanford Achievement Test (External test publisher)	Language	.08	Treatment students in 4 th percentile and control students in 3 rd percentile of nationally normed sample	No	.20	7 th –8 th	814 treatment students in 10 schools and 706 control students in 9 schools
Newark Public Schools, NJ: Three Years							
<i>READ 180 Enterprise Edition</i>							
Stanford Achievement Test (External test publisher)	Vocabulary	.05	Treatment students in 15 th percentile, control students in 14 th percentile of nationally normed sample	No	.21	8 th	552 treatment students in 10 schools and 471 control students in 9 schools

Reading Test (Source)	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ³	Impact on Reading Test Scores in Percentile Units ⁴	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁵	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁶	Grade Level in Impact Analysis	Sample Size in Impact Analysis
Newark Public Schools, NJ: Three Years (continued)							
<i>READ 180 Enterprise Edition (continued)</i>							
Stanford Achievement Test (External test publisher)	Comprehension	.06	Treatment students in 21 st percentile, control students in 20 th percentile of nationally normed sample	No	.19	8 th	552 treatment students in 10 schools and 471 control students in 9 schools
Stanford Achievement Test (External test publisher)	Language	.07	Treatment students in 7 th percentile, control students in 6 th percentile of nationally normed sample	No	.20	8 th	552 treatment students in 10 schools and 471 control students in 9 schools
San Diego Unified School District, CA: Two Years¹³							
<i>Strategies for Literacy Independence across the Curriculum</i>							
California Standards Test (State)	English Language Arts	.05	Treatment students in 22 nd percentile, control students in 21 st percentile of state normed sample	No	.17	8 th -9 th	414 treatment and 426 control students who began the study in middle school
California Standards Test (State)	English Language Arts	-.03	Treatment and control students in 16 th percentile of state normed sample	No	.19	10 th -11 th	368 treatment and 366 control students who began the study in high school

Reading Test (Source)	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ³	Impact on Reading Test Scores in Percentile Units ⁴	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁵	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁶	Grade Level in Impact Analysis	Sample Size in Impact Analysis
San Diego Unified School District, CA: Two Years¹³ (continued)							
<i>Strategies for Literacy Independence across the Curriculum (continued)</i>							
Degrees of Reading Power (External test publisher)	Reading Comprehension	.08 ¹⁴	Treatment students in 43 rd percentile, control students in 42 nd percentile of nationally normed sample	No	.16	8 th –9 th	412 treatment and 419 control students who began the study in middle school
Degrees of Reading Power (External test publisher)	Reading Comprehension	.12 ¹⁴	Treatment students in 55 th percentile, control students in 51 st percentile of nationally normed sample	No	.23	10 th	175 treatment and 172 control students who began the study in high school
San Diego Unified School District, CA: Three Years¹⁵							
<i>Strategies for Literacy Independence across the Curriculum</i>							
California Standards Test (State)	English Language Arts	.02 ¹⁴	Treatment students in 22 nd percentile, control students in 21 st percentile of state normed sample	No	.26	9 th –10 th	171 treatment and 173 control students who began the study in middle school
California Standards Test (State)	English Language Arts	-.17 ¹⁴	Treatment students in 15 th percentile, control students in 20 th percentile of state normed sample	No	.63	11 th	134 treatment and 128 control students who began the study in high school

Reading Test (Source)	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ³	Impact on Reading Test Scores in Percentile Units ⁴	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁵	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁶	Grade Level in Impact Analysis	Sample Size in Impact Analysis
San Diego Unified School District, CA: Three Years¹⁵ (continued)							
<i>Strategies for Literacy Independence across the Curriculum (continued)</i>							
Degrees of Reading Power (External test publisher)	Reading Comprehension	-.00 ¹⁴	Treatment students in 43 rd percentile, control students in 42 nd percentile of nationally normed sample	No	.26	9 th –10 th	165 treatment and 155 control students who began the study in middle school
Source: Striving Readers Evaluation Reports (available at: http://www.ed.gov/programs/strivingreaders/performance.html)							

¹ Impact estimates for two years of intervention services includes students provided the opportunity to receive the intervention from 2006-07 through 2007-08, 2007-08 through 2008-09, 2008-09 through 2009-10, or 2009-10 through 2010-11. Impact estimates for three years of intervention services includes students provided the opportunity to receive the intervention from 2006-07 through 2008-09, 2007-08 through 2009-10, or 2008-09 through 2010-11. Exceptions apply for Chicago and San Diego and are explained in subsequent footnotes.

² Except where noted, estimates are from studies that meet WWC standards without reservations.

³ 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.

⁴ 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.

⁵ Statistical significance is measured at the 95% confidence level, which is a conventional standard set for social science research.

⁶ Abt Associates staff calculated the MDE by multiplying the standard error of the impact estimate by 2.8 and converting to standardized units. 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.

⁷ Impact estimate for two years of Chicago's Striving Readers English Language Arts Curriculum is for students reading one year or less below grade level (Tier 2) who entered the program as 6th graders in 2008-09.

⁸ This impact estimate met WWC evidence standards with reservations, because there was insufficient data to determine attrition rates.

⁹ Impact estimate for two years of Chicago Striving Readers Language Arts Curriculum and After School Program (Achieving Maximum Potential) is for 6th grade students reading more than one year below grade level (Tier 3) who received the Language Arts Curriculum for two years but AMP in 6th grade only.

¹⁰ Impact estimate for three years of Chicago's Striving Readers English Language Arts Curriculum is for students reading one year or less below grade level (Tier 2) who entered the program as 6th graders in 2008-09.

¹¹ Impact estimate for three years of Chicago Striving Readers Language Arts Curriculum and After School Program (Achieving Maximum Potential) is for 6th grade students reading more than one year below grade level (Tier 3) who received the Language Arts Curriculum for three years but AMP in 6th grade only.

¹² The Tennessee Comprehensive Assessment Program assessments changed between the spring of 2009 and 2010; therefore, the spring 2010 assessment data were not combined with assessment data from prior years. The results shown on this row are for 6th graders who were assessed in the spring of 2010 only.

Neither state nor district level population means or standard deviations of these assessments were available. Therefore impacts could not be converted to percentile units.

¹³ Impact estimates for San Diego of two years of exposure include students who received the intervention from 2007-08 through 2008-09 or from 2008-09 through 2009-2010.

¹⁴ This impact estimate met WWC evidence standards with reservations, because there was insufficient data to determine attrition rates.

¹⁵ Impact estimates for San Diego of three years of exposure include students who received the intervention from 2007-08 through 2009-2010.

Summary of 2006 Striving Readers Projects: Targeted Interventions for Struggling Readers

Table 9: Targeted Interventions: Impacts of Interventions on All Struggling Readers by Intervention ^{1,2}

Reading Test (Source)	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ³	Impact on Reading Test Scores in Percentile Units ⁴	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁵	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁶	Grade Level of Students in Impact Analysis	Sample Size in Impact Analysis
READ 180 Enterprise Edition—One Year Intervention							
<i>Memphis City Schools, TN</i>							
Iowa Test of Basic Skills (External test publisher)	Total Reading	-.04	Treatment and control students in 8 th percentile of nationally normed sample	No	.11	6 th –8 th	1090 treatment and 1384 control students in 8 schools
Tennessee Comprehensive Assessment Program (State)	Reading and Language Arts	-.07	Not available ⁷	No	.26	6 th	211 treatment and 234 control students in 8 schools
<i>Newark Public Schools, NJ</i>							
Stanford Achievement Test (External test publisher)	Vocabulary	.04	Treatment and control students in 9 th percentile of nationally normed sample	No	.12	6 th –8 th	1350 treatment students in 10 schools and 1205 control students in 9 schools

Reading Test (Source)	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ³	Impact on Reading Test Scores in Percentile Units ⁴	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁵	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁶	Grade Level of Students in Impact Analysis	Sample Size in Impact Analysis
READ 180 Enterprise Edition—One Year Intervention (continued)							
<i>Newark Public Schools, NJ (continued)</i>							
Stanford Achievement Test (External test publisher)	Comprehension	.04	Treatment students in 11 th percentile, control students in 10 th percentile of nationally normed sample	No	.11	6 th –8 th	1350 treatment students in 10 schools and 1205 control students in 9 schools
Stanford Achievement Test (External test publisher)	Language	.03	Treatment and control students in 5 th percentile of nationally normed sample	No	.08	6 th –8 th	1350 treatment students in 10 schools and 1205 control students in 9 schools
<i>Ohio Department of Youth Services (students in juvenile correction facilities)</i>							
Scholastic Reading Inventory Assessment (Scholastic, developer of Read 180)	Reading Comprehension	.21 ⁸	Treatment students in 18 th percentile, control students in 11 th percentile of nationally normed sample	Yes	.12	9 th –12 th	677 treatment and 568 control students in 7 facilities
California Achievement Test (External test publisher)	Reading Comprehension (after 1 year of intended treatment)	.26 ⁹	Treatment students in 16 th percentile, control students in 13 th percentile of nationally normed sample.	Yes	.28	9 th –12 th	133 treatment and 110 control students in 7 facilities

Reading Test (Source)	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ³	Impact on Reading Test Scores in Percentile Units ⁴	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁵	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁶	Grade Level of Students in Impact Analysis	Sample Size in Impact Analysis
READ 180 Enterprise Edition—One Year Intervention (continued)							
<i>Springfield and Chicopee Public Schools, MA</i>							
Stanford Diagnostic Reading Test, 4 th Edition (External test publisher)	Reading Achievement	.18	Treatment students in 24 th percentile, control students in 21 st percentile of nationally normed sample	Yes	.22	9 th	231 treatment and 225 control students in 5 schools
READ 180 Enterprise Edition—Two Year Intervention							
<i>Memphis City Schools, TN</i>							
Iowa Test of Basic Skills (External test publisher)	Total Reading	.02	Treatment and control students in 9 th percentile of nationally normed sample	No	.17	7 th –8 th	545 treatment and 728 control students in 8 schools
Tennessee Comprehensive Assessment Program (State)	Reading and Language Arts	-.02	Not available ⁶	No	.27	7 th	171 treatment and 141 control students in 8 schools
<i>Newark Public Schools, NJ</i>							
Stanford Achievement Test (External test publisher)	Vocabulary	.06	Treatment and control students in 4 th percentile of nationally normed sample	No	.12	7 th –8 th	814 treatment students in 10 schools and 706 control students in 9 schools

Reading Test (Source)	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ³	Impact on Reading Test Scores in Percentile Units ⁴	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁵	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁶	Grade Level of Students in Impact Analysis	Sample Size in Impact Analysis
READ 180 Enterprise Edition—Two Year Intervention (continued)							
<i>Newark Public Schools, NJ</i>							
Stanford Achievement Test (External test publisher)	Comprehension	.14	Treatment students in 6 th percentile, control students in 5 th percentile of nationally normed sample	Yes	.14	7 th –8 th	814 treatment students in 10 schools and 706 control students in 9 schools
Stanford Achievement Test (External test publisher)	Language	.08	Treatment students in 4 th percentile and control students in 3 rd percentile of nationally normed sample	No	.20	7 th –8 th	814 treatment students in 10 schools and 706 control students in 9 schools
READ 180 Enterprise Edition—Three Year Intervention							
<i>Newark Public Schools, NJ</i>							
Stanford Achievement Test (External test publisher)	Vocabulary	.05	Treatment students in 15 th percentile, control students in 14 th percentile of nationally normed sample	No	.21	8 th	552 treatment students in 10 schools and 471 control students in 9 schools

Reading Test (Source)	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ³	Impact on Reading Test Scores in Percentile Units ⁴	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁵	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁶	Grade Level of Students in Impact Analysis	Sample Size in Impact Analysis
READ 180 Enterprise Edition—Three Year Intervention (continued)							
<i>Newark Public Schools, NJ (continued)</i>							
Stanford Achievement Test (External test publisher)	Comprehension	.06	Treatment students in 21 st percentile, control students in 20 th percentile of nationally normed sample	No	.19	8 th	552 treatment students in 10 schools and 471 control students in 9 schools
Stanford Achievement Test (External test publisher)	Language	.07	Treatment students in 7 th percentile, control students in 6 th percentile of nationally normed sample	No	.20	8 th	552 treatment students in 10 schools and 471 control students in 9 schools
Xtreme Reading Strategic Instruction Model, One Year Intervention							
<i>Portland School District, OR</i>							
Group Reading Assessment Diagnostic Evaluation (External test publisher)	Total Reading (Vocabulary, Comprehension)	.29	Treatment students in 21 st percentile, control students in 14 th percentile of nationally normed sample	Yes	.13	7 th –8 th	401 treatment and 421 control students in 5 schools (Years 1 and 2) or 6 schools (Years 3 and 4)

Reading Test (Source)	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ³	Impact on Reading Test Scores in Percentile Units ⁴	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁵	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁶	Grade Level of Students in Impact Analysis	Sample Size in Impact Analysis
Xtreme Reading Strategic Instruction Model, One Year Intervention (continued)							
<i>Portland School District, OR (continued)</i>							
Group Reading Assessment Diagnostic Evaluation (External test publisher)	Total Reading (Vocabulary, Comprehension)	.12	Treatment students in 19 th percentile, control students in 16 th percentile of nationally normed sample	Yes	.16	9 th –10 th	355 treatment and 402 control students in 4 schools
Oregon Assessment of Knowledge and Skills (State)	Reading and Literature	.12	Treatment students in 19 th percentile, control students in 17 th percentile of state normed sample	Yes	.14	7 th –8 th	472 treatment and 482 control students in 5 schools (Years 1 and 2) or 6 schools (Years 3 and 4)
Oregon Assessment of Knowledge and Skills (State)	Reading and Literature	.02	Treatment and control students in 24 th percentile of state normed sample	No	.21	10 th	260 treatment and 254 control students in 4 schools
<i>Springfield and Chicopee Public Schools, MA</i>							
Stanford Diagnostic Reading Test, 4 th Edition (External test publisher)	Reading Achievement	.01	Treatment and control students in 21 st percentile of nationally normed sample	No	.23	9 th	223 treatment and 225 control students in 5 schools

Reading Test (Source)	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ³	Impact on Reading Test Scores in Percentile Units ⁴	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁵	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁶	Grade Level of Students in Impact Analysis	Sample Size in Impact Analysis
Learning Strategies Curriculum, One Year Intervention							
<i>Danville School District, KY</i>							
Group Reading Assessment Diagnostic Evaluation (External test publisher)	Total Reading (Vocabulary, Comprehension)	.08	Treatment students in 17 th percentile, control students in 16 th percentile of nationally normed sample	No	.14	6 th	605 treatment and 530 control students in 12 schools
Group Reading Assessment Diagnostic Evaluation (External test publisher)	Total Reading (Vocabulary, Comprehension)	.12	Treatment students in 19 th percentile, control students in 17 th percentile of nationally normed sample	Yes	.16	9 th	593 treatment and 535 control students in 11 schools
Chicago Striving Readers English Language Arts Curriculum—One Year Intervention¹⁰							
<i>Chicago Public Schools, IL</i>							
Illinois Standard Achievement Test (State)	Vocabulary, Reading Strategies, Comprehension, and Literature	.17 ¹¹	Treatment students in 29 th percentile, control students in 27 th percentile of state normed sample	Yes	.24	6 th	660 treatment students in Tier 2 and 628 control students in Tier 2 in 63 schools

Reading Test (Source)	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ³	Impact on Reading Test Scores in Percentile Units ⁴	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁵	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁶	Grade Level of Students in Impact Analysis	Sample Size in Impact Analysis
Chicago Striving Readers English Language Arts Curriculum—Two Year Intervention¹²							
<i>Chicago Public Schools, IL</i>							
Illinois Standard Achievement Test (State)	Vocabulary, Reading Strategies, Comprehension, and Literature	-.09 ¹¹	Treatment students in 30 th percentile, control students in 31 st percentile of state normed sample	No	.28	7 th	331 treatment students in Tier 2 and 319 control students in Tier 2 in 63 schools
Chicago Striving Readers English Language Arts Curriculum—Three Year Intervention¹³							
<i>Chicago Public Schools, IL</i>							
Illinois Standard Achievement Test (State)	Vocabulary, Reading Strategies, Comprehension, and Literature	-.06 ¹¹	Treatment students in 35 th percentile, control students in 36 th percentile of state normed sample	No	.30	8 th	214 treatment students in Tier 2 and 219 control students in Tier 2 in 63 schools
Chicago Striving Readers English Language Arts Curriculum and Achieving Maximum Potential (AMP) After School Program— One Year Intervention¹⁴							
<i>Chicago Public Schools, IL</i>							
Illinois Standard Achievement Test (State)	Vocabulary, Reading Strategies, Comprehension, and Literature	.07 ¹¹	Treatment students in 13 th percentile, control students in 12 th percentile of state normed sample	No	.19	6 th	602 treatment students in Tier 3 and 632 control students in Tier 3 in 63 schools

Reading Test (Source)	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ³	Impact on Reading Test Scores in Percentile Units ⁴	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁵	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁶	Grade Level of Students in Impact Analysis	Sample Size in Impact Analysis
Chicago Striving Readers English Language Arts Curriculum and Achieving Maximum Potential (AMP) After School Program— Two Year Intervention¹⁵							
<i>Chicago Public Schools, IL</i>							
Illinois Standard Achievement Test (State)	Vocabulary, Reading Strategies, Comprehension, and Literature	-.11 ¹¹	Treatment students in 15 th percentile, control students in 17 th percentile of state normed sample	No	.26	7 th	298 treatment students in Tier 3 and 284 control students in Tier 3 in 63 schools
Chicago Striving Readers English Language Arts Curriculum and Achieving Maximum Potential (AMP) After School Program— Three Year Intervention¹⁶							
<i>Chicago Public Schools, IL</i>							
Illinois Standard Achievement Test (State)	Vocabulary, Reading Strategies, Comprehension, and Literature	.00 ¹¹	Treatment students in 15 th percentile, control students in 17 th percentile of state normed sample	No	.17	8 th	452 treatment students in Tier 3 and 452 control students in Tier 3 in 63 schools
Strategies for Literacy Independence across the Curriculum—One Year Intervention							
<i>San Diego Unified School District, CA</i>							
California Standards Test (State)	English Language Arts	.04	Treatment and control students in 17 th percentile of state normed sample	No	.14	7 th –8 th	503 treatment and 533 control students in 4 middle schools

Reading Test (Source)	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ³	Impact on Reading Test Scores in Percentile Units ⁴	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁵	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁶	Grade Level of Students in Impact Analysis	Sample Size in Impact Analysis
Strategies for Literacy Independence across the Curriculum—One Year Intervention (continued)							
<i>San Diego Unified School District, CA (continued)</i>							
California Standards Test (State)	English Language Arts	.05	Treatment students in 26 th percentile, control students in 24 th percentile of state normed sample	No	.29	9 th –10 th	371 treatment and 405 control students in 4 high schools
Degrees of Reading Power (External test publisher)	Reading Comprehension	.12	Treatment students in 35 th percentile, control students in 33 rd percentile of nationally normed sample	No	.14	7 th –8 th	495 treatment and 532 control students in 4 middle schools
Degrees of Reading Power (External test publisher)	Reading Comprehension	.05	Treatment students in 48 th percentile, control students in 46 th percentile of nationally normed sample	No	.37	9 th –10 th	248 treatment and 234 control students in 4 high schools

Reading Test (Source)	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ³	Impact on Reading Test Scores in Percentile Units ⁴	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁵	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁶	Grade Level of Students in Impact Analysis	Sample Size in Impact Analysis
Strategies for Literacy Independence across the Curriculum—Two Year Intervention¹⁷							
<i>San Diego Unified School District, CA</i>							
California Standards Test (State)	English Language Arts	.05	Treatment students in 22 nd percentile, control students in 21 st percentile of state normed sample	No	.17	8 th –9 th	414 treatment and 426 control students who began the study in middle school
California Standards Test (State)	English Language Arts	-.03	Treatment and control students in 16 th percentile of state normed sample	No	.19	10 th –11 th	368 treatment and 366 control students who began the study in high school
Degrees of Reading Power (External test publisher)	Reading Comprehension	.08 ¹⁸	Treatment students in 43 rd percentile, control students in 42 nd percentile of nationally normed sample	No	.16	8 th –9 th	412 treatment and 419 control students who began the study in middle school
Degrees of Reading Power (External test publisher)	Reading Comprehension	.12 ¹⁸	Treatment students in 55 th percentile, control students in 51 st percentile of nationally normed sample	No	.23	10 th	175 treatment and 172 control students who began the study in high school

Reading Test (Source)	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ³	Impact on Reading Test Scores in Percentile Units ⁴	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁵	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁶	Grade Level of Students in Impact Analysis	Sample Size in Impact Analysis
Strategies for Literacy Independence across the Curriculum—Three Year Intervention¹⁹							
<i>San Diego Unified School District, CA</i>							
California Standards Test (State)	English Language Arts	.02 ¹⁸	Treatment students in 22 nd percentile, control students in 21 st percentile of state normed sample	No	.26	9 th –10 th	171 treatment and 173 control students who began the study in middle school
California Standards Test (State)	English Language Arts	-.17 ¹⁸	Treatment students in 15 th percentile and control students in 20 th percentile of state normed sample	No	.63	11 th	134 treatment and 128 control students who began the study in high school
Degrees of Reading Power (External test publisher)	Reading Comprehension	-.00 ¹⁸	Treatment students in 43 rd percentile, control students in 42 nd percentile of nationally normed sample	No	.26	9 th –10 th	165 treatment and 155 control students who began the study in middle school

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

¹ Impact estimates for one year of intervention services include students provided the opportunity to receive the interventions in 2006-07, 2007-08, 2008-09, 2009-2010 or 2010-11 school years, except in San Diego, where impact estimates are for one year of intervention services in 2007-08 or 2008-09 school year. Impact estimates for two years of intervention services includes students provided the opportunity to receive the intervention from 2006-07 through 2007-08, 2007-08 through 2008-09, 2008-09 through 2009-10, or 2009-10 through 2010-11. Impact estimates for three years of intervention services includes students provided the opportunity to receive the intervention from 2006-07 through 2008-09, 2007-08 through 2009-10, or 2008-09 through 2010-11. Exceptions apply for Chicago and San Diego and are explained in subsequent footnotes.

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- ² Except where noted, estimates are from studies that meet WWC standards without reservations.
- ³ 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.
- ⁴ 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.
- ⁵ Statistical significance is measured at the 95% confidence level, which is a conventional standard set for social science research.
- ⁶ 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 model.
- ⁷ The Tennessee Comprehensive Assessment Program assessments changed between the spring of 2009 and 2010; therefore, the spring 2010 assessment data were not combined with assessment data from prior years. The results shown on this row are for 6th graders who were assessed in spring of 2010 only. Neither state nor district level population means or standard deviations of these assessments were available. Therefore impacts could not be converted to percentile units.
- ⁸ This impact estimate did not meet WWC standards because of over-alignment of the SRI with the intervention.
- ⁹ This impact estimate did not meet WWC standards without reservations because of high attrition; however, the estimate did meet standards with reservations because the baseline equivalence of the analytic sample was established.
- ¹⁰ Impact estimate for Chicago's Striving Readers English Language Arts Curriculum is for students reading one year or less below grade level (Tier 2).
- ¹¹ This impact estimate met WWC evidence standards with reservations, because there was insufficient data to determine attrition rates.
- ¹² Impact estimate for two years of Chicago's Striving Readers English Language Arts Curriculum is for students reading one year or less below grade level (Tier 2) who entered the program as 6th graders in 2008-09.
- ¹³ Impact estimate for three years of Chicago's Striving Readers English Language Arts Curriculum is for students reading one year or less below grade level (Tier 2) who entered the program as 6th graders in 2008-09.
- ¹⁴ Impact estimate for Chicago Striving Readers Language Arts Curriculum and AMP is for 6th grade students reading more than one year below grade level (Tier 3).
- ¹⁵ Impact estimate for two years of Chicago Striving Readers Language Arts Curriculum and AMP is for 6th grade students reading more than one year below grade level (Tier 3) who received the Language Arts Curriculum for two years but AMP in 6th grade only.
- ¹⁶ Impact estimate for three years of Chicago Striving Readers Language Arts Curriculum and AMP is for 6th grade students reading more than one year below grade level (Tier 3) who received the Language Arts Curriculum for three years but AMP in 6th grade only.
- ¹⁷ Impact estimates for San Diego of two years of exposure include students who received the intervention from 2007-08 through 2008-09 or from 2008-09 through 2009-2010.
- ¹⁸ This impact estimate met WWC evidence standards with reservations, because there was insufficient data to determine attrition rates.
- ¹⁹ Impact estimates for San Diego of three years of exposure include students who received the intervention from 2007-08 through 2009-2010.

Summary of 2006 Striving Readers Projects: Targeted Interventions for Struggling Readers

Table 10: Targeted Interventions: Impacts of Interventions on Subgroups of Struggling Readers ¹

Description of the Outcome Measure (Source)	Areas Covered by Test	Impact in Standard Deviation Units ²	Impact in Percentile Units or Original Metric ³	Is Impact Different than Zero (statistically significant)? ⁴	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁵	Grade Level in Impact Analysis	Sample Size in Impact Analysis
Special Education Students - One Year Intervention⁶							
<i>Chicago Public Schools: Chicago Striving Readers English Language Arts Curriculum and Achieving Maximum Potential (AMP) After School Program⁷</i>							
Illinois Standard Achievement Test (State)	Vocabulary, Reading Strategies, Comprehension and Literature	-.10	Not Available ⁸	No	.45	6 th	162 treatment students in Tier 3 and 143 control students in Tier 3 in 63 schools
<i>Newark, NJ: READ 180 Enterprise Edition</i>							
Stanford Achievement Test (External test publisher)	Vocabulary	.13	Treatment students in 8 th percentile, control students in 6 th percentile of nationally normed sample	Yes	.16	6 th -8 th	543 treatment students in 10 schools and 486 control students in 9 schools

Description of the Outcome Measure (Source)	Areas Covered by Test	Impact in Standard Deviation Units ²	Impact in Percentile Units or Original Metric ³	Is Impact Different than Zero (statistically significant)? ⁴	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁵	Grade Level in Impact Analysis	Sample Size in Impact Analysis
Special Education Students – One Year Intervention⁶ (continued)							
<i>Newark, NJ: READ 180 Enterprise Edition, continued.</i>							
Stanford Achievement Test <i>(External test publisher)</i>	Comprehension	.05	Treatment students in 8th percentile, control students in 7th percentile of nationally normed sample	No	.16	6 th –8 th	543 treatment students in 10 schools and 486 control students in 9 schools
Stanford Achievement Test <i>(External test publisher)</i>	Language	.04	Treatment and control students in 3 rd percentile of nationally normed sample	No	.15	6 th –8 th	543 treatment students in 10 schools and 486 control students in 9 schools
<i>Portland School District, OR: Xtreme Reading Strategic Instruction Model</i>							
Group Reading Assessment Diagnostic Evaluation <i>(External test publisher)</i>	Total Reading (Vocabulary, Comprehension)	.22	Treatment students in 14 th percentile, control students in 10 th percentile of nationally normed sample	Yes	.22	7 th –10 th	186 treatment and 217 control students in 9 schools (Years 1 and 2) or 10 schools (Years 3 and 4)

Description of the Outcome Measure (Source)	Areas Covered by Test	Impact in Standard Deviation Units ²	Impact in Percentile Units or Original Metric ³	Is Impact Different than Zero (statistically significant)? ⁴	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁵	Grade Level in Impact Analysis	Sample Size in Impact Analysis
Special Education Students – Two Year Intervention⁹							
<i>Chicago Public Schools: Chicago Striving Readers English Language Arts Curriculum and Achieving Maximum Potential (AMP) After School Program¹⁰</i>							
Illinois Standard Achievement Test (State)	Vocabulary, Reading Strategies, Comprehension and Literature	.17	Not Available ⁸	No	.51	7 th	87 treatment students in Tier 3 and 68 control students in Tier 3 in 63 schools
<i>Newark, NJ: READ 180 Enterprise Edition</i>							
Stanford Achievement Test (External test publisher)	Vocabulary	.08	Treatment students in 11 th percentile, control students in 10 th percentile of nationally normed sample	No	.19	7 th –8 th	361 treatment students in 10 schools and 283 control students in 9 schools
Stanford Achievement Test (External test publisher)	Comprehension	.22	Treatment students in 11 th percentile, control students in 9 th percentile of nationally normed sample	Yes	.18	7 th –8 th	361 treatment students in 10 schools and 283 control students in 9 schools

Description of the Outcome Measure (Source)	Areas Covered by Test	Impact in Standard Deviation Units ²	Impact in Percentile Units or Original Metric ³	Is Impact Different than Zero (statistically significant)? ⁴	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁵	Grade Level in Impact Analysis	Sample Size in Impact Analysis
Special Education Students – Two Year Intervention⁹ (continued)							
<i>Newark, NJ: READ 180 Enterprise Edition (continued)</i>							
Stanford Achievement Test (External test publisher)	Language	.07	Treatment and control students in 4 th percentile of nationally normed sample	No	.27	7 th -8 th	361 treatment students in 10 schools and 283 control students in 9 schools
Special Education Students – Three Year Intervention¹¹							
<i>Chicago Public Schools: Chicago Striving Readers English Language Arts Curriculum and Achieving Maximum Potential (AMP) After School Program¹²</i>							
Illinois Standard Achievement Test (State)	Vocabulary, Reading Strategies, Comprehension and Literature	.08	Not Available ⁸	No	.49	8 th	164 treatment students in Tier 3 and 133 control students in Tier 3 in 63 schools
<i>Newark, NJ: Read 180 Enterprise Edition</i>							
Stanford Achievement Test (External test publisher)	Vocabulary	-.05	Treatment students in 10 th percentile, control students in 11 th percentile of nationally normed sample	No	.23	8 th	257 treatment students in 10 schools and 203 control students in 9 schools
Stanford Achievement Test (External test publisher)	Comprehension	-.03	Treatment and control students in 16 th percentile of nationally normed sample	No	.20	8 th	257 treatment students in 10 schools and 203 control students in 9 schools

Description of the Outcome Measure (Source)	Areas Covered by Test	Impact in Standard Deviation Units ²	Impact in Percentile Units or Original Metric ³	Is Impact Different than Zero (statistically significant)? ⁴	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁵	Grade Level in Impact Analysis	Sample Size in Impact Analysis
Special Education Students – Three Year Intervention¹¹ (continued)							
<i>Newark, NJ: Read 180 Enterprise Edition (continued)</i>							
Stanford Achievement Test (External test publisher)	Language	.15	Treatment students in 5 th percentile, control students in 4 th percentile of nationally normed sample	No	.18	8 th	257 treatment students in 10 schools and 203 control students in 9 schools
English Language Learners – One Year Intervention							
<i>Chicago Public Schools: Chicago Striving Readers English Language Arts Curriculum and Achieving Maximum Potential (AMP) After School Program⁷</i>							
Illinois Standard Achievement Test (State)	Vocabulary, Reading Strategies, Comprehension and Literature	-.03	Not Available ¹³	No	.43	6 th	87 treatment students in Tier 3 and 69 control students in Tier 3 in 63 schools
<i>Portland School District, OR: Xtreme Reading Strategic Instruction Model</i>							
Group Reading Assessment Diagnostic Evaluation (External test publisher)	Total Reading (Vocabulary, Comprehension)	.35	Treatment students in 15 th percentile, control students in 8 th percentile of nationally normed sample	Yes	.22	7 th –10 th	213 treatment and 209 control students in 9 schools (Years 1 and 2) or 10 schools (Years 3 and 4)

Description of the Outcome Measure (Source)	Areas Covered by Test	Impact in Standard Deviation Units ²	Impact in Percentile Units or Original Metric ³	Is Impact Different than Zero (statistically significant)? ⁴	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁵	Grade Level in Impact Analysis	Sample Size in Impact Analysis
English Language Learners – One Year Intervention (continued)							
<i>San Diego Unified School District, CA: Strategies for Literacy Independence across the Curriculum</i>							
California Standards Test (State)	English Language Arts	.03	Treatment and control students in 18 th percentile of state normed sample	No	.16	7 th –10 th	366 treatment and 375 control students in 4 middle schools and 4 high schools
Degrees of Reading Power (External test publisher)	Reading Comprehension	.03	Treatment and control students in 30 th percentile of nationally normed sample	No	.18	7 th –10 th	298 treatment and 303 control students in 4 high schools and 4 high schools
English Language Learners – Two Year Intervention							
<i>Chicago Public Schools: Chicago Striving Readers English Language Arts Curriculum and Achieving Maximum Potential (AMP) After School Program¹⁰</i>							
Illinois Standard Achievement Test (State)	Vocabulary, Reading Strategies, Comprehension and Literature	-.53	Not Available ¹³	Yes	.70	7 th	24 treatment students in Tier 3 and 21 control students in Tier 3 in 63 schools
<i>San Diego Unified School District, CA: Strategies for Literacy Independence across the Curriculum</i>							
California Standards Test (State)	English Language Arts	.04	Treatment students in 16 th percentile, control students in 15 th percentile of state normed sample	No	.18	8 th –11 th	358 treatment and 349 control students in 4 middle schools and 4 high schools

Description of the Outcome Measure (Source)	Areas Covered by Test	Impact in Standard Deviation Units ²	Impact in Percentile Units or Original Metric ³	Is Impact Different than Zero (statistically significant)? ⁴	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁵	Grade Level in Impact Analysis	Sample Size in Impact Analysis
English Language Learners – Two Year Intervention (continued)							
<i>San Diego Unified School District, CA: Strategies for Literacy Independence across the Curriculum (continued)</i>							
Degrees of Reading Power (External test publisher)	Reading Comprehension	.12	Treatment students in 41 st percentile, control students in 38 th percentile of nationally normed sample	No	.20	8 th –11 th	280 treatment and 266 control students in 4 middle schools and 4 high schools
English Language Learners – Three Year Intervention							
<i>Chicago Public Schools: Chicago Striving Readers English Language Arts Curriculum and Achieving Maximum Potential (AMP) After School Program¹²</i>							
Illinois Standard Achievement Test (State)	Vocabulary, Reading Strategies, Comprehension and Literature	-.04	Not Available ¹³	No	.41	8 th	4 treatment students in Tier 3 and 8 control students in Tier 3 in 63 schools
<i>San Diego Unified School District, CA: Strategies for Literacy Independence across the Curriculum</i>							
California Standards Test (State)	English Language Arts	-.05	Treatment students in 17 th percentile, control students in 18 th percentile of state normed sample	No	.28	9 th –11 th	142 treatment and 123 control students who began the study in 4 middle schools and 4 high schools

Description of the Outcome Measure (Source)	Areas Covered by Test	Impact in Standard Deviation Units ²	Impact in Percentile Units or Original Metric ³	Is Impact Different than Zero (statistically significant)? ⁴	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁵	Grade Level in Impact Analysis	Sample Size in Impact Analysis
English Language Learners – Three Year Intervention (continued)							
<i>San Diego Unified School District, CA: Strategies for Literacy Independence across the Curriculum (continued)</i>							
Degrees of Reading Power (External test publisher)	Reading Comprehension	-.00	Treatment and control students in 46 th percentile of nationally normed sample	No	.38	9 th –11 th	88 treatment and 60 control students who began the study in 4 middle schools and 4 high schools
<i>Source: Striving Readers Evaluation Reports (available at: http://www.ed.gov/programs/strivingreaders/performance.html)</i>							

¹ Key subgroups represented in this table include special education students and English language learners (ELL).

² 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.

³ 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.

⁴ Statistical significance is measured at 95% confidence level, which is a conventional standard set for social science research.

⁵ Abt Associates staff calculated the MDE by multiplying the standard error of the impact estimate by 2.8 and converting to standardized units. 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.

⁶ Impact estimates for one year of intervention services for students new to the intervention in the 2006-07, 2007-08, 2008-09, 2009-2010, and the 2010-11 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 and 2008-09 school years.

⁷ Impact estimate for Chicago Striving Readers Language Arts Curriculum and AMP is for 6th grade students reading more than one year below grade level (Tier 3).

⁸ NCE scores, and therefore percentiles, could not be accurately calculated for Special Education students because the state does not run separate analyses for this subgroup.

⁹ Impact estimates for two years of intervention services includes students offered the intervention from 2006-07 through 2007-08, 2007-08 through 2008-09, 2008-2009 through 2009-2010, and 2009-10 through 2010-11.

¹⁰ Impact estimate for two years of Chicago Striving Readers Language Arts Curriculum and AMP is for 6th grade students reading more than one year below grade level (Tier 3) who received the Language Arts Curriculum for two years but AMP in 6th grade only.

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- ¹¹ Impact estimates for three years of intervention services includes students offered the intervention from 2006-07 through 2008-09 and 2007-08 through 2009-10, and 2008-09 through 2010-11.
- ¹² Impact estimate for three years of Chicago Striving Readers Language Arts Curriculum and AMP is for 6th grade students reading more than one year below grade level (Tier 3) who received the Language Arts Curriculum for three years but AMP in 6th grade only.
- ¹³ NCE scores, and therefore percentiles, could not be accurately calculated for English Language Learners because the state does not run separate analyses for this subgroup.

Summary of 2006 Striving Readers Projects: Targeted Interventions for Struggling Readers

Table 11: Targeted Interventions: Impact of the Interventions on Other Outcomes for All Struggling Readers ¹

Description of Outcome (Source)	Data Source	Impact on Other Outcomes in Standard Deviation Units ²	Impact on Other Outcomes in Original Scale Units	Is Impact Different than Zero (statistically significant)? ³	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁴	Grade Level in Impact Analysis	Sample Size in Impact Analysis
Reading Strategies – One Year Intervention							
<i>Danville School District, KY: Learning Strategies Curriculum</i>							
Metacognitive Awareness of Reading Strategies Inventory (Mokhtari and Reichard, 2002) 30-item scale; Cronbach's alpha = .93.	Student surveys	.13	Treatment students are .09 units closer on a 5 point Likert scale to 'I usually do this', 4, than control students	No	.18	6 th	439 treatment and 390 control students in 12 schools
Metacognitive Awareness of Reading Strategies Inventory (Mokhtari and Reichard, 2002) 30-item scale; Cronbach's alpha = .93.	Student surveys	.09	Treatment students are .07 units closer on a 5 point Likert scale to 'I usually do this', 4, than control students	No	.19	9 th	368 treatment and 342 control students in 11 schools
Reading Motivation – One Year Intervention							
<i>Danville School District, KY: Learning Strategies Curriculum</i>							
Motivation to Read (Wigfield & Guthrie, 1997; 55-item scale; Cronbach's alpha = .93)	Student surveys	.16	Treatment students are .08 units closer on a 4 point Likert scale to 'agreeing', 3, than control students	Yes	.18	6 th	439 treatment and 390 control students in 12 schools

Description of Outcome (Source)	Data Source	Impact on Other Outcomes in Standard Deviation Units ²	Impact on Other Outcomes in Original Scale Units	Is Impact Different than Zero (statistically significant)? ³	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁴	Grade Level in Impact Analysis	Sample Size in Impact Analysis
Reading Motivation – One Year Intervention (continued)							
<i>Danville School District, KY: Learning Strategies Curriculum (continued)</i>							
Motivation to Read (Wigfield & Guthrie, 1997; 55-item scale; Cronbach's alpha = .93)	Student surveys	.23	Treatment students are .12 units closer on a 4 point Likert scale to 'agreeing', 3, than control students	Yes	.18	9 th	368 treatment and 342 control students in 11 schools
<i>Portland School District, OR: Xtreme Reading Strategic Instruction Model</i>							
Year 2 – 4 Motivation for Reading ⁵ (28-item scale; Cronbach's alpha=.94)	Student surveys	.13	Treatment students are .12 units closer on a 6 point Likert scale to "I usually do this", 4, than the control students	Yes	.17	7 th –10 th	342 treatment and 426 control students in 9 schools (Year 2 or 10 schools (Years 3 & 4)
<i>San Diego Unified School District, CA: Strategies for Literacy Independence across the Curriculum</i>							
Year 2 ⁶ Reading Motivation ⁷ (12-item scale; Cronbach's alpha=.87)	Student surveys	-.03	Treatment students are -0.25 points higher on a scale ranging from 0 (not at all motivated) to 48 (very motivated) than control students	No	.24	7 th –8 th	275 treatment and 312 control students in 4 middle schools

Description of Outcome (Source)	Data Source	Impact on Other Outcomes in Standard Deviation Units ²	Impact on Other Outcomes in Original Scale Units	Is Impact Different than Zero (statistically significant)? ³	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁴	Grade Level in Impact Analysis	Sample Size in Impact Analysis
Reading Motivation – One Year Intervention (continued)							
<i>San Diego Unified School District, CA: Strategies for Literacy Independence across the Curriculum (continued)</i>							
Year 3 Reading Motivation ⁸ (12-item scale; Cronbach's alpha=.87)	Student surveys	-.02	Treatment students are -0.21 points higher on a scale ranging from 0 (not at all motivated) to 48 (very motivated) than control students	No	.37	7 th -8 th	273 treatment and 287 control students in 4 middle schools
Year 2 Reading Motivation ⁷ (12-item scale; Cronbach's alpha=.87)	Student surveys	.03	Treatment students are 0.25 points higher on a scale ranging from 0 (not at all motivated) to 48 (very motivated) than control students	No	.26	9 th -10 th	266 treatment and 235 control students in 4 high schools
Year 3 Reading Motivation ⁸ (12-item scale; Cronbach's alpha=.87)	Student surveys	-.10	Treatment students are -0.87 points higher on a scale ranging from 0 (not at all motivated) to 48 (very motivated) than control students	No	.35	9 th -10 th	152 treatment and 159 control students in 4 high schools

Description of Outcome (Source)	Data Source	Impact on Other Outcomes in Standard Deviation Units ²	Impact on Other Outcomes in Original Scale Units	Is Impact Different than Zero (statistically significant)? ³	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁴	Grade Level in Impact Analysis	Sample Size in Impact Analysis
Reading Motivation – Two Year Intervention							
<i>San Diego Unified School District, CA: Strategies for Literacy Independence across the Curriculum</i>							
Year 2 Reading Motivation ⁸ (12-item scale; Cronbach's alpha=.87)	Student surveys	.02	Treatment students are 0.22 points higher on a scale ranging from 0 (not at all motivated) to 48 (very motivated) than control students	No	.36	8 th –9 th	179 treatment and 199 control students in 4 middle schools
Year 2 Reading Motivation ⁸ (12-item scale; Cronbach's alpha=.87)	Student surveys	.04	Treatment students are 0.34 points higher on a scale ranging from 0 (not at all motivated) to 48 (very motivated) than control students	No	.30	10 th –11 th	168 treatment and 198 control students in 4 middle schools
Year 3 Reading Motivation ⁸ (12-item scale; Cronbach's alpha=.87)	Student surveys	.04	Treatment students are 0.41 points higher on a scale ranging from 0 (not at all motivated) to 48 (very motivated) than control students	No	.36	8 th –9 th	132 treatment and 167 control students in 4 high schools

Description of Outcome (Source)	Data Source	Impact on Other Outcomes in Standard Deviation Units ²	Impact on Other Outcomes in Original Scale Units	Is Impact Different than Zero (statistically significant)? ³	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁴	Grade Level in Impact Analysis	Sample Size in Impact Analysis
Reading Motivation – Two Year Intervention (continued)							
<i>San Diego Unified School District, CA: Strategies for Literacy Independence across the Curriculum (continued)</i>							
Year 3 Reading Motivation ⁸ (12-item scale; Cronbach's alpha=.87)	Student surveys	-.02	Treatment students are -0.16 points higher on a scale ranging from 0 (not at all motivated) to 48 (very motivated) than control students	No	.42	10 th –11 th	121 treatment and 115 control students in 4 high schools
Year 4 Reading Motivation ⁸ (12-item scale; Cronbach's alpha=.87)	Student surveys	.05	Treatment students are 0.47 points higher on a scale ranging from 0 (not at all motivated) to 48 (very motivated) than control students	No	.38	8 th –9 th	146 treatment and 141 control students who began the study in 4 middle schools
Year 4 Reading Motivation ⁸ (12-item scale; Cronbach's alpha=.87)	Student surveys	-.09	Treatment students are -0.73 points higher on a scale ranging from 0 (not at all motivated) to 48 (very motivated) than control students	No	.44	10 th –11 th	85 treatment and 79 control students in 4 high schools

Description of Outcome (Source)	Data Source	Impact on Other Outcomes in Standard Deviation Units ²	Impact on Other Outcomes in Original Scale Units	Is Impact Different than Zero (statistically significant)? ³	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁴	Grade Level in Impact Analysis	Sample Size in Impact Analysis
Reading Motivation – Three Year Intervention							
<i>San Diego Unified School District, CA: Strategies for Literacy Independence across the Curriculum</i>							
Year 4 Reading Motivation ⁷ (12-item scale; <i>Cronbach's alpha=.87</i>)	Student surveys	.30	Treatment students are 2.88 points higher on a scale ranging from 0 (not at all motivated) to 48 (very motivated) than control students	No	.44	9 th –10 th	69 treatment and 64 control students who began the study in 4 middle schools
Year 4 Reading Motivation ⁷ (12-item scale; <i>Cronbach's alpha=.87</i>)	Student surveys	-.11	Treatment students are -0.98 points higher on a scale ranging from 0 (not at all motivated) to 48 (very motivated) than control students	No	.51	11 th	57 treatment and 61 control students in 4 high schools
Attendance – One Year Intervention							
<i>Newark Public Schools, NJ: Read 180 Enterprise Edition</i>							
Attendance (Count of unexcused absences)	School Records	.00	Treatment students have mean of 19.33 unexcused absences, control students have mean of 19.27 unexcused absences	No	.01	6 th –8 th	1350 treatment students in 10 schools and 1205 control students in 9 schools

Description of Outcome (Source)	Data Source	Impact on Other Outcomes in Standard Deviation Units ²	Impact on Other Outcomes in Original Scale Units	Is Impact Different than Zero (statistically significant)? ³	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁴	Grade Level in Impact Analysis	Sample Size in Impact Analysis
Attendance – Two Year Intervention							
<i>Newark Public Schools, NJ: Read 180 Enterprise Edition</i>							
Attendance (Count of unexcused absences)	School Records	.00	Treatment students have mean of 19.14 unexcused absences, control students have mean of 19.09 unexcused absences	No	.01	7 th -8 th	814 treatment students in 10 schools and 706 control students in 9 schools
Attendance – Three Year Intervention							
<i>Newark Public Schools, NJ: Read 180 Enterprise Edition</i>							
Attendance (Count of unexcused absences)	School Records	-.01	Treatment students have mean of 15.83 unexcused absences, control students have mean of 15.63 unexcused absences	No	.02	8 th	552 treatment students in 10 schools and 471 control students in 9 schools
Source: Striving Readers Evaluation Reports (available at: http://www.ed.gov/programs/strivingreaders/performance.html)							

¹ Other reading outcomes include reading strategy use, motivation, and attendance.

² 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.

³ Statistical significance is measured at 95% confidence level, which is a conventional standard set for social science research.

⁴ Abt Associates staff calculated the MDE by multiplying the standard error of the impact estimate by 2.8 and converting to standardized units. 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 Impact estimates for Portland include students who received the intervention in school years 2007-08 through 2009-2010.

⁶ "Year" on the motivation measures for San Diego refers to study year.

⁷ These impact estimates for San Diego include students who began the program in the 2007-08 school year.

⁸ These impact estimates for San Diego include students who began the program in the 2008-09 school year.

Summary of 2006 Striving Readers Projects: Whole School Interventions for All Readers

Table 12: Whole School Interventions: Implementation Context

Model/Developer	Grades Served by Intervention	Number of Years Students Eligible to Receive Intervention	Relationship of Whole School and Targeted Interventions	How Intervention Teachers Selected
Chicago Public Schools, IL				
<i>Chicago Striving Readers Program</i>				
<p>Blended intervention model of reading comprehension instruction for all students. Teachers provide direct explicit instruction in comprehension, fluency, vocabulary, and word identification, and help to facilitate gradual release of responsibility from teacher to students within a whole group/small group/whole group configuration.</p> <p>Five reading instruction components:</p> <ul style="list-style-type: none"> • Building background knowledge through direct vocabulary instruction (developed by Marzano & the Association 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><i>(continued on following page)</i></p>	Grades 6–8	Students could continue to receive intervention for up to 3 years.	Integrated model, with all students receiving whole school intervention and struggling readers additionally receiving linked targeted intervention	Intervention delivered by English language arts, math, science, and social science teachers. Self-contained special education and bilingual education teachers and school librarians also participated

Model/Developer	Grades Served by Intervention	Number of Years Students Eligible to Receive Intervention	Relationship of Whole School and Targeted Interventions	How Intervention Teachers Selected
Chicago Public Schools, IL (continued)				
<i>Chicago Striving Readers Program (continued)</i>				
<p><i>(continued from previous page)</i></p> <ul style="list-style-type: none"> • Word study for phonics, vocabulary, and spelling instruction (based on <i>Words Their Way</i>, developed by Bear & Templeton) • Explicit instruction in comprehension techniques <p>Developed by Chicago Public Schools Striving Readers program developers and implementers in collaboration with Donna Ogle at National-Louis University</p>				
Danville School District, KY ¹				
<i>Adolescent Literacy Model (ALM)</i>				
<p>During instruction, teachers apply literacy strategies (e.g., vocabulary development, reading comprehension, verbal fluency, writing to learn, writing to demonstrate learning, and academic dialogue)</p> <p>Developed by Collaborative for Teaching and Learning, University of Kentucky (Awbrey, 2008)² http://www.ctlonline.org/site/news_articles/ctl-and-the-national-stimulus-effort.html</p>	Grades 6–12	Students could continue to receive intervention for up to 4 years. ³	Separate models for whole school intervention and targeted intervention	Intervention delivered by all core subject and auxiliary staff (special education and other certified staff included)
Memphis City Schools, TN				
<i>Memphis Content Literacy Academy (MCLA)</i>				
<p>Four teacher instructional strategies:</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 coaching support to teachers on literacy integration <p><i>(continued on following page)</i></p>	Grades 6–8	Students could continue to receive intervention for up to 2 years.	Separate models for whole school intervention and targeted intervention	Intervention delivered by English language arts, math, science, and social studies teachers. Special education teachers also included unless they were assigned to self-contained classrooms

Model/Developer	Grades Served by Intervention	Number of Years Students Eligible to Receive Intervention	Relationship of Whole School and Targeted Interventions	How Intervention Teachers Selected
Memphis City Schools, TN (continued)				
<i>Memphis Content Literacy Academy (MCLA) (continued)</i>				
<p><i>(continued from previous page)</i></p> <ul style="list-style-type: none"> • 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-leveled materials <p>Developed by the University of Memphis with input from key staff at Memphis City Schools</p>				<p>In year 3, expanded to include any full-time staff who provided instruction to students – exploratory teachers (music, art, PE), counselors who provided instruction, writing and foreign language teachers, and instructional facilitators</p>
Newark Public Schools, NJ				
<i>National Urban Alliance (NUA) / New Jersey City University (NJCU)</i>				
<p><i>NJCU</i> Language arts teachers and literacy coaches provided instruction on a variety of strategies including use of graphic organizers, text annotation, note taking, post-reading reflection, anticipation guides to model brain-storming.</p> <p>Developed by New Jersey City University (NJCU)</p> <p><i>NUA</i> Other content teachers provided instruction in content lessons literacy strategies such as graphic organizers (“Thinking Maps”), anticipation guides, word taxonomies.</p> <p>Developed by National Urban Alliance (NUA)</p>	Grades 6–8	Eligible students could continue to receive intervention for up to 3 years.	Separate models for whole school intervention and targeted intervention	<p><i>NJCU</i> Intervention delivered by English language arts teachers</p> <p><i>NUA</i> Intervention delivered by math, science, and social studies teachers</p>

Model/Developer	Grades Served by Intervention	Number of Years Students Eligible to Receive Intervention	Relationship of Whole School and Targeted Interventions	How Intervention Teachers Selected
Ohio Department of Youth Services (operating as public school education district for youth in juvenile correction facilities)				
<i>Year 1: State Institute for Reading Instruction- Adolescent Literacy(SIRI-AL) and English Language Arts Writing Academy</i> <i>Years 2 & 3: High Yield Strategies (HYS)</i>				
<p><i>Year 1</i> <i>State Institute for Reading Instruction— Adolescent Literacy (SIRI-AL)</i> Provide teachers with research based national knowledge and skills on a classroom reading and writing instruction</p> <p>Developed by the Ohio State Department of Education</p> <p><i>English Language Arts Writing Academy</i> Build teachers' capacity to use Ohio's Writing Academic Content Standards to inform instruction</p> <p>Developed by the Ohio State Department of Education</p> <p><i>Years 2 - 5</i> <i>The High Yield Strategies (HYS)</i> Teachers provide instruction on nine strategies to improve reading comprehension, such as advance organizers, note-taking, summarizing, etc.</p> <p>Developed by R. Marzano</p>	Grades 7 – 12	Students could continue to receive intervention for up to the duration of the study (up to 5 years), for as long as student is in the facility (average of 10.5 months).	Separate models for whole school intervention and targeted intervention	Intervention delivered by English language arts, math, science, history, and technical trade teachers

Model/Developer	Grades Served by Intervention	Number of Years Students Eligible to Receive Intervention	Relationship of Whole School and Targeted Interventions	How Intervention Teachers Selected
Portland School District, OR				
<i>Strategic Instruction Model Content Enhancement Routines for Teachers (SIM-CERT)</i>				
<p>Curriculum to facilitate content literacy--the engagement skills and strategies (including listening, speaking, reading, and writing) necessary to process, understand, and master material across a range of academic disciplines. Embedded strategy instruction (teachers embed selected learning strategies in core curriculum courses). Organized around a set of twelve Content Enhancement Routines.</p> <p>Developed by the University of Kansas, as part of its Content Literacy Continuum http://www.xtremereading.com/pages/sim.html</p>	Grades 6–12	Students could continue to receive intervention for up to 5 years (for the duration of the study).	Targeted and whole school interventions were linked--they represented different levels of the same curriculum developed by the University of Kansas.	<p>Intervention delivered by English language arts and social studies teachers in year 1. In year 2, math and science teachers also included. In year 3, art, physical education and health teachers included.</p> <p>ELL, special education and foreign language teachers participated at each school's discretion.</p>
San Diego Unified School District, CA				
<i>Strategies for Literacy Integration across the Curriculum (SLIC)</i>				
<p>Teachers present students with a set of literacy strategies developed 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. Use of model and strategies by teachers is informed by periodic administrations (every 2-3 months) of SLIC assessment.</p> <p>Developed by T. McDonald & C. Thornley, Education Associates, New Zealand</p>	Grades 6–12	Students could continue to receive intervention for up to 4 years.	Integrated model, with all students receiving whole school intervention and struggling readers additionally receiving linked targeted intervention	Intervention delivered by English language arts, math, science, social science, history, and special education teachers

Model/Developer	Grades Served by Intervention	Number of Years Students Eligible to Receive Intervention	Relationship of Whole School and Targeted Interventions	How Intervention Teachers Selected
Springfield Public Schools and Chicopee Public Schools, MA				
<i>Strategic Instruction Model Content Enhancement Routines for Teachers (SIM-CERT)</i>				
<p>Curriculum to facilitate content literacy--the engagement skills and strategies (including listening, speaking, reading, and writing) necessary to process, understand, and master material across a range of academic disciplines. Embedded strategy instruction (teachers embed selected learning strategies in core curriculum courses). Organized around a set of Content Enhancement Routines: unit organizers, course organizer framing, vocabulary LINCing, concept mastery, and concept comparison.</p> <p>Published by the University of Kansas Center for Research on Learning http://www.xtremereading.com/pages/sim.html</p>	Grades 9–12	Students could continue to receive intervention for up to 5 years	<p>For the Xtreme Reading targeted intervention, targeted and whole school interventions were linked; they represented different levels of the same curriculum developed by the University of Kansas.</p> <p>For the READ 180 targeted intervention, separate models for whole school intervention and targeted intervention</p>	Intervention delivered by all content-area teachers (at end of grant), including English language arts, science, social studies/history, math, art, foreign language, physical education/health, and vocational track teachers
<p>Source: Striving Readers Year 5 Evaluation Reports (available at: http://www.ed.gov/programs/strivingreaders/performance.html)</p>				

¹ The six other participating districts are: Bullitt County School District, Eminence Independent, Jessamine County, Pike County, Rowan County, and Washington County.

² Awbrey, A. (2008). *Where everyone gets it: CTL's adolescent literacy model*. Unpublished manuscript).

³ In Year 5, study continued in a subsample of 9 schools; students in these schools could have received the whole school intervention for a 5th year.

Summary of 2006 Striving Readers Projects: Whole School Interventions for All Readers

Table 13: Whole School Interventions: Overall Sample

Year ¹	Number of Schools/ Grades in Intervention	Number of Teachers Eligible for the Intervention	Total Number of Students in Intervention
Chicago Public Schools, IL²			
<i>Chicago Striving Readers Program</i>			
Year 1	Cohort 1 16 new K-8 schools Grades 6, 7, 8 in the study in each school	Total = 214 eligible teachers	Total = 3,068 students in grades 6 – 8
Year 2	Cohort 1 same as year 1 Cohort 2 15 new K-8 schools Grades 6, 7, 8 in the study in each school	Total = 249 eligible teachers	Total = 5,915 students in grades 6 – 8
Year 3	Same as year 2	Total = 256 eligible teachers	Total = 5,317 students in grades 6 – 8
Year 4	Cohort 1 same as year 1 Cohort 2 13 K-8 schools Grades 6, 7, 8 in the study in each school	Total = 199 eligible teachers	Total = 4,905 students in grades 6 – 8
Year 5	Cohort 1 same as year 1 Cohort 2 8 K-8 schools Grades 6, 7, 8 in the study in each school ³	Total = 165 eligible teachers	Total = 3,833 students in grades 6 – 8

Year ¹	Number of Schools/ Grades in Intervention	Number of Teachers Eligible for the Intervention	Total Number of Students in Intervention
Danville School District, KY⁴			
<i>Adolescent Literacy Model (ALM)</i>			
Year 1	10 middle schools (grades 6-8) Grades 6, 7, 8 in the study in each school 9 high schools (grades 9-12) Grades 9, 10, 11, 12 in the study in each school 2 schools grades 6-12 Grades 6 - 12 in the study in each school	Total = 912 teachers Middle schools = 382 teachers High schools = 488 teachers 6-12 schools = 42 teachers	Total = 13,614 students Grade 6 = 1,838 students Grade 7 = 1,819 students Grade 8 = 1,888 students Grade 9 = 2,490 students Grade 10 = 2,125 students Grade 11 = 1,849 students Grade 12 = 1,605 students
Year 2	Same as year 1	Total = 994 teachers Middle schools = 390 teachers High schools = 554 teachers 6-12 schools = 50 teachers	Total = 13,431 students Grade 6 = 1,841 students Grade 7 = 1,796 students Grade 8 = 1,827 students Grade 9 = 2,361 students Grade 10 = 2,024 students Grade 11 = 1,867 students Grade 12 = 1,715 students
Year 3	Same as year 1	Total = 851 teachers Middle schools = 318 teachers High schools = 493 teachers 6-12 schools = 40 teachers	Total = 13,460 students Grade 6 = 1,813 students Grade 7 = 1,848 students Grade 8 = 1,842 students Grade 9 = 2,214 students Grade 10 = 2,074 students Grade 11 = 1,907 students Grade 12 = 1,762 students
Year 4	Same as year 1	Total = 853 teachers Middle schools = 316 teachers High schools = 492 teachers 6-12 schools = 45 teachers	Total = 12,038 students Middle school = 5,724 students High school = 6,314 students

Year ¹	Number of Schools/ Grades in Intervention	Number of Teachers Eligible for the Intervention	Total Number of Students in Intervention
Danville School District, KY⁵ (continued)			
<i>Adolescent Literacy Model (ALM) (continued)</i>			
Year 5	Subset of schools identified as having high implementation in Years 1 - 2 6 middle schools Grade 7 in each school 8 high schools Grade 10 in each school 1 school grades 6-12 Grade 7	Total = 650 teachers Middle school = 190 teachers High school = 437 teachers 6 – 12 school = 23 teachers	Total = 9,046 students Middle school = 3,434 students High school = 5,612 students
Memphis City Schools, TN			
<i>Memphis Content Literacy Academy (MCLA)</i>			
Year 1	4 middle schools (grades 6-8) Grades 6, 7, 8 in the study in each school	Total = 132 eligible teachers	Total = 2,776 students Grade 6 = 752 students Grade 7 = 984 students Grade 8 = 1,040 students
Year 2	Same as year 1	Total = 115 eligible teachers	Total = 2,418 students
Year 3	8 middle schools—4 original plus 4 new middle schools (grades 6-8) ⁶	Total = 259 eligible teachers	Total = 5,235 students
Year 4	8 middle schools—4 original plus 4 new middle schools (grades 6-8) ⁷	Total = 271 eligible teachers	Total = 5,467 students

Year ¹	Number of Schools/ Grades in Intervention	Number of Teachers Eligible for the Intervention	Total Number of Students in Intervention
Memphis City Schools, TN (continued)			
<i>Memphis Content Literacy Academy (MCLA) (continued)</i>			
Year 5	Intervention not implemented	NA	NA
Newark Public Schools, NJ			
<i>National Urban Alliance (NUA) / New Jersey City University (NJCU)</i>			
Year 1	19 middle schools (grades 6-8) Grades 6, 7, 8 in the study in each school	Total = 337 eligible teachers Eligible for only NUA = 128 teachers Eligible for only NJCU = 76 teachers Eligible for both NUA & NJCU = 133 teachers	Total = 2,430 students
Year 2	Same as year 1	Total = 363 eligible teachers Eligible for only NUA = 147 teachers Eligible for only NJCU = 100 teachers Eligible for both NUA & NJCU = 116 teachers	Total = 3,608 students
Year 3	Same as year 1	Total = 337 eligible teachers Eligible for only NUA = 138 teachers Eligible for only NJCU = 60 teachers Eligible for both NUA & NJCU = 139 teachers 182 teachers taught 3 years in an intervention classroom 257 teachers taught 2-3 years	Total = 3,536 students

Year ¹	Number of Schools/ Grades in Intervention	Number of Teachers Eligible for the Intervention	Total Number of Students in Intervention
Newark Public Schools, NJ (continued)			
<i>National Urban Alliance (NUA) / New Jersey City University (NJCU) (continued)</i>			
Year 4	Same as year 1	Total = 337 eligible teachers Eligible for only NUA = 138 teachers Eligible for only NJCU = 59 teachers Eligible for both NUA & NJCU = 140 teachers 149 teachers in their 4 th year of intervention 94 teachers in their 3 rd year of intervention 138 in their 2 nd year of intervention 220 in their 1 st year of intervention	Total = 3,471 students
Year 5	Same as year 1	Total = 343 eligible teachers Eligible for only NUA = 139 teachers Eligible for only NJCU = 60 teachers Eligible for both NUA & NJCU = 142 teachers	Total = 3,881 students
Ohio Department of Youth Services (operating as public school education district for youth in juvenile correction facilities)			
<i>Year 1: State Institute for Reading Instruction- Adolescent Literacy(SIRI-AL) and English Language Arts Writing Academy Years 2 - 4: High Yield Strategies (HYS)</i>			
Year 1	7 youth detention facilities Grades 7 - 12 (Majority of students between 15 - 21 years of age)	Total = 164 eligible teachers	Total = 3,180 students
Year 2	Same as year 1	Total = 167 eligible teachers	Total = 3,298 students

Year ¹	Number of Schools/ Grades in Intervention	Number of Teachers Eligible for the Intervention	Total Number of Students in Intervention
Ohio Department of Youth Services (operating as public school education district for youth in juvenile correction facilities)			
<i>Year 1: State Institute for Reading Instruction- Adolescent Literacy(SIRI-AL) and English Language Arts Writing Academy Years 2 - 4: High Yield Strategies (HYS) (continued)</i>			
Year 3	6 youth detention facilities ⁸ Grades 7 - 12 (Majority of students between 15 - 21 years of age)	Total = 176 eligible teachers	Total = 2,686 students
Year 4	5 youth detention facilities ⁹ Grades 7 - 12 (Majority of students between 15 - 21 years of age)	Total = 176 eligible teachers	Total = 1,342 students
Year 5	5 youth detention facilities ¹⁰ Grades 7 - 12 (Majority of students between 15 - 21 years of age) Implementation not studied in year 5	Total = 176 eligible teachers	Total = 1,342 students
Portland School District, OR			
<i>Strategic Instruction Model Content Enhancement Routines for Teachers (SIM-CERT)</i>			
Year 1	5 middle schools (grades 6-8) Grades 6, 7, 8 in the study in 4 schools Grades 7, 8 in the study in 1 school 4 high schools (grades 9-12) Grades 9, 10, 11, 12 in the study in each school	Total = 91 teachers (social studies and language arts) Middle schools = 32 teachers High schools = 59 teachers	Total = 5,968 students Middle schools (grades 6 – 8) = 2,551 students High schools (grades 9 – 12) = 3,417 students

Year ¹	Number of Schools/ Grades in Intervention	Number of Teachers Eligible for the Intervention	Total Number of Students in Intervention
Portland School District, OR (continued)			
<i>Strategic Instruction Model Content Enhancement Routines for Teachers (SIM-CERT) (continued)</i>			
Year 2	1 middle school (grades 6-8) ¹¹ Grades 6, 7, 8 in the study 1 all-girls middle school (grades 6-9) Grades 6, 7, 8, 9 in the study 2 K-8 schools Grades 6, 7, 8 in the study in each school 1 8 th grade academy; Grade 8 in the study 4 high schools (grades 9-12) Grades 9, 10, 11, 12 in the study in each school	Total = 180 teachers (language arts, social studies, math and science) Middle schools = 60 teachers High schools = 120 teachers	Total = 5,248 students Middle schools (grades 6 – 8) = 1,881 students High schools (grades 9 – 12) = 3,367 students
Year 3	2 middle schools (grades 6-8) ¹² Grades 6, 7, 8 in the study in each school 1 all-girls middle school (grades 6-10) Grades 6, 7, 8, 9, 10 in the study 3 K-8 schools Grades 6, 7, 8 in the study in each school 4 high schools (grades 9-12) Grades 9, 10, 11, 12 in the study in each school	Total = 235 teachers (all areas) Middle schools = 101 teachers High schools = 134 teachers	Total = 4,673 students Middle schools (grades 6 – 8) = 1,554 students High schools (grades 9 – 12) = 3,119 students
Year 4	Same as year 3 except all-girls middle school serves Grades 6, 7, 8, 9, 10, and 11	Total = 197 teachers (all areas) Middle schools = 97 teachers High schools = 100 teachers	Total = 4,570 students Middle schools (grades 6 – 8) = 1,562 students High schools (grades 9 – 12) = 3,008 students

Year ¹	Number of Schools/ Grades in Intervention	Number of Teachers Eligible for the Intervention	Total Number of Students in Intervention
Portland School District, OR (continued)			
<i>Strategic Instruction Model Content Enhancement Routines for Teachers (SIM-CERT) (continued)</i>			
Year 5	Same as year 4	4,700 students	Total = 4,569 students Middle schools (grades 6 – 8) = 1,525 students High schools (grades 9 – 12) = 3,044 students
San Diego Unified School District, CA			
<i>Strategies for Literacy Integration across the Curriculum (SLIC)</i>			
Year 1	3 middle schools (grades 6-8) Grades 6, 7, 8 in the study in each school 2 high schools (grades 9-12) Grades 9, 10, 11, 12 in the study in each school	Total = 128 teachers Middle schools = 79 teachers High schools = 49 teachers	Total = 4,068 students
Year 2	4 middle schools (grades 6-8) Grades 6, 7, 8 in the study in each school 4 high schools (grades 9-12) ¹³ Grades 9, 10, 11, 12 in the study in each school	Total = 236 teachers Middle schools = 117 teachers High schools = 119 teachers 63% of teachers were new	Total = 6,498 students
Year 3	Same as year 2 ¹⁴	Total = 223 teachers Middle schools = 115 teachers High schools = 118 teachers 24% of teachers were new	Total = 6,809 students
Year 4	Same as year 2 ¹³	Total = 224 teachers Middle schools = 116 teachers High schools = 108 teachers 19% of teachers were new	Total = 6,647 students

Year ¹	Number of Schools/ Grades in Intervention	Number of Teachers Eligible for the Intervention	Total Number of Students in Intervention
San Diego Unified School District, CA (continued)			
<i>Strategies for Literacy Integration across the Curriculum (SLIC) (continued)</i>			
Year 5	Same as year 2		
Springfield Public Schools and Chicopee Public Schools, MA			
<i>Strategic Instruction Model Content Enhancement Routines for Teachers (SIM-CERT)</i>			
Year 1	5 high schools (grades 9-12) Grades 9, 10, 11, 12 in the study in each school	Teachers phased-in over 3 years, with 9 th grade targeted intervention teachers trained last (to keep targeted and whole school interventions separate) – districts update teacher training records each year for prior years 91 teachers trained	Total = 1,440 students
Year 2	Same as year 1	126 additional teachers trained Total teachers in year 2 = 218	Total = 2,009 students
Year 3	Same as year 1	158 additional teachers trained Total teachers in year 3 = 376	Total = 4,516 students
Year 4	Same as year 1	171 additional teachers trained Total teachers trained by year 4 = 545	Total = 5,944 students

Year ¹	Number of Schools/ Grades in Intervention	Number of Teachers Eligible for the Intervention	Total Number of Students in Intervention
Springfield Public Schools and Chicopee Public Schools, MA (continued)			
<i>Strategic Instruction Model Content Enhancement Routines for Teachers (SIM-CERT) (continued)</i>			
Year 5	Same as year 1	77 additional teachers trained Total teachers trained by year 5 = 623	Total = 6,761 students
Source: Striving Readers Year 5 Evaluation Reports (available at: http://www.ed.gov/programs/strivingreaders/performance.html)			

¹ Year refers to implementation year. Year 1- 2006-07 school year; Year 2- 2007-08 school year; Year 3- 2008-09 school year; Year 4-2009-10 school year; Year 5- 2010-11 school year.

² Figures reflect numbers of students in schools that were still participating in the study. These numbers are different from those used in the Intent-to-Treat impact analyses.

³ The Cohort 2 schools that were lost from the study included primarily the smaller schools that were unable to provide funding for their literacy intervention teacher and continued implementation at a diminished level.

⁴ The six other participating districts are: Bullitt County School District, Eminence Independent, Jessamine County, Pike County, Rowan County, and Washington County.

⁵ The six other participating districts are: Bullitt County School District, Eminence Independent, Jessamine County, Pike County, Rowan County, and Washington County.

⁶ These four middle schools were control schools in years 1 and 2.

⁷ These four middle schools were control schools in years 1 and 2.

⁸ One all-male facility closed and individuals (staff and youth) were reassigned.

⁹ Another facility closed and individuals were reassigned.

¹⁰ Another facility closed and individuals were reassigned.

¹¹ In Year 2, two middle schools merged with K-5 schools, another middle school closed and the final grade 8 class went to a participating high school, and a fourth middle school became an all-girls school serving grades 6-9 with new Striving Readers teachers.

¹² In Year 3, an original middle school merged with a K-5 school to become a K-8 school and 2 new middle schools were added to Striving Readers.

¹³ One additional middle school and two additional high schools were added to the study in year 2.

¹⁴ One new middle school replaced a year 2 school that closed for failure to meet AYP. The new school used the same building but most of the staff was replaced.

Summary of 2006 Striving Readers Projects: Whole School Interventions for All Readers

Table 14: Whole School Interventions: Elements of Planned Professional Development and Coaching Models and Definitions of Adequate Implementation

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Chicago Public Schools, IL				
<i>Chicago Striving Readers Program</i>				
Year 1	<p>Total = 54-57 hours/teacher plus school-based training</p> <ul style="list-style-type: none"> • 5 day Summer Institute (6 hours/day) • Quarterly follow-up trainings (3 hours/day) • Monthly Saturday Seminars (3 hours/day for 5 sessions) <p><i>Other district/school staff</i></p> <ul style="list-style-type: none"> • Principal Leadership Seminars (3 hours/day each month) <p>Training by SR team and developer</p>	Not calculated	<p>Total = 32 – 36 hours/teacher and as needed</p> <ul style="list-style-type: none"> • School Literacy Team meetings (monthly, 4 hours/meeting) • Site-based support as needed by district literacy coaches 	Not calculated

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Chicago Public Schools, IL (continued)				
<i>Chicago Striving Readers Program (continued)</i>				
Year 2	<p><i>New teachers</i> Same as year 1 with the addition of 6 hours of technology training</p> <p><i>Returning teachers</i> Total = 48 hours/teacher plus school-based training</p> <ul style="list-style-type: none"> • 3 day Summer Institute (6 hours/day) • Quarterly follow-up trainings (3 hours/day for 3 sessions) • Saturday Seminars (3 hours/session for 5 sessions) • Technology training (6 hours) <p><i>Other district/school staff</i></p> <ul style="list-style-type: none"> • Principal Leadership Seminars (3 hours/day each month) <p>Training by SR team, developer and <i>GoKnow</i> Technology Consultants</p>	<p>High = high attendance (>80% for teachers and principals, at 4 of 4 core types of professional development activities (initial and 2 types of ongoing training, Principal Seminars)</p> <p>Medium = high attendance at some types/moderate attendance (51-79% for teachers, 60-79% for principals) at 4 types of professional development</p> <p><i>Adequate implementation:</i> Overall PD calculated at school-level on scale of 0 – 10 (including whole school plus targeted/ intensive intervention training)</p> <p>High = score of 8 – 10 out of 10</p> <p>Medium = score 5.0 - 7.9 out of 10</p>	<p>Site-based support as needed by district literacy coaches, school-based literacy teams and school-based grade level teams</p>	<p>Not calculated</p>

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Chicago Public Schools, IL (continued)				
<i>Chicago Striving Readers Program (continued)</i>				
Year 3	<p>Total = 48 hours/teacher plus school-based training</p> <ul style="list-style-type: none"> • 3 day Summer Institute (6 hours/day) • Quarterly follow-up trainings (3 hours/day) • Technology training (18 hours) <p><i>Other district/school staff</i></p> <ul style="list-style-type: none"> • Principal Leadership Seminars reduced to half day bi-monthly • NLU-Librarian workshop: monthly • Coordinator Training: bi-monthly (5 ½-day plus 2 full-day sessions) • Project Director Training as needed <ul style="list-style-type: none"> • Training by SR team, developer and GoKnow Technology Consultants 	Same as year 2	Same as year 2, with additional support from study groups and cross-site visitations	Not calculated

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Chicago Public Schools, IL (continued)				
<i>Chicago Striving Readers Program (continued)</i>				
Year 4	<p>Total = 32.5 – 37 hours/teacher plus school-based training</p> <ul style="list-style-type: none"> • 3 day Summer Institute (14 hours) • Quarterly follow-up trainings (18-23 hours) <p><i>Other district/school staff</i></p> <ul style="list-style-type: none"> • Principal Leadership Seminars half day bi-monthly (3 hours each) • Bi-weekly LIT meetings (6 hours/meeting) • Monthly NLU-Librarian workshop • Bi-monthly coordinator training (5 half day plus 2 full day sessions) • Project director training as needed <p>Training by SR team, developer and literacy consultants</p>	Same as year 3	Same as year 3	Not calculated

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Chicago Public Schools, IL (continued)				
<i>Chicago Striving Readers Program (continued)</i>				
Year 5	<p>Total = 18 - 23 hours/teacher plus school-based training</p> <ul style="list-style-type: none"> Quarterly follow-up trainings focused on working with student data and differentiating instruction, writing <p><i>Other district/school staff</i></p> <ul style="list-style-type: none"> Principal Leadership Seminars 4 half day sessions (3 hours each, total = 12 hours) Bi-weekly LIT meetings (6 hours/meeting) Monthly NLU-Librarian workshop Coursework series for language arts, content-area teachers NLU <p>Training by SR team, developer and literacy consultants</p>	Not calculated	Not calculated	Not calculated
Danville School District, KY ²				
<i>Adolescent Literacy Model (ALM)</i>				
Year 1	<p>Total = 30 hours/teacher</p> <ul style="list-style-type: none"> 5 days at Teacher Institute (6 hours/day) <p><i>Other district/school staff</i></p> <ul style="list-style-type: none"> 2 day administrator training Administrators attend teacher training <p>Training by Professional Development Director from CTL</p>	<p><i>Adequate implementation:</i> Full participation = $\geq 80\%$ of teachers attending at least one day of summer training</p>	<p>Total = est. 12 hours/teacher</p> <ul style="list-style-type: none"> 9 site visits/teacher by mentor coaches from Collaborative for Teaching and Learning (est. 3 hours/visit) 	Not calculated ³

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Danville School District, KY² (continued)				
<i>Adolescent Literacy Model (ALM) (continued)</i>				
Year 2	<p><i>New Teachers</i> Same as year 1</p> <p><i>Returning teachers</i> Total = 24 hours/teacher and as needed</p> <ul style="list-style-type: none"> • 1 day common trainings (6 hours) • 1 day school-specific sub-domain trainings (6 hours) • 2 day school institutes (6 hours/day) • 2 half day department-specific trainings per discipline/school as needed (3 hours/session) <p><i>Other district/school staff</i></p> <ul style="list-style-type: none"> • Administrator training (1.5 days) • Administrators attend teacher training <p>Training by Professional Development Director from CTL</p>	Same as year 1	<ul style="list-style-type: none"> • Same as year 1 	Not calculated
Year 3	<p>Total = 12 hours/teacher</p> <ul style="list-style-type: none"> • 1 day school institutes by CTL (6 hours) • 1 day project-wide conference by CTL mentors and school literacy coaches (6 hours) <p><i>Other district/school staff</i> Same as year 2</p> <p>Training by Professional Development Director from CTL</p>	Same as year 1	<ul style="list-style-type: none"> • 7 - 9 days onsite coach mentoring • Weekly distance learning sessions <p>Additional coaching as needed</p>	Not calculated

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Danville School District, KY² (continued)				
<i>Adolescent Literacy Model (ALM) (continued)</i>				
Year 4	Total = 12 hours/teacher <ul style="list-style-type: none"> • 1 day school institute by CTL (6 hours) • 1 day project-wide conference by CTL mentors and school literacy coaches (6 hours) <i>Other district/school staff</i> Same as year 2 Training by Professional Development Director from CTL	Same as year 1	Same as year 3	Not calculated
Year 5	Total = 12 hours/teacher <ul style="list-style-type: none"> • 3 days training by CTL (6 hours) <i>Other district/school staff</i> <ul style="list-style-type: none"> • Administrator training (1.5 days) Training by Professional Development Director from CTL	Same as year 1	Total = est. 9 hours/teacher <ul style="list-style-type: none"> • 3 site visits/teacher by mentor coaches from Collaborative for Teaching and Learning (est. 3 hours/visit) 	Not calculated

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Memphis City Schools, TN				
<i>Memphis Content Literacy Academy (MCLA)</i>				
Year 1	<p>Total = 90 hours/teacher</p> <ul style="list-style-type: none"> Year 1 of 2-year MCLA course, 30 weekly classes (3 hours/class) <p><i>Other district/school staff</i></p> <ul style="list-style-type: none"> Year 1 of 2-year course for principals (45 hours over 2 years) <p>Training by developers, facilitated by MCS staff</p>	<p><i>Adequate implementation:</i></p> <p>4 (High) = attended 76 - 100% of PD offered</p> <p>3 (Medium) = attended 51 - 75% of PD offered</p>	Coaching support as needed by on-site literacy coach	<p>Coaching dosage score based on coaching logs</p> <p>High coaching dosage = collaborated 10 or more times with a coach on an activity of substance</p> <p>Mean coaching score for school is % teachers who receive high level of coaching support.</p> <p>1 = < 25% teachers had high dosage</p> <p>2 = 25-50% teachers had high dosage</p> <p>3 = 51-75% teachers had high dosage</p> <p>4 = > 75% teachers had high dosage</p>
Year 2	<p>Total = 90 hours/teacher</p> <ul style="list-style-type: none"> Year 2 of 2-year MCLA course, 30 weekly classes (3 hours/class) <p><i>Other district/school staff</i></p> <ul style="list-style-type: none"> Year 2 of 2-year course for principals (45 hours over 2 years) <p>Training by developers, facilitated by MCS staff</p>	Same as year 1	Same as year 1	Same as year 1

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Memphis City Schools, TN (continued)				
<i>Memphis Content Literacy Academy (MCLA) (continued)</i>				
Year 3	<p><i>New teachers (Cohort 2)</i> Total = 49 hours/teacher</p> <ul style="list-style-type: none"> Year 1 of 2-year MCLA course, 6 hour kickoff session and 19 weekly classes <p><i>Other district/school staff</i></p> <ul style="list-style-type: none"> Principals, assistant principals and instructional facilitators invited as a team to participate in 7 sessions (3 hours/session) <p>Training by developers, facilitated by MCS staff</p>	Same as year 1	Same as year 1	Same as year 2
Year 4	<p><i>(Cohort 2)</i> Total = 42.5 hours/teacher</p> <ul style="list-style-type: none"> MCLA course (9 sessions in fall, 9 sessions in spring) <p><i>Other district/school staff</i> Same as year 3</p> <p>Training by developers, facilitated by MCS staff</p>	Same as year 1	Same as year 1	Same as year 2
Year 5	Intervention not implemented	NA	NA	NA

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Newark Public Schools, NJ				
<i>National Urban Alliance (NUA) / New Jersey City University (NJCU)</i>				
Year 1	<p><i>NJCU</i> (language arts teachers) Total = 16 hours/teacher</p> <ul style="list-style-type: none"> 4 half days at summer institute (4 hours/day) <p><i>NUA</i> (other content area teachers) Total = 23 hours/teacher</p> <ul style="list-style-type: none"> 3 half days at summer institute (4 hours/day) 2 follow-up training sessions (5.5 hours/session) <p>Training by developers</p>	<p><i>Adequate implementation:</i> <i>Teacher level (NUA & NJCU):</i> Full = teacher attended 75 - 100% of professional development offered</p> <p>Moderate = teacher attended 50 - 74% professional development offered</p> <p><i>School level:</i> High (score of 4) = 75 - 100% teachers with full or adequate participation</p> <p>Moderate-to-High (score of 3) = 50 - 74% teachers with full or adequate participation</p>	<p><i>NJCU</i> Total = 5 visits/school by NJCU coaches</p> <p><i>NUA</i> Total = 15 visits/school by NUA coaches</p> <ul style="list-style-type: none"> Visits to teachers by district resource teacher coordinators (RTC) on as-needed basis 	<p><i>Adequate implementation:</i> High (score of 4) = 75 - 100% of intended visits occurred</p> <p>Moderate-to-High (score of 3) = 50 - 74% of intended visits occurred</p>
Year 2	<p><i>NJCU</i> Total = 33.5 hours/teacher</p> <ul style="list-style-type: none"> 4 half days at summer institute (4 hours/day) 3 follow-up training sessions (17.5 hours total) <p><i>NUA</i> Total = 24 hours/teacher</p> <ul style="list-style-type: none"> 3 half days at summer institute (4 hours/day) 2 follow-up training sessions (6 hours/session) <p>Training by developers</p>	Same as year 1	<p><i>NJCU</i> Total = 10 visits/school by NJCU coaches</p> <p><i>NUA</i> Same as year 1</p>	Same as year 1

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Newark Public Schools, NJ (continued)				
<i>National Urban Alliance (NUA) / New Jersey City University (NJCU) (continued)</i>				
Year 3	<p><i>NJCU</i> Total = 28 hours/teacher</p> <ul style="list-style-type: none"> • 4 half days at summer institute (4 hours/day) • 2 follow-up training sessions (6 hours/session) <p><i>NUA</i> Same as year 2</p> <p>Training by developers</p>	<p><i>Adequate implementation:</i> <i>Teacher level:</i> <i>NJCU</i> Full = attended 4 days summer institute plus 2 days follow-up</p> <p>Moderate = attended 3 - 5 days</p> <p><i>NUA</i> Full = attended 3 days summer institute plus 2 days follow-up</p> <p>Moderate = attended 2 - 4 days</p> <p><i>School level:</i> High (score of 4) = 75 - 100% teachers with full or adequate participation</p> <p>Moderate-to-High (score of 3) = 50 - 74% teachers with full or adequate participation</p>	<p><i>NJCU</i></p> <ul style="list-style-type: none"> • In-school coaching visits (12 times/school) by NJCU coaches • Coaching from district RTCs as necessary <p><i>NUA</i> In-school coaching visits by NUA mentor (15 days/school)</p>	Same as year 1

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Newark Public Schools, NJ (continued)				
<i>National Urban Alliance (NUA) / New Jersey City University (NJCU) (continued)</i>				
Year 4	<p><i>NJCU</i> 1-day large group training (6 hours)</p> <p><i>NUA</i> 1-day large group training (6 hours)</p> <p>Training by developers</p>	<p><i>Adequate implementation:</i> <i>Teacher level:</i> <i>NJCU</i> Full = attended 1 day training</p> <p><i>NUA</i> Full = attended 1 day training</p> <p><i>School level:</i> High (score of 4) = 75 - 100% teachers with full or adequate participation</p> <p>Moderate-to-High (score of 3) = 50 - 74% teachers with full or adequate participation</p>	Same as year 3	Same as year 1
Year 5	No additional professional development for new or returning teachers	NA	<p><i>NJCU</i></p> <ul style="list-style-type: none"> In-school coaching visits (8 - 10 times/school) by NJCU coaches Coaching from district RTCs as necessary <p><i>NUA</i></p> <ul style="list-style-type: none"> In-school coaching visits (8 - 10 times/school) by NUA coaches Coaching from district RTCs as necessary 	Not calculated

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Ohio Department of Youth Services (operating as public school education district for youth in juvenile correction facilities)				
<i>Year 1: State Institute for Reading Instruction- Adolescent Literacy(SIRI-AL) and English Language Arts Writing Academy</i> <i>Years 2 - 4: High Yield Strategies (HYS)</i>				
Year 1	Total = 46 hours/teacher • SIRI-AL (28 hours) • Writing Academy (18 hours) Training by local literacy experts contracted to provide instruction to teachers	<i>Adequate implementation:</i> High = attended 75% – 100% of professional development offered Moderate = attended 50% – 74% of professional development offered	As needed	Not calculated
Year 2	Total = 17.5 – 33.5 hours/teacher • High Yield Strategies (17.5 – 33.5 hours, depending on how many modules each facility offered) Training by literacy coaches	Same as year 1	As needed	Not calculated
Year 3	Total = 30 - 41 hours/teacher • High Yield Strategies (30 - 41 hours, depending on how many modules each facility offered) Training by literacy coaches	Same as year 1	As needed	Not calculated
Year 4	Total = 22 – 24.5 hours/teacher • High Yield Strategies (hours, depend on how many modules each facility offers) Training by literacy coaches	Same as year 1	As needed	Not calculated
Year 5	Total = 22 – 24.5 hours/teacher • High Yield Strategies (hours, depend on how many modules each facility offers) Training by literacy coaches	Not calculated	As needed	Not calculated

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Portland School District, OR				
<i>Strategic Instruction Model Content Enhancement Routines for Teachers (SIM-CERT)</i>				
Year 1	<p>Total = 55 hours/teacher</p> <ul style="list-style-type: none"> 5-day initial Professional Development with fall make-up (37 hours total) Ongoing PD--teachers select from a menu of training sessions on new content enhancement routines (18 hours total) <p><i>Other district/school staff</i></p> <ul style="list-style-type: none"> Administrator training (6+ hours/year) <p>Training by professional developers, Strategic Learning Center (SLC) of Seattle, WA, hired as consultants to developer</p>	<p><i>Adequate implementation:</i></p> <p>High (score of 4) = 7 or more points</p> <p>Medium (score of 3) = 6 – 6.9 points</p> <p>Score is sum of: 4 points summer training 3 points fall training (make-up) 2 points Oct/Nov trainings 1 point each additional session Subtract 2 points if not trained in all required routines</p>	<p>Total = 44 hours/teacher (encouraged but not required)</p> <ul style="list-style-type: none"> In-school coaching by literacy coaches (2 hours/month for 7 months) In-school coaching by professional developers (2 hours/month for 7 months) Observations with feedback (twice each semester, 4 hours/session) 	<p><i>Adequate implementation:</i></p> <p>High (score of 4) = amount of time ≥ 75th percentile</p> <p>Medium (score of 3) = amount of time between 50th - 74th percentile</p> <p>Based on average number of minutes across all schools (same for meetings with literacy coach and professional developers)</p>
Year 2	<p>Total = 33 - 37 hours/teacher</p> <ul style="list-style-type: none"> 3 days of summer training with fall make-up Follow-up training on Content Enhancement Routines selected by school administrators and professional developers- attendance voluntary (hours vary) <p><i>Other district/school staff</i></p> <ul style="list-style-type: none"> Administrator training (6+ hours/year) <p>Training by professional developers (SLC)</p>	<p><i>Adequate implementation:</i></p> <p>High (score of 4) = 5 or more points</p> <p>Medium (score of 3) = 4 – 4.9 points</p> <p>Score is sum of: 4 points summer training 3 points fall training (make-up) 2 points if trained in additional routines Subtract 2 points if not trained in all 4 required routines</p>	Same as year 1	Same as year 1

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Portland School District, OR (continued)				
<i>Strategic Instruction Model Content Enhancement Routines for Teachers (SIM-CERT) (continued)</i>				
Year 3	<p>Total = 33 - 37 hours/teacher</p> <ul style="list-style-type: none"> • 3-day summer training session at each of 2 new middle schools with fall make-up • Ongoing school-based PD (was centralized before) <p><i>Other district/school staff</i> Same as year 1</p> <p>Training by professional developers (SLC) for new schools; by district staff for continuing schools</p>	Same as year 2	Same as year 1	Same as year 1
Year 4	<p>Total = 39 hours/teacher</p> <ul style="list-style-type: none"> • 3-day summer training sessions in June and August x 6.5 hours/day = 39 hours • Ongoing school-based PD (was centralized before) <p><i>Other district/school staff</i> Same as year 1</p> <p>Training by school district certified trainers</p>	Same as year 2	<p>Total = 30 hours/teacher (encouraged but not required)</p> <ul style="list-style-type: none"> • In-school coaching by literacy coaches (2 hours/month for 7 months) <p>Observations with feedback (twice each semester, 4 hours/session)</p>	Not calculated
Year 5	<p><i>Training only offered to middle school teachers</i></p> <p>Total = 39 hours/teacher</p> <ul style="list-style-type: none"> • Ongoing school-based PD in the form of facilitated work time to support teachers • School literacy coaches provided only in middle schools <p>Training by school district certified trainers</p>	Same as year 2	School literacy coaches supported middle school teachers as needed but not high school teachers	Not calculated

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
San Diego Unified School District, CA				
<i>Strategies for Literacy Integration across the Curriculum (SLIC)</i>				
Year 1	Total = 23 - 28 hours/teacher <ul style="list-style-type: none"> Whole school/cross site conferences (15 - 20 hours) Small group, content-area seminars (8 hours) Training by developer, district staff, and/or coaches	<i>Adequate implementation:</i> High participation at school-level = > 60% of teachers received at least 27 hours of PD (<i>including coaching</i>) 27 hours include: 14+ hours of whole-school PD 7+ hours of content-area PD 7+ hours of individual/in-class support	Total = 8 hours/teacher <ul style="list-style-type: none"> School literacy coaches provide individual/in-class support (8 hours) 	<i>Adequate implementation:</i> High participation at school-level = > 60% of teachers received at least 27 hours of PD (<i>including coaching</i>) 27 hours include: 14+ hours of whole-school PD 7+ hours of content-area PD 7+ hours of individual/in-class support
Year 2	Same as year 1	Same as year 1	Same as year 1	Same as year 1
Year 3	Same as year 1	Same as year 1	Same as year 1	Same as year 1
Year 4	Same as year 1	Same as year 1	Same as year 1	Same as year 1
Year 5	District followed a “sustainability” model which meant that there was little or no formal professional development for teachers.	Not calculated	Not calculated	Not calculated

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Springfield Public Schools and Chicopee Public Schools, MA				
<i>Strategic Instruction Model Content Enhancement Routines for Teachers (SIM-CERT)</i>				
Year 1	<p>Total = 24 hours/teacher</p> <ul style="list-style-type: none"> • 2 day initial summer training (6 hours/day) • 2 days ongoing training on additional routines (6 hours/day) <p><i>Other district/school staff</i></p> <ul style="list-style-type: none"> • Administrator training (½ day) • Administrator information session (1 day) <p>Training by nationwide SIM trainer network, overseen by the University of Kansas' Center for Research on Learning</p>	<p><i>Adequate implementation:</i> Adequate = full attendance at <i>all</i> required professional development sessions</p>	<p>Total = No data provided by districts or developers</p> <ul style="list-style-type: none"> • 8 -9 monthly classroom visits and feedback by developers (2 hours/visit) 	Not calculated
Year 2	<p><i>New teachers</i> Same as year 1</p> <p><i>Returning teachers</i> Total = 12 hours/teacher</p> <ul style="list-style-type: none"> • 2 days ongoing training on additional routines (6 hours/day) <p>Training by nationwide SIM trainer network</p>	Same as year 1	Same as year 1	Not calculated

Year ¹	Planned Professional Development	Levels of Participation Required for Adequate Implementation	Planned In-Class Support/Coaching	Levels of Participation Required for Adequate Implementation
Springfield Public Schools and Chicopee Public Schools, MA (continued)				
<i>Strategic Instruction Model Content Enhancement Routines for Teachers (SIM-CERT) (continued)</i>				
Year 3	<p><i>New teachers</i> Total = 24 hours/teacher</p> <ul style="list-style-type: none"> • 4 day initial summer training (6 hours/day) <p><i>Returning teachers</i> Total = 12 hours/teacher</p> <ul style="list-style-type: none"> • 2 days ongoing training on additional routines (6 hours/day) <p>Training by nationwide SIM trainer network <i>and/or SIM certified teachers and literacy coaches</i></p>	Same as year 1	Same as year 1	Not calculated
Year 4	Same as year 3	Same as year 1	Same as year 1	Not calculated
Year 5	Same as year 3	Same as year 1	Same as year 1	Not calculated

Source: Striving Readers Year 5 Evaluation Reports (available at: <http://www.ed.gov/programs/strivingreaders/performance.html>)

¹ Year refers to implementation year. Year 1- 2006-07 school year; Year 2- 2007-08 school year; Year 3- 2008-09 school year; Year 4-2009-10 school year; Year 5- 2010-11 school year.
² The six other participating districts are: Bullitt County School District, Eminence Independent, Jessamine County, Pike County, Rowan County, and Washington County.
³ Coaching is for both the targeted and whole school interventions. In year 1, the extent to which support was specific to the whole school or targeted intervention was not designated.

Summary of 2006 Striving Readers Projects: Whole School Interventions for All Readers

Table 15: Whole School Interventions: Elements of Planned Classroom Instruction Model and Definitions of *Adequate Implementation*

Elements of Planned Classroom Model	Level Required for Adequate Implementation
Chicago Public Schools, IL	
<i>Chicago Striving Readers Program</i>	
Elements in rating: <ul style="list-style-type: none"> • Whole-part-whole • Gradual release model • Comprehension focus • Partner Reading and Content, Too (PRC2) • Direct vocabulary instruction 	<i>Adequate implementation:</i> High implementation = 8–10 Medium implementation = 5.0–7.9 Implementation scored on 10-point scale, where 1 indicates none of the key program characteristics are being implemented and 10 indicates all key components were being implemented with the expected regularity Not calculated in Year 5
Danville School District, KY ¹	
<i>Adolescent Literacy Model (ALM)</i>	
Elements in rating: <ul style="list-style-type: none"> • Fluency • Comprehension • Writing to use what you know • Writing to learn • Academic dialogue • Vocabulary development 	No criterion established for adequacy; report shows “average % of time in LSC activities”

Elements of Planned Classroom Model	Level Required for Adequate Implementation
Memphis City Schools, TN	
<i>Memphis Content Literacy Academy (MCLA)</i>	
<p>Elements in rating:</p> <ul style="list-style-type: none"> • Years 2 and 3: Use of materials (% eligible teachers who use the Curriculum Resource Center) • Years 2 and 3: Principal involvement (attendance at fellowship classes and MCLA events) • Years 3 & 4: Classroom Implementation (based on teacher survey, focus group interviews, analysis of daily logs maintained by the literacy coaches, direct observation, ratings of implementation by literacy coaches) • Year 5: Not implemented 	<p><i>Adequate implementation:</i></p> <p><i>Materials Use</i> 2 = more than 50% of teachers checked out materials at least once 1 = less than 50% of teachers checked out materials at least once</p> <p><i>Classroom Implementation</i> High = 3.1–4 Medium = 2.1–3 Not calculated in Year 5</p>
Newark Public Schools, NJ	
<i>National Urban Alliance (NUA) / New Jersey City University (NJCU)</i>	
Not studied	NA
Ohio Department of Youth Services (operating as public school education district for youth in juvenile correction facilities)	
<i>Year 1: State Institute for Reading Instruction- Adolescent Literacy(SIRI-AL) and English Language Arts Writing Academy Years 2–5: High Yield Strategies (HYS)</i>	
<p>Years 2–4: Average minutes of instruction per day</p> <p>Year 5: Implementation not studied</p>	<p><i>Adequate implementation:</i></p> <p>High = 80 or more minutes of instruction Moderate = 74–79 minutes of instruction Not calculated in Year 5</p>

Elements of Planned Classroom Model	Level Required for Adequate Implementation
Portland School District, OR	
<i>Strategic Instruction Model Content Enhancement Routines for Teachers (SIM-CERT)</i>	
<p>Elements in rating:</p> <ul style="list-style-type: none"> Percent of required Content Enhancement Routines (CERs) completed 	<p><i>Adequate implementation:</i> <i>Total score (average rating across observations, % CERs completed, % teachers using CERs in previous month)</i> High = 3.5–4.0 Medium = 2.5–3.4</p> <p><i>Observation</i> 4 = teachers' average fidelity of implementation was 90% or higher for routines observed 3 = teachers' average fidelity of implementation was 80 - 89% for routines observed of expected routines observed</p> <p><i>Percent of CERs completed</i> 4 = 75% or higher 3 = 50–74%</p> <p><i>Percent of teachers using CERs in previous month</i> 4 = 75% or higher 3 = 50–74%</p>
San Diego Unified School District, CA	
<i>Strategies for Literacy Integration across the Curriculum (SLIC)</i>	
<p>Elements in rating:</p> <ul style="list-style-type: none"> Program-related instruction in approximately 60% of a student's classes 	<p><i>Adequate implementation:</i> High (3) = scores > 0.5 Medium (2) = scores of -0.1–0.5</p> <p>Implementation rated on a 3 point scale (mean response determined and set-averages z-scored based on survey population; 3 scores averaged for each site and cut-points of -0.1 and 0.5)</p>

Elements of Planned Classroom Model	Level Required for Adequate Implementation
Springfield Public Schools and Chicopee Public Schools, MA	
<i>Strategic Instruction Model Content Enhancement Routines for Teachers (SIM-CERT)</i>	
Elements in rating: <ul style="list-style-type: none"> • Use of at least one Unit Organizer in 1 course during academic year (mandatory) • Implementation of at least 1 additional routine during academic year (mandatory) • Implement other routines as appropriate (optional) 	<i>Adequate implementation (based on teacher survey responses):</i> Above adequate (exceeded minimum usage requirements) = 1 Unit Organizer and 2 additional routines Adequate (met minimum usage requirements) = 1 Unit Organizer and 1 additional routine
<i>Source: Striving Readers Year 5 Evaluation Reports (available at: http://www.ed.gov/programs/strivingreaders/performance.html)</i>	

¹ The six other participating districts are: Bullitt County School District, Eminence Independent, Jessamine County, Pike County, Rowan County, and Washington County.

Summary of 2006 Striving Readers Projects: Whole School Interventions for All Readers

Table 16: Whole School Interventions: Actual Levels of Implementation of Professional Development, Coaching and Classroom Instruction Models and Combined Model

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Chicago Public Schools, IL				
<i>Chicago Striving Readers Program</i>				
Year 1	Attendance rates by component: Summer Institute ~ 87% Follow-up trainings (school year institutes) = 79% Saturday Seminars = 67%	Not calculated	Not calculated	Not calculated
Year 2	<p><i>Overall</i>² 3% of schools with high participation 71% of schools with medium participation</p> <p><i>Cohort 1</i> 6% with high participation 75% with medium participation</p> <ul style="list-style-type: none"> • Principal seminars, 61% • Summer Institute, 87% • Follow-up Institutes, 33% • Saturday Seminars, 22% <p><i>(continued following page)</i></p>	Not calculated	<p><i>Overall</i> 10% of schools with high implementation 90% of schools with medium implementation</p> <p><i>Cohort 1</i> 13% with high implementation 8% with medium implementation</p> <p><i>(continued following page)</i></p>	Not calculated

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Chicago Public Schools, IL (continued)				
<i>Chicago Striving Readers Program (continued)</i>				
Year 2	<p><i>(continued from previous page)</i></p> <p><i>Cohort 2</i> 0% with high participation 67% with medium participation</p> <ul style="list-style-type: none"> • Principal seminars, 55% • Summer Institute, 79% • Follow-up Institutes, 53% <p>Saturday Seminars, 32%</p>	Not calculated	<p><i>(continued from previous page)</i></p> <p><i>Cohort 2</i> 7% with high implementation</p> <p>93% with medium implementation</p>	Not calculated ³
Year 3	<p><i>Overall⁴</i> 0% of schools with high participation</p> <p>45% of schools with medium participation</p> <p><i>Cohort 1</i> 0% with high participation 38% with medium participation</p> <ul style="list-style-type: none"> • Principal seminars, 79% • Summer Institute, 80% • Follow-up Institutes, 44%) <p><i>Cohort 2</i> 0% with high participation 53% with medium participation</p> <ul style="list-style-type: none"> • Principal seminars, 66% • Summer Institute, 73% • Follow-up Institutes, 45% 	Not calculated	<p><i>Overall</i> 13% of schools with high implementation</p> <p>87% of schools with medium implementation</p> <p><i>Cohort 1</i> 6% with high implementation</p> <p>94% with medium implementation</p> <p><i>Cohort 2</i> 20% with high implementation</p> <p>80% with medium implementation</p>	Not calculated ³

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Chicago Public Schools, IL (continued)				
<i>Chicago Striving Readers Program (continued)</i>				
Year 4	<p><i>Overall</i>⁴ 14% of schools with high participation 76% of schools with medium participation</p> <p><i>Cohort 1</i> 19% with high participation 69% with medium participation</p> <p><i>Cohort 2</i> 8% with high participation 85% with medium participation</p>	Not calculated	<p><i>Overall</i> 19% of schools with high implementation 82% of schools with medium implementation</p> <p><i>Cohort 1</i> 13% with high implementation 88% with medium implementation</p> <p><i>Cohort 2</i> 27% with high implementation 73% with medium implementation</p>	Not calculated ³
Year 5	Implementation not studied	Not calculated	Implementation not studied	Not calculated

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Danville School District, KY⁵				
<i>Adolescent Literacy Model (ALM)</i>				
Year 1	<p><i>All schools</i> 71% schools with full participation</p> <p><i>Middle schools</i> 70% schools with full participation</p> <p><i>High schools</i> 67% schools with full participation</p> <p><i>Schools with grades 6–12</i> 100% schools with full participation</p>	Not calculated	<p><i>% time ALM observed:</i> Grade 6 = 26%</p> <p>Grade 9 = 24%</p>	Not calculated
Year 2	<p><i>All schools</i> 67% schools with full participation</p> <p><i>Middle schools</i> 80% schools with full participation</p> <p><i>High schools</i> 56% schools with full participation</p> <p><i>Schools with grades 6–12</i> 50% schools with full participation</p>	Not calculated	<p><i>% time ALM observed:</i> Grade 6 = 30%</p> <p>Grade 9 = 13%</p>	Not calculated

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Danville School District, KY⁵ (continued)				
<i>Adolescent Literacy Model (ALM) (continued)</i>				
Year 3	<p><i>All schools</i> 71% schools with full participation</p> <p><i>Middle schools</i> 70% schools with full participation</p> <p><i>High schools</i> 67% schools with full participation</p> <p><i>Schools with grades 6–12</i> 100% schools with full participation</p>	Not calculated	<p><i>% time ALM observed:</i> Grade 6 = 26%</p> <p>Grade 9 = 24%</p>	Not calculated
Year 4	<p><i>All schools</i> 71% schools with full participation</p> <p><i>Middle schools</i> 70% schools with full participation</p> <p><i>High schools</i> 67% schools with full participation</p> <p><i>Schools with grades 6–12</i> 100% schools with full participation</p>	Not calculated	<p><i>% time ALM observed:</i> Grade 6 = 34%</p> <p>Grade 9 = 24%</p>	Not calculated

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Danville School District, KY⁵ (continued)				
<i>Adolescent Literacy Model (ALM) (continued)</i>				
Year 5	<p><i>All schools</i> 71% schools with full participation</p> <p><i>Middle schools</i> 50% schools with full participation</p> <p><i>High schools</i> 50% schools with full participation</p> <p><i>School with grades 6–12</i> 100% schools with full participation</p>	Not calculated	Not calculated	Not calculated
Memphis City Schools, TN				
<i>Memphis Content Literacy Academy (MCLA)</i>				
Year 1	<p><i>Course participation score</i> 62% of teacher participants attended 80 percent or more of PD offered</p> <p>28% of teacher participants attended 70 - 80 % of PD offered</p> <p>10% of teacher participants attended < 70% of PD offered</p>	Not calculated	Not calculated	<p><i>Overall implementation rating:</i> (average rating for school on teacher participation in PD)</p> <p>25% of schools (one) at high level of implementation</p> <p>25% of schools (one) at medium implementation</p> <p>50% of schools (two) at low/minimal level of implementation</p>

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Memphis City Schools, TN (continued)				
<i>Memphis Content Literacy Academy (MCLA) (continued)</i>				
Year 2	<p><i>Course participation score:</i> 66% of teachers at high level (Attended 80% or more of PD offered)</p> <p>34% of teachers at medium level</p> <p><i>Principal involvement score:</i> 100% of principals at high level</p>	<p><i>Coaching dosage score:</i> 75% of schools (three) at high level of coaching support (mean level for teachers > 75%)</p> <p>25% of schools (one) at low level of coaching support</p> <p>0% of schools at medium level of coaching support (mean level for teachers between 50-75%)</p>	<p><i>Coach-assigned classroom rating:</i> Not calculated</p> <p><i>Materials use rating:</i> 0% of schools with majority of teachers at high or medium level of implementation</p>	<p><i>Overall implementation rating:</i> (average rating for school on teacher participation in PD, coaching dosage, principal involvement, materials use):</p> <p>25% schools at high level of implementation</p> <p>75% of schools at medium level of implementation</p>
Year 3	<p><i>Course participation score;</i> 86% of teachers at high level</p> <p>14% of teachers at medium level</p> <p><i>Principal involvement score:</i> 100% of principals at high level</p>	<p><i>Coaching dosage score:</i> 0% of schools at high level of coaching support (mean level for teachers > 75%)</p> <p>75% of schools at medium level of coaching support (mean level for teachers between 50- 75%)</p> <p>25% of school at low level of coaching support (mean level for teachers <50%)</p>	<p><i>Coach-assigned classroom rating:</i> 25% of schools with majority of teachers at high implementation</p> <p>75% of schools with majority of teachers at medium implementation</p> <p><i>Materials use rating:</i> 0% of schools at high or medium level of implementation</p>	<p><i>Overall implementation rating:</i> (average rating for school on teacher participation in PD, coaching dosage, classroom implementation, principal involvement, materials use):</p> <p>0% schools at high level of implementation</p> <p>100% of schools at medium level of implementation</p>
Year 4	<p><i>Course participation score;</i> 71% of teachers at high level of attendance</p> <p><i>Principal involvement score:</i> 100% of principals at high level</p>	<p><i>Coaching dosage score:</i> 0% of schools at high level of coaching support (mean level for teachers > 75%)</p> <p><i>(continued following page)</i></p>	<p><i>Coach-assigned classroom rating:</i> 0% of schools with majority of teachers at high or medium</p> <p><i>(continued following page)</i></p>	<p><i>Overall implementation rating:</i> (average rating for school on teacher participation in PD, coaching dosage, classroom implementation, principal involvement, materials use):</p> <p><i>(continued following page)</i></p>

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Memphis City Schools, TN (continued)				
<i>Memphis Content Literacy Academy (MCLA) (continued)</i>				
Year 4		<p><i>(continued from previous page)</i></p> <p>50% of schools at medium level of coaching support (mean level for teachers between 50- 75%)</p> <p>50% of schools at low level of coaching support (mean level for teachers < 50%)</p>	<p><i>(continued from previous page)</i></p> <p>100% of schools with majority of teachers at low level of implementation</p> <p><i>Materials use rating:</i> 0% of schools at high level of implementation</p> <p>50% of schools at medium level of implementation</p> <p>50% of schools at low level of implementation</p>	<p><i>(continued from previous page)</i></p> <p>0% schools at high level of implementation</p> <p>75% of schools at medium level of implementation</p> <p>25% of schools at low level of implementation</p>
Year 5	Intervention not implemented	NA	NA	NA

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Newark Public Schools, NJ				
<i>National Urban Alliance (NUA) / New Jersey City University (NJCU)</i>				
Year 1	<p><i>Overall</i> 0% of schools with high participation 42% of schools with moderate-to-high participation</p> <p><i>NJCU</i> 0% of schools with high participation 42% of schools with moderate-to-high participation</p> <p><i>NUA</i> 0% of schools with high participation 32% of schools with moderate-to-high participation</p>	<p><i>Overall</i> 68% of schools with high participation 32% of schools with moderate-to-high participation</p> <p><i>NJCU</i> 58% of schools with high participation 11% of schools with moderate-to-high participation</p> <p><i>NUA</i> 100% of schools with high participation</p>	Not calculated	Not calculated
Year 2	<p><i>Overall</i> 0% of schools with high participation 16% of schools with moderate-to-high participation</p> <p><i>NJCU</i> 0% of schools with high participation 0% of schools with moderate-to-high participation</p> <p><i>NUA</i> 11% of schools with high participation 32% of schools with moderate-to-high participation</p>	<p><i>Overall</i> 89% of schools with high participation 11% of schools with moderate-to-high participation</p> <p><i>NJCU</i> 90% of schools with high participation 0% of schools with moderate-to-high participation</p> <p><i>NUA</i> 100% of schools with high participation</p>	Not calculated	Not calculated

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Newark Public Schools, NJ (continued)				
<i>National Urban Alliance (NUA) / New Jersey City University (NJCU) (continued)</i>				
Year 3	<p><i>Overall</i> 5% of schools with high participation</p> <p>47% of schools with moderate-to-high participation</p> <p><i>NJCU</i> 5% of schools with high participation</p> <p>32% of schools with moderate-to-high participation</p> <p><i>NUA</i> 5% of schools with high participation</p> <p>37% of schools with moderate-to-high participation</p>	<p><i>Overall</i> 100% of schools with high participation</p> <p><i>NJCU</i> 89% of schools with high participation</p> <p>10% of schools with moderate-to-high participation</p> <p><i>NUA</i> 100% of schools with high participation</p>	Not calculated	<p><i>Summary implementation score:</i> (including professional development and coaching)</p> <p>5% of schools with high fidelity</p> <p>74% of schools with moderate-to-high fidelity</p>
Year 4	<p><i>NJCU</i> 0% of schools with high participation</p> <p>21% of schools with moderate-to-high participation</p> <p><i>NUA</i> 0% of schools with high participation</p> <p>37% of schools with moderate-to-high participation</p>	<p><i>NJCU</i> 100% of schools with high participation</p> <p><i>NUA</i> 100% of schools with high participation</p>	Not calculated	<p><i>Summary implementation score:</i> (including professional development and coaching)</p> <p>0% of schools with high fidelity</p> <p>79% of schools with moderate-to-high fidelity</p>

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Newark Public Schools, NJ (continued)				
<i>National Urban Alliance (NUA) / New Jersey City University (NJCU) (continued)</i>				
Year 5	No additional professional development for new or returning teachers	Not calculated	Not calculated	Not calculated
Ohio Department of Youth Services (operating as public school education district for youth in juvenile correction facilities)				
<i>Year 1: State Institute for Reading Instruction- Adolescent Literacy(SIRI-AL) and English Language Arts Writing Academy Years 2 - 4: High Yield Strategies (HYS)</i>				
Year 1	<i>SIRI-AL</i> 0% of facilities with high participation 71% of facilities with moderate participation <i>Writing Academy</i> 100% of facilities with high participation	Not calculated	Not calculated	Not calculated
Year 2	<i>High Yield Strategies</i> 57% of facilities with high participation 43% of facilities with moderate participation	Not calculated	Not calculated	Not calculated
Year 3	<i>High Yield Strategies</i> 50% of facilities with high participation 50% of facilities with moderate participation	Not calculated	Not calculated	Not calculated

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Ohio Department of Youth Services (operating as public school education district for youth in juvenile correction facilities) (continued)				
<i>Year 1: State Institute for Reading Instruction- Adolescent Literacy(SIRI-AL) and English Language Arts Writing Academy Years 2 - 4: High Yield Strategies (HYS) (continued)</i>				
Year 4	<i>High Yield Strategies</i> 50% of facilities with high participation 50% of facilities with moderate participation	Not calculated	Not calculated	Not calculated
Year 5	Implementation not studied	Not calculated	Not calculated	Not calculated
Portland School District, OR				
<i>Strategic Instruction Model Content Enhancement Routines for Teachers (SIM-CERT)</i>				
Year 1	<i>All schools</i> 0% of schools with high participation 78% of schools with medium participation <i>Middle schools</i> 0% of schools with high participation 80% of schools with medium participation <i>High schools</i> 0% of schools with high participation 75% of schools with medium participation	Included in PD implementation scores	<i>All schools</i> 0% of schools with high implementation 33% of schools with medium implementation <i>Middle schools</i> 0% of schools with high implementation 60% of schools with medium implementation <i>High schools</i> 0% of schools with high implementation 0% of schools with medium implementation	<i>Overall implementation (includes PD, classroom fidelity, teacher buy-in⁶)</i> <i>All schools</i> 0% of schools with high implementation scores in 3 areas 0% of schools with moderate-high implementation in 3 areas 22% of schools with moderate implementation in 3 areas <i>Middle schools</i> 0% of schools with high implementation in 3 areas <i>(continued following page)</i>

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Portland School District, OR (continued)				
<i>Strategic Instruction Model Content Enhancement Routines for Teachers (SIM-CERT) (continued)</i>				
Year 1				<p><i>(continued from previous page)</i></p> <p>0% of schools with moderate - high implementation in 3 areas</p> <p>40% with moderate implementation in 3 areas</p> <p><i>High schools</i> 0% of schools with high implementation in 3 areas</p> <p>0% of schools with moderate - high implementation in 3 areas</p> <p>0% of schools with moderate implementation in 3 areas</p>
Year 2	<p><i>All schools</i> 0% of schools with high participation</p> <p>67% of schools with medium participation</p> <p><i>(continued following page)</i></p>	<p>Included in PD implementation scores</p>	<p><i>All schools</i> 0% of schools with high implementation</p> <p>44% of schools with medium implementation</p> <p><i>(continued following page)</i></p>	<p><i>Overall implementation (includes PD, classroom fidelity, teacher buy-in⁶)</i> <i>All schools</i> 0% of schools with high implementation scores in 3 areas</p> <p>20% of schools with moderate-high implementation in 3 areas</p> <p>20% of schools with moderate implementation in 3 areas</p> <p><i>(continued following page)</i></p>

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Portland School District, OR (continued)				
<i>Strategic Instruction Model Content Enhancement Routines for Teachers (SIM-CERT) (continued)</i>				
Year 2	<p><i>(continued from previous page)</i></p> <p><i>Middle schools</i> 0% of schools with high participation</p> <p>80% of schools with medium participation</p> <p><i>High schools</i> 0% of schools with high participation</p> <p>50% of schools with medium participation</p>		<p><i>(continued from previous page)</i></p> <p><i>Middle schools</i> 0% of schools with high implementation</p> <p>80% of schools with medium implementation</p> <p><i>High schools</i> 0% of schools with high implementation</p> <p>0% of schools with medium implementation</p>	<p><i>(continued from previous page)</i></p> <p><i>Middle schools</i> 0% of schools with high implementation in 3 areas</p> <p>33% of schools with moderate - high implementation in 3 areas</p> <p>33% with moderate implementation in 3 areas</p> <p><i>High schools</i> 0% of schools with high implementation in 3 areas</p> <p>0% of schools with moderate - high implementation in 3 areas</p> <p>0% of schools with moderate implementation in 3 areas</p>
Year 3	<p><i>All schools</i> 10% of schools with high participation</p> <p>40% of schools with medium participation</p> <p><i>(continued following page)</i></p>	<p>Included in PD implementation scores</p>	<p><i>All schools</i> 0% of schools with high implementation</p> <p>60% of schools with medium implementation</p> <p><i>(continued following page)</i></p>	<p>Not calculated</p>

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Portland School District, OR (continued)				
<i>Strategic Instruction Model Content Enhancement Routines for Teachers (SIM-CERT) (continued)</i>				
Year 3	<p><i>(continued from previous page)</i></p> <p><i>Middle schools</i> 17% of schools with high participation</p> <p>50% of schools with medium participation</p> <p><i>High schools</i> 0% of schools with high participation</p> <p>25% of schools with medium participation</p>		<p><i>(continued from previous page)</i></p> <p><i>Middle schools</i> 0% of schools with high implementation</p> <p>100% of schools with medium implementation</p> <p><i>High schools</i> 0% of schools with high implementation</p> <p>0% of schools with medium implementation</p>	
Year 4	<p><i>All schools</i> 10% of schools with high participation</p> <p>30% of schools with medium participation</p> <p><i>Middle schools</i> 17% of schools with high participation</p> <p>33% of schools with medium participation</p> <p><i>High schools</i> 0% of schools with high participation</p> <p>25% of schools with medium participation</p>	Included in PD implementation scores	<p><i>All schools</i> 0% of schools with high implementation</p> <p>50% of schools with medium implementation</p> <p><i>Middle schools</i> 0% of schools with high implementation</p> <p>67% of schools with medium implementation</p> <p><i>High schools</i> 0% of schools with high implementation</p> <p>25% of schools with medium implementation</p>	Not calculated

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Portland School District, OR (continued)				
<i>Strategic Instruction Model Content Enhancement Routines for Teachers (SIM-CERT) (continued)</i>				
Year 5	<p><i>Middle schools only</i> 66% of schools with high participation</p> <p>33% of schools with medium participation</p>	Included in PD implementation scores	<p><i>All schools</i> 0% of schools with high implementation</p> <p>50% of schools with medium implementation</p> <p><i>Middle schools</i> 0% of schools with high implementation</p> <p>67% of schools with medium implementation</p> <p><i>High schools</i> 0% of schools with high implementation</p> <p>25% of schools with medium implementation</p>	Not calculated
San Diego Unified School District, CA				
<i>Strategies for Literacy Integration across the Curriculum (SLIC)</i>				
Year 1	<p><i>Whole school professional development</i> 20% of schools with high participation</p> <p><i>Content area professional development</i> 0% of schools with high participation</p>	0% of schools with high participation	Not calculated	Not calculated

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
San Diego Unified School District, CA (continued)				
<i>Strategies for Literacy Integration across the Curriculum (SLIC) (continued)</i>				
Year 2	<p><i>Whole school professional development</i> 0% of schools with high participation</p> <p><i>Content area professional development</i> 0% of schools with high participation</p>	0% of schools with high participation	0% of schools with high implementation	<p><i>Overall implementation rating:</i> (includes content-teacher PD/PD support, coach PD participation, classroom model)</p> <p>0% of schools with high fidelity</p>
Year 3	<p><i>Whole school professional development</i> 0% of schools with high participation</p> <p><i>Content area professional development</i> 63% of schools with high participation</p>	13% of schools with high participation	13% of schools with high implementation	<p><i>Overall implementation rating:</i> (includes content-teacher PD/PD support, coach PD participation, classroom model)</p> <p>25% of schools with high fidelity</p>
Year 4	<p><i>Content area professional development</i> 13% of schools with high participation</p> <p><i>Middle schools</i> 25% of schools with high participation</p> <p><i>High schools</i> 0% of schools with high participation</p>	13% of schools with high participation	13% of schools with high implementation	<p><i>Overall implementation rating:</i> (includes content-teacher PD/PD support, coach PD participation, classroom model)</p> <p>0% of schools with high fidelity</p>
Year 5	Not calculated	Not calculated	Not calculated	Not calculated

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Springfield Public Schools and Chicopee Public Schools, MA				
<i>Strategic Instruction Model Content Enhancement Routines for Teachers (SIM-CERT)</i>				
Year 1	<p><i>Initial training</i> 92% of teachers participated in adequate # of training days</p> <p><i>Ongoing training</i> 75% of teachers participated in adequate # of training days</p>	Not calculated	Not calculated ⁷	Not calculated
Year 2	<p><i>New teachers</i>⁸ 33% of teachers participated in adequate # of training days</p> <p><i>Returning teachers</i> 24% of teachers participated in adequate # of training days</p>	Not calculated	<p>79% of teachers met minimum usage requirements</p> <p>Of the 79% of teachers meeting requirements, 76% exceeded requirements</p>	Not calculated
Year 3	<p><i>New teachers</i>⁸ 25% of teachers participated in adequate # of training days</p> <p>80% of teachers received adequate training in 4 required routines in 1st year</p> <p><i>Returning teachers</i> 54% of teachers participated in adequate # of training days</p>	Not calculated	<p>81% of teachers met minimum usage requirements</p> <p>Of the 81% of teachers meeting requirements, 74% exceeded requirements</p>	Not calculated

Year ¹	Implementation of Professional Development	Implementation of In-Class Support/Coaching	Implementation of Classroom Instruction Model	Implementation of Combined Model (Professional Development, Coaching and/or Classroom Instruction Models)
Springfield Public Schools and Chicopee Public Schools, MA (continued)				
<i>Strategic Instruction Model Content Enhancement Routines for Teachers (SIM-CERT) (continued)</i>				
Year 4	<p><i>New teachers</i> 24% of teachers participated in adequate # of training days</p> <p>88% of teachers received adequate training in 4 required routines in 1st year</p> <p><i>Returning teachers</i> 46% of teachers participated in adequate # of training days</p>	Not calculated	<p>73% of teachers met minimum usage requirements</p> <p>Of the 73% of teachers meeting requirements, 71% exceeded requirements</p>	Not calculated
Year 5	<p><i>New teachers</i> 21% of teachers participated in adequate # of training days</p> <p>52% of teachers received adequate training in 4 required routines in 1st year</p>	Not calculated	<p>62% of teachers met minimum usage requirements</p> <p>Of the 62% of teachers meeting requirements, 70% exceeded requirements</p>	Not calculated

Source: Striving Readers Year 5 Evaluation Reports (available at: <http://www.ed.gov/programs/strivingreaders/performance.html>)

¹ Year refers to implementation year. Year 1- 2006-07 school year; Year 2- 2007-08 school year; Year 3- 2008-09 school year; Year 4-2009-10 school year; Year 5- 2010-11 school year.

² For year 2, professional development scores include professional development for whole school, targeted and intensive interventions.

³ The overall score was not calculated for whole school (blended) intervention separate from targeted and intensive interventions.

⁴ In year 3, professional development scores were disaggregated; these scores exclude LIT meetings, which focus on the targeted and intensive interventions.

⁵ The six other participating districts are: Bullitt County School District, Eminence Independent, Jessamine County, Pike County, Rowan County, and Washington County.

⁶ Teacher perceptions of: (a) the usefulness of the group professional development and in-school coaching provided by the professional developers; and (b) the effectiveness of Xtreme Reading strategies, both on a 5-point scale.

⁷ Data regarding attendance and training requirements were not provided until after the initial year report.

⁸ Developer-district provided rating criteria changed in Year 3 to eliminate initial and ongoing training in the first year. Therefore, the total of first year training days became 4 rather than 2 initial and 2 ongoing, which explains the lower rates in subsequent years. The rates appeared much higher in Years 1 and 2 because of this break-out of initial and ongoing days in these years.

Summary of 2006 Striving Readers Projects: Whole School Interventions for All Readers

Table 17: Whole School: Evaluation Designs for the Analysis of the Impacts for All Readers			
Relationship of Whole School and Targeted Interventions	Evaluation Design ¹	Number of School Years Included in Final Impact Analysis ²	Description of the Counterfactual
Chicago Public Schools, IL			
<i>Chicago Striving Readers Program</i>			
Integrated model, with all students receiving whole-school intervention and struggling readers receiving additional targeted intervention.	School-level random assignment design with 31 treatment and 32 control schools followed for three years. Three years of follow-up data included in final analysis (Years 1 & 5 not included).	3	Students in control schools received the regular English language arts curriculum.
Danville School District, KY			
<i>Adolescent Literacy Model</i>			
Integrated model, with all students receiving whole-school intervention and struggling readers receiving additional targeted intervention.	Interrupted time series design with 21 treatment schools and 21 comparison schools. Four years of baseline data and four years of follow-up data included in final analysis.	4	Students in comparison schools received the regular English language arts curriculum.
Memphis City Schools, TN			
<i>Memphis Content Literacy Academy</i>			
Whole school intervention and targeted intervention not related. Targeted intervention was Read 180 and whole school intervention was the Memphis Content Literary Academy Program.	School-level random assignment design with 4 treatment and 4 control schools. Design implemented only in years 1 and 2. In years 3 & 4, all schools participated in the whole school intervention. No data were collected in year 5. Two years of follow-up data included in final analysis.	2	Students in control schools received the regular English language arts curriculum.

Relationship of Whole School and Targeted Interventions	Evaluation Design ¹	Number of School Years Included in Final Impact Analysis ²	Description of the Counterfactual
Newark Public Schools, NJ			
<i>National Urban Alliance and New Jersey City University</i>			
Whole school intervention and targeted intervention not related. Targeted intervention was Read 180 and whole school interventions were the National Urban Alliance and the New Jersey City University teacher training programs.	Interrupted time series design with 19 treatment schools and 19 comparison schools. One year of baseline data and three years of follow-up data included in final analysis. ³	3	Students in comparison schools received the regular English language arts curriculum.
Ohio Department of Youth Services (operating as public school education district for youth in juvenile correction facilities)			
<i>Year 1: State Institute for Reading Instruction- Adolescent Literacy(SIRI-AL) and English Language Arts Writing Academy Years 2 & 3: High Yield Strategies (HYS)</i>			
No impact estimates computed. Only descriptive analyses.	NA	NA	NA
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 receiving additional targeted intervention.	Interrupted time series design with nine treatment schools and no comparison schools. Three years of baseline and two to four years of follow-up data included in final analysis. ⁴	2-4 ⁵	Not applicable
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 receiving additional targeted intervention.	Quasi-experimental design with eight treatment schools and eight comparison schools. Two years of follow-up data in final analysis.	2	Students in comparison schools received the regular English language arts curriculum.

Relationship of Whole School and Targeted Interventions	Evaluation Design ¹	Number of School Years Included in Final Impact Analysis ²	Description of the Counterfactual
Springfield and Chicopee Public Schools, MA			
<i>Strategic Instruction Model - Content Enhancement Routines for Teachers (SIM-CERT)</i>			
Integrated model for one of the targeted interventions (Xtreme Reading) but not for second targeted intervention (READ 180). All students received whole school intervention (Xtreme Reading) and struggling readers received one of the two additional targeted interventions.	Interrupted time series design with five treatment schools and schools in four comparison districts. One year of baseline and five years of follow-up data included in final analysis.	5	Schools in the comparison districts received the regular English language arts curricula in those districts.
Source: Striving Readers Year 5 Evaluation Reports (available at: http://www.ed.gov/programs/strivingreaders/performance.html)			

¹ Year refers to implementation year. Year 1- 2006-07 school year; Year 2- 2007-08 school year; Year 3- 2008-09 school year; Year 4-2009-10 school year; Year 5- 2010-11 school year.

² The number of school years refers to the number of years that the intervention was implemented that are included in the Year 5 analysis and does not include years of pre-intervention data.

³ The number of treatment and control schools in the analysis varied across the years in the time series.

⁴ This design is not reviewable under What Works Clearinghouse standards because it is a quasi-experimental design without a comparison group

⁵ Schools had different numbers of years of follow-up data, based on different years when they started in the study.

Summary of 2006 Striving Readers Projects: Whole School Interventions for All Readers

Table 18: Whole School Interventions: Impacts of Interventions on All Readers

Reading Test (Source) ¹	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ²	Impact on Reading Test Scores in Percentile Units ³	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁴	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁵	Grade Level of Students in Year 4 Impact Analysis	Sample Size in Impact Analysis
Chicago Public Schools, IL							
<i>Chicago Striving Readers One Year of Intervention- ISAT (External Test Publisher)</i>							
Illinois Standard Achievement Test (State)	Vocabulary, Reading Strategies, Comprehension, and Literature	-.01	Treatment and control students in 43 rd percentile of state normed sample	No	.14	6 th	2,693 Treatment students and 2,692 Control students in 63 schools ⁶
<i>Chicago Striving Readers Two Years of Intervention- ISAT (External Test Publisher)</i>							
Illinois Standard Achievement Test (State)	Vocabulary, Reading Strategies, Comprehension, and Literature	-.05	Treatment students in 40 th percentile, control students in 42 nd percentile of nationally normed sample	No	.14	7 th	1,318 Treatment students and 1,281 Control students in 63 schools ⁷
<i>Chicago Striving Readers Three Years of Intervention- ISAT (External Test Publisher)</i>							
Illinois Standard Achievement Test (State)	Vocabulary, Reading Strategies, Comprehension, and Literature	.01	Treatment and control students in 50 th percentile of state normed sample	No	.11	8 th	1,316 Treatment students and 1,287 Control students in 63 schools ⁸

Reading Test (Source) ¹	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ²	Impact on Reading Test Scores in Percentile Units ³	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁴	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁵	Grade Level of Students in Year 4 Impact Analysis	Sample Size in Impact Analysis
Danville School District, KY							
<i>Danville Striving Readers One Year of Intervention – KCCT (State): Reading Achievement</i>							
Kentucky Core Content Test (State)	Reading Achievement	Not calculated ⁹	Not applicable	No	Not calculated	6 th	Students in 18 middle schools
Kentucky Core Content Test (State)	Reading Achievement	Not calculated ⁹	Not applicable	No	Not calculated	9 th	Students in 20 high schools
<i>Danville Striving Readers One Year of Intervention – KCCT (State): Writing Achievement</i>							
Kentucky Core Content Test (State)	Writing Achievement	Not calculated ⁹	Not applicable	No	Not calculated	6 th	Students in 18 middle schools
Kentucky Core Content Test (State)	Writing Achievement	Not calculated ⁹	Not applicable	No	Not calculated	9 th	Students in 20 high schools
Memphis City Schools, TN							
<i>Memphis Striving Readers One Year of Intervention – ITBS (External test publisher): Total Reading</i>							
Iowa Test of Basic Skills (External test publisher)	Total Reading	-.01	Treatment and control students in 15 th percentile of nationally normed sample	No	.40	6 th –8 th	698 Treatment and 1042 Control students in 8 schools ¹⁰
<i>Memphis Striving Readers One Year of Intervention – TCAP (State): Reading and Language Arts</i>							
Tennessee Comprehensive Assessment Program (State)	Reading and Language Arts	-.19	Treatment students in 42 nd percentile, control students in 45 th percentile of state normed sample	Yes	.40	6 th –8 th	698 Treatment and 1042 Control students in 8 schools ⁸

Reading Test (Source) ¹	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ²	Impact on Reading Test Scores in Percentile Units ³	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁴	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁵	Grade Level of Students in Year 4 Impact Analysis	Sample Size in Impact Analysis
Memphis City Schools, TN (continued)							
<i>Memphis Striving Readers Two Years of Intervention – ITBS (External test publisher): Total Reading</i>							
Iowa Test of Basic Skills (External test publisher)	Total Reading	-.08	Treatment students in 27 th percentile, control students in 28 th percentile of state normed sample	No	.23	7 th –8 th	414 Treatment and 620 Control students in 8 schools ¹¹
<i>Memphis Striving Readers Two Years of Intervention – TCAP (State): Reading and Language Arts</i>							
Tennessee Comprehensive Assessment Program (State)	Reading and Language Arts	-.37	Treatment students in 50 th percentile, control students in 51 st percentile of state normed sample	No	.43	7 th –8 th	414 Treatment and 620 Control students in 8 schools ¹⁰
Newark Public Schools, NJ							
<i>Newark Striving Readers One Year of Intervention – NJASK (State)</i>							
New Jersey Assessment of Skills and Knowledge (State)	Language Arts	Not calculated ⁹	Not applicable	No	Not calculated	6 th –8 th	Students in 38 middle schools
<i>Newark Striving Readers Two Years of Intervention – NJASK (State)</i>							
New Jersey Assessment of Skills and Knowledge (State)	Language Arts	Not calculated ⁹	Not applicable	No	Not calculated	6 th –8 th	Students in 38 middle schools

Reading Test (Source) ¹	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ²	Impact on Reading Test Scores in Percentile Units ³	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁴	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁵	Grade Level of Students in Year 4 Impact Analysis	Sample Size in Impact Analysis
Newark Public Schools, NJ (continued)							
<i>Newark Striving Readers Three Years of Intervention- NJASK (State)</i>							
New Jersey Assessment of Skills and Knowledge (State)	Language Arts	Not calculated ⁹	Not applicable	No	Not calculated	6 th –8 th	Students in 38 middle schools
Portland School District, OR							
<i>Portland Striving Readers One Year of Intervention- OAKS (State)</i>							
Oregon Assessment of Knowledge and Skills (State)	Reading and Literature	.01	Treatment students in 38 th percentile, control students in 37 th percentile of state normed sample	No	.55	6 th –10 th	Students in 9 schools (Years 1 & 2) and 10 schools (Years 3 & 4)
San Diego Unified School District, CA							
<i>San Diego Striving Readers One Year of Intervention – CST (State): English Language Arts</i>							
California Standards Test (State)	English Language Arts	.03	Treatment students in 57 th percentile, control students in 59 th percentile of state normed sample	No	.10	7 th –8 th	2,427 Treatment and 3,003 Control students in 16 schools ¹²
California Standards Test (State)	English Language Arts	.07	Treatment students in 53 rd percentile, control students in 55 th percentile of state normed sample	No	.36	9 th –10 th	2,488 Treatment and 3,820 Control students in 16 schools ¹³

Reading Test (Source) ¹	Areas Covered by Test	Impact on Reading Test Scores in Standard Deviation Units ²	Impact on Reading Test Scores in Percentile Units ³	Is Impact on Reading Test Scores Different than Zero (statistically significant)? ⁴	Minimum Impact in Standard Deviation Units that Study can Measure with Confidence ⁵	Grade Level of Students in Year 4 Impact Analysis	Sample Size in Impact Analysis
San Diego Unified School District, CA (continued)							
<i>San Diego Striving Readers One Year of Intervention – Degrees of Reading Power (External test publisher): Reading Comprehension</i>							
Degrees of Reading Power (External test publisher)	Reading Comprehension	.11	Treatment students in 57 th percentile, control students in 61 st percentile of nationally normed sample	No	.23	7 th –8 th	828 Treatment and 990 Control students in 16 schools ¹²
Degrees of Reading Power (External test publisher)	Reading Comprehension	-.15	Treatment students in 68 th percentile, control students in 64 th percentile of nationally normed sample	No	.42	9 th –10 th	1,406 Treatment and 1,869 Control students in 16 schools ¹³
Springfield and Chicopee Public Schools, MA							
<i>Strategic Instruction Model Content Enhancement Routines for Teachers (SIM-CERT)-MCAS (State): English Language Arts</i>							
Massachusetts Comprehensive Assessment System (State)	English Language Arts	Not calculated ⁹	Not applicable	No	Not calculated	10 th	11 schools
Source: Striving Readers Year 4 Evaluation Reports (available at: http://www.ed.gov/programs/strivingreaders/performance.html)							

¹ Ohio is not included in this table because their whole school analysis was limited to descriptive analyses; no inferential analyses were conducted.

² 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.

³ 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.

⁴ Statistical significance is measured at the 95% confidence level, which is a conventional standard set for social science research.

⁵ 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.

⁶ 6th graders who entered study schools in years 3 and 4.

⁷ 7th graders with two years of exposure, who entered study schools as 6th graders in year 3.

⁸ 8th graders with three years of exposure, who entered study schools as 6th graders in year 2.

⁹ Because information on the student-level standard deviations for these outcomes is not available, Abt was not able to calculate standardized effect sizes and MDEs for these outcomes in a way that would make them comparable to the standardized effect sizes and MDEs that were calculated for the other outcomes in the table. Therefore, no standardized effect sizes or MDEs are calculated for these outcomes. For example, Danville's KCCT 6th grade writing achievement score in standard deviation units was 0.21 with an MDE of 0.59.

¹⁰ Combined sample of 6th – 8th graders who entered study schools in year 1 and new 6th graders who entered study schools in year 2.

¹¹ 7th – 8th graders who entered study schools in year 1.

¹² Combined sample of 7th- 8th graders who entered study schools in year 2 and new 7th graders who entered study schools in year 3.

¹³ Combined sample of 9th- 10th graders who entered study schools in year 2 and new 9th graders who entered study schools in year 3.

Final Summary of 2006 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 of the Study

Sixty-three Title I middle 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 majority of the schools in the CPS-SR project were located in communities that are economically disadvantaged and racially segregated. At the onset of the grant, on average, 93 percent of students in the CPS-SR schools received free or reduced priced lunch. Across the schools, 57 percent of the students were African-American, 37 percent were Hispanic, 3 percent were white, and 3 percent were from other ethnic groups; however, nearly all CPS-SR schools were comprised of one predominate racial or ethnic group. Eight percent of the students were classified as having Limited English Proficiency. The Striving Readers project was funded for five years, from 2006-07 (Year 1) through 2010-11 (Year 5).

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 & Associates for Supervision and Curriculum Development); (b) Partner Reading in the Content Area Too for fluency, comprehension, vocabulary development (developed by D. Ogle, National-Louis University); and (c) text set units related to subject area content/formats (developed by D. Ogle, National-Louis University).¹

Students in the treatment schools were assigned to tiers based on their reading skills, as assessed on the Stanford Achievement Test (SAT) or - for students missing an SAT score - the Basic

¹ For more information on the Chicago Striving Readers Program, please see the Chicago Striving Readers English Language Arts Curriculum and Achieving Maximum Potential Intervention Profile by Abt Associates, available at <http://www2.ed.gov/programs/strivingreaders/performance.html>.

Reading Inventory. Tier 1 included proficient readers; Tier 2 included struggling readers who could reach grade level with focused classroom support; and Tier 3 consisted of struggling readers who require long-term intensive support/customized instruction. All tiers received the whole-school intervention model of reading comprehension-focused literacy strategies. Tier 1 students received the regular English Language Arts instruction. Tier 2 and Tier 3 students received 20 minutes of targeted intervention daily during the regular English Language Arts class, during which differentiated instruction/scaffolding/support was provided by the Literacy Intervention Teacher (LIT).

Tier 3 students also received intensive instruction in an after-school supplemental literacy program, Achieving Maximum Potential program (AMP), which uses an approach based on work by Timothy Shanahan of the University of Illinois at Chicago. Tier 3 students attended 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. The LITs were responsible for the instruction in the AMP program.

Technology was integrated into the English Language Arts classroom instruction through a listening center where students could access models of fluency, record themselves reading, monitor their own fluency levels, and listen to audio books; a media center with three computers and printer to support special intervention software and group or individual research; and ten 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 in collaboration with 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.

The program makes use of screening, diagnostic, and progress-monitoring tools that are intended to help teachers adjust instruction to match student needs, including the 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 student interest inventories.

Professional Development Model as Planned: In the Chicago model, there was professional development for the ELA teachers, on implementation of the whole school intervention model as the curriculum in the regular ELA classrooms. There also was professional development for the LITs, who worked together with the ELA teachers in the ELA classes and provided the targeted support for the Tier 2 and Tier 3 students during the regular ELA class. In addition, the LITs were trained to implement the AMP program for Tier 3 students. In Year 1 of implementation, teachers new to the intervention were offered 54-57 hours a year of professional development. This included a five-day Summer Institute, quarterly follow-up training sessions, and monthly Saturday seminars. LITs were offered this same training and, in addition, six hours of weekly literacy instruction and targeted intervention meetings.

In Year 2 of implementation, teachers and LITs new to the intervention were offered the same level of professional development as in Year 1. Returning staff were offered a three-day Summer Institute and the same quarterly follow-up training sessions and Saturday seminars. In addition, since a technology component was added to the classroom instruction model in the second year of the project, both new and returning staff were offered six hours of training on using the technology. In the third year of implementation, new and returning staff members were again offered a three-day Summer Institute, the quarterly follow-up training sessions, and the technology training, but the Saturday seminars were not continued. In the fourth year, the technology training was no longer provided. In the fifth year, staff members were offered four half-day follow-up training sessions and customized on-site training on using laptops, media centers. In each of the five years of implementation, teachers and LITs were offered in-class mentoring and additional technical assistance from the district literacy coaches on an as-needed basis.

Context for Implementation: The Chicago Striving Readers program was implemented in 31 middle schools. For students in Tiers 2 and 3, the Striving Readers program replaced 20-30 minutes of the regular English Language Arts class each day with small group work. For students in Tier 3, in 6th grade only, the small group work as part of the English Language Arts class also was supplemented with the AMP after-school program for 240 minutes each week. Students in grades 6-8 were tiered based on their previous year's score on the Stanford Achievement Test or the Basic Reading Inventory.² All special education students participated in the program and were tiered similarly to the regular education students. Students could move between tiers throughout the three years of middle school, as they acquired stronger reading skills.

The project conducted random assignment at the school level: half of the participating middle schools were assigned to implement the targeted and the whole school interventions and half were assigned to business-as-usual. In the first year (Cohort 1), the program was implemented in 16 treatment schools; approximately 1,700 grade 6-8 students were assigned to Tiers 2 and 3. Another 16 schools comprised the control group. In the second year, the program continued in the Cohort 1 schools and a second cohort of 15 treatment schools was added. Approximately 2,400 students in grades 6-8 were assigned to Tiers 2 and 3 across the Cohort 1 and 2 schools in the second year of implementation. Another 16 schools comprised the Cohort 2 control sample. In the third year, the program was implemented in the same 16 Cohort 1 and 15 Cohort 2 schools, with approximately 2,300 students in grades 6-8 assigned to Tiers 2 and 3. In the fourth year of implementation, the number of Cohort 1 schools remained at 16, but the number of Cohort 2 schools dropped to 13. Approximately 1,800 grade 6-8 students were assigned to Tiers 2 and 3. During its final year, the Striving Readers program evaluation involved 23 treatment schools (16 from Cohort 1 and seven from Cohort 2) and 30 control schools (15 from Cohort 1 and 15 from Cohort 2). Most of these schools served students in grades Pre-K-8 or K-8, with the exception of two schools in the control group that were middle schools serving grades 4-8.³

² See Figure 1 on page 16 of the Year 5 Final Report for test score cutoffs used to assign students to Tiers in each year of the study.

³ The Cohort 2 schools that were lost from the study included primarily the smaller schools that were unable to provide funding for their literacy intervention teacher and continued implementation at a diminished level

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 receiving 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: The professional development for the targeted and the whole school interventions was combined. (See description above for “Professional Development Model as Planned” for the Targeted Intervention.)

Context for Implementation: All 6th through 8th grade students (Tiers 1, 2, and 3) in the 31 Cohort 1 and 2 treatment schools received instruction from nearly 500 teachers who were guided by the Chicago Striving Readers Program’s whole school model. In Year 1, approximately 3,000 students in grades 6-8 in the initial 16 treatment schools received the intervention. In Years 2, 3 and 4, between 4,900 and 5,900 students in grades 6-8 received the intervention in all 31 treatment schools. In Year 5, the intervention was only implemented in a subset of the Cohort 2 schools.

Evaluation Designs

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 6?⁴
2. What is the impact of the Chicago Striving Readers Program on Tier 3 grade 6 students?
3. What is the fidelity of implementation of the Chicago Striving Readers Program for Tier 2 and Tier 3 students in grade 6?

⁴ Note that although grade 6-8 students were assigned to Tiers, the evaluation focused on successive cohorts of grade 6 students only.

Impact Study:

Research Design and Methods. Two cohorts of middle schools were randomly assigned to implement the Chicago Striving Readers Program or continued 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 was maintained for the duration of the five-year study.

The impact of the Chicago Striving Readers Program was 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) was modeled at the school level (Level 2). Models were run to disaggregate effects by tier, to examine the separate effect of the most intense services on the most struggling readers. Although the targeted intervention was implemented for the full five years of the project, only Years 1-4 were included in the impact analyses.

Control Condition. Students in control schools were placed in their regular Language Arts classes. They were instructed by teachers who attended the regular professional development offered by the school district, and who delivered instruction to students according to the regular Language Arts curriculum. Students in the control schools were tiered for the purposes of analysis using the same test score cutoffs on the Illinois Student Achievement Test (ISAT) that were used to tier their treatment group counterparts.

Sample Size. Data from 63 schools (16 treatment schools from Cohort 1 plus 15 treatment schools from Cohort 2; and 32 control schools) were included in the final impact analyses.⁵ The evaluation of one year of exposure to CPS-SR included 660 treatment and 628 control students in grade 6 in Tier 2 and 602 treatment and 632 control students in grade 6 in Tier 3. The evaluation of two years of exposure to CPS-SR included 331 treatment and 319 control students in grade 7 (who started in the study in grade 6) in Tier 2 and 298 treatment and 284 control students in grade 7 (who started in the study in grade 6) in Tier 3. The evaluation of three years of exposure to CPS-SR included 214 treatment and 219 control students in grade 8 (who started in the study in grade 6) in Tier 2 and 452 treatment and 452 control students in grade 8 (who started in the study in grade 6) in Tier 3.

The evaluation of impacts on students after exposure to one, two, and three years of the intervention included the following analyses:

- The analysis of the impact on 6th grade students after one year of the intervention, which included a sample of students large enough to detect an impact (in standard deviation units) on reading achievement equivalent to .24 on the standardized test (Illinois Standard Achievement Test) for Tier 2 students and .19 for Tier 3 students.⁶
- The analysis of the impact on students who were in 6th grade when they entered the intervention and who had two years of exposure, which included a sample of students

⁵ Although two treatment and four control schools from the original sample were closed or restructured during the Chicago SR Program, student achievement and demographic data from students in those schools are included in the Intent-to-Treat impact analyses.

⁶ 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 percent power, and with an alpha level of .05, and accounts for clustering and for the inclusion of the covariates in the model.

large enough to detect an impact (in standard deviation units) on reading achievement equivalent to .28 on the standardized test for Tier 2 students and equivalent to .26 for Tier 3 students.

- The analysis of the impact on students who were in 6th grade when they entered the intervention and who had three years of exposure, which included a sample of students large enough to detect an impact (in standard deviation units) on reading achievement equivalent to .30 on the standardized test for Tier 2 students and equivalent to .17 for Tier 3 students.

Key Measures of Student Reading Outcomes (Source):

Illinois Standards Achievement Test (ISAT) (State Test)

Implementation Study:

Research Design and Methods. The fidelity of implementation of the targeted intervention model was studied in the 31 treatment schools through the first four years of the study (involving three or four years of implementation, depending on the cohort). In each of the years that implementation was studied, fidelity was assessed for the *professional development model* and the *classroom instruction model*. For each model, fidelity was defined as the extent to which the actual level of implementation measured during the study was consistent with the model as planned. Fidelity of implementation of the CPS-SR professional development model was rated as high, medium, or low, based on the level of participation of teachers in the CPS-SR training activities that were offered by the district and developers.⁷ Fidelity of implementation of the CPS-SR *classroom model* was rated as high, medium or low, based on the extent to which the classroom instruction matched the definition of the key components of the model that were identified by the district and the developers.⁸

Evaluation of the Whole School Intervention

Research Questions:

1. What is the impact of the Chicago Striving Readers Program on all students in grades 6 through 8?
2. What is the fidelity of implementation of the Chicago Striving Readers Program on all students in grades 6 through 8, in each year of the study?

⁷ The definition of fidelity of implementation of the professional development model for the CPS-SR targeted intervention can be found on the website for the U.S. Department of Education, Office of Elementary and Secondary Education in the cross-site summary tables for the 2006-2011 cohort (*Summary of 2006 Striving Readers Projects. Implementation and Evaluation of Targeted Interventions for Struggling readers and Whole School Interventions for All Readers: Years 1 – 5*), Table 3.

⁸ The definition of fidelity of implementation of the classroom model for the CPS-SR targeted intervention can be found on the website for the U.S. Department of Education, Office of Elementary and Secondary Education in the cross-site summary tables for the 2006-2011 cohort (*Summary of 2006 Striving Readers Projects. Implementation and Evaluation of Targeted Interventions for Struggling readers and Whole School Interventions for All Readers: Years 1 – 5*), Table 4.

Impact Study:

Research Design and Methods. Participating schools were randomly assigned to either implement CPS-SR or to continue with the existing literacy program. The impact of the Chicago Striving Readers Program was 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) was modeled at the school level (Level 2). Models were run to disaggregate effects by tier, to examine the separate effect of the most intense services on the most struggling readers. Although the whole school intervention was implemented for a total of five years, analyses of impacts on students were based on data from only Years 1-4 of implementation.

Control Condition. Control school teachers received the regular professional development offered by the districts and delivered instruction according to the regular language arts curriculum. The control school teachers did not attend the Striving Readers professional development workshops.

Sample Size. The analysis of the impacts of the whole school intervention included the entire population of students (Tiers 1, 2 and 3) in the 63 participating schools, which consisted of between 5,300 and 5,900 students in grades 6-8 depending on the implementation year. The analyses of the impacts of the whole school intervention were based on data from Years 1-4. The impact analysis of the effect of one year of exposure to the whole school intervention was based on a sample of 6th grade students (2,693 students in treatment schools and 2,692 students in control schools) who entered the study in either Year 3 or Year 4. The impact analysis of the effect of two years of exposure to the whole school intervention was based on a sample of 7th grade students (1,318 students in treatment schools and 1,281 students in control schools) who entered the study in Year 3. The impact analysis of the effect of three years of exposure to the whole school intervention was based on a sample of 8th grade students (1,316 students in treatment schools and 1,287 students in control schools) who entered the study in Year 2.

The impact analysis of the effect of one year of implementation of the whole school intervention included a sample of schools and students large enough to detect an impact of .14 (in standard deviation units) of the intervention on the ISAT. For the analysis of the effect of two years of the intervention, the sample was large enough to detect an impact of .14 on the ISAT. For the analysis of the effect of three years of the intervention, the sample was large enough to detect an impact of .11 on the ISAT.

Key Measures of Student Reading Outcomes (Source):

Illinois Standards Achievement Test (ISAT) (State Test)

Implementation Study:

Research Design and Methods. The fidelity of implementation of the whole school intervention model was studied in the 31 treatment schools through the first four years of the study (involving three or four years of implementation, depending on the cohort). In each of the years that implementation was studied, fidelity was assessed for the *professional development model* and the *classroom instruction* model. Fidelity of implementation of the professional development model was rated as high, medium, or low, based on the level of participation of

teachers in the CPS-SR training activities offered by the district and the developers.⁹ Fidelity of implementation of the *classroom model* was rated as high, medium or low, based on the extent to which the classroom instruction matched the definition of the key components of the model that were identified by the district and the developers.¹⁰

Evaluation Findings: Targeted Intervention _____

Level of Implementation of the Targeted Intervention Model

Professional Development Model: Fidelity of implementation of the professional development model was not calculated for the first year of implementation.¹¹ In Year 2, across all of the components of professional development, teachers participated at a high level in 3 percent of the schools and at a medium level in 71 percent of schools. In Year 3, there were no schools where teachers participated at a high level in professional development activities but in 90 percent of the schools, teachers participated at a medium level. In Year 4, teachers participated at a high level in PD activities in 62 percent of schools and at a medium level in 38 percent of schools. Fidelity of implementation of the professional development model was not studied in Year 5. Case study interviews and classroom observations were conducted at five Cohort 1 high-implementing schools.

Classroom Instruction Model: Fidelity of implementation of the classroom model was not calculated for the first year of the program. In Year 2, in 84 percent of schools, the classroom instruction model for the Tier 2 and Tier 3 students was implemented at a medium level of fidelity, although none of the schools implemented the classroom model at a high level of fidelity. The intensive classroom instruction model for the Tier 3 students was implemented at a high level of fidelity in 42 percent of schools, and at a medium level of fidelity in 55 percent of schools. In Year 3, the classroom instruction model for the Tier 2 and Tier 3 students was implemented at a high level of fidelity in 64 percent of schools and at a medium level of fidelity in 36 percent of schools. The intensive classroom instruction model for the Tier 3 students was implemented at a high level of fidelity in 68 percent of schools and at a medium level of fidelity in 32 percent of schools. In Year 4 of the intervention, the classroom instruction model was implemented at a high level of fidelity in 72 percent of schools, and at a medium level in 24 percent of schools. The intensive classroom instruction model was implemented at a high level in

⁹ The definition of fidelity of implementation of the professional development model for the CPS-SR whole school intervention can be found on the website for the U.S. Department of Education, Office of Elementary and Secondary Education in the cross-site summary tables for the 2006-2011 cohort (*Summary of 2006 Striving Readers Projects. Implementation and Evaluation of Targeted Interventions for Struggling readers and Whole School Interventions for All Readers: Years 1 – 5*), Table 15.

¹⁰ The definition of fidelity of implementation of the CPS-SR classroom model for the CPS-SR whole school intervention can be found on the website for the U.S. Department of Education, Office of Elementary and Secondary Education in the cross-site summary tables for the 2006-2011 cohort (*Summary of 2006 Striving Readers Projects. Implementation and Evaluation of Targeted Interventions for Struggling readers and Whole School Interventions for All Readers: Years 1 – 5*), Table 16.

¹¹ Although level of participation was not calculated for Year One, the evaluation reported on teacher attendance at professional development activities: On average, across the treatment schools, 87 percent of teachers attended the Summer Institute, 79 percent of teachers participated in the follow-up trainings, and 67 percent attended the Saturday seminars.

45 percent of schools, and 55 percent of schools implemented the model at a medium level. Implementation of the classroom model was not studied in Year 5.

Impact of the Targeted Intervention Model

After one year of intervention, there were significant impacts on the reading achievement of grade 6 struggling readers assigned to Tier 2 but no significant impacts for grade 6 struggling readers assigned to Tier 3. The significant effect size for Tier 2 was .17, while the non-significant effect size for Tier 3 was .07.

After two years of intervention, there were no significant impacts on the reading achievement of 6th grade struggling readers. The non-significant effect sizes for Tier 2 and Tier 3 were -.09 and -.11, respectively.

After three years of intervention, there were no significant impacts on the reading achievement of grade 6 struggling readers (those assigned to Tiers 2 and 3). The non-significant effect sizes for Tier 2 and Tier 3 were -.06 and .00, respectively.

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

Strengths:

- The analysis of the impact of one, two, and three years of the Chicago Striving Readers Program on reading achievement (ISAT) meets What Works Clearinghouse (WWC) evidence standards with reservations. Analyses that meet WWC evidence standards with reservations make us reasonably confident that the estimated effect is due solely to the intervention alone, and not to the many other factors that are at play in schools and in the lives of students, such as teachers, school, and family.
- Eligibility for inclusion in the Chicago Striving Readers Program was determined systematically, using a predetermined cutoff score on a test of reading achievement (SAT10 or the Basic Reading Inventory (BRI)). Although the eligibility criteria varied somewhat from year to year, within each year, eligibility criteria were applied systematically across treatment and control groups.
- School-level random assignment was faithfully executed. The evaluators noted that in Year 2, 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 corresponded to 0.6 percent of the student sample, and was a minimal crossover rate. The evaluators did not report any crossovers occurring in Year 3 or Year 4.
- School-level attrition was low; only one school (assigned to be a Striving Readers school, 1.6 percent) did not participate in the Year 4 follow-up data collection.
- 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.

- The reading test used as an outcome measure, the Illinois Standard Achievement Test (ISAT), assesses 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 had more experience taking the test than did the control group students, or that the test measured skills specific to the intervention, both of which could undermine confidence in the impact estimates.
- With respect to measured characteristics, no differences in pre-study reading or math achievement were noted between the students in the remaining 32 treatment and 31 control schools 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 models to increase the precision of the impact estimates.

Weaknesses:

- The Chicago Striving Readers Program was developed specifically to address the needs of struggling adolescent readers in the Chicago Public Schools. Therefore, the model is not readily or commercially available to other districts who might wish to replicate it.
- Student-level attrition could not be calculated because baseline sample sizes were not reported.
- The impacts of the targeted intervention for struggling readers could not be estimated independently from the whole school intervention for all readers; all students in the treatment schools, including those in the targeted intervention, received the whole school intervention.

Evaluation Findings: Whole School Intervention _____

Level of Implementation of the Whole School Intervention Model

Professional Development Model: Fidelity of implementation of the professional development model was not calculated for the first year of implementation. In Year 2, teachers had a high level of participation in the professional development activities in 3 percent of schools and at a medium level of participation in 71 percent of schools. In Year 3, there were no schools in which teachers participated in the professional development model at a high level, but teachers participated at a medium level in 45 percent of schools. In Year 4, the comparable ratings were 14 percent of schools with high participation and 76 percent with medium participation. Implementation of the professional development model was not studied in Year 5.

Classroom Instruction Model: Fidelity of the implementation of the classroom 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 high level of fidelity in 10 percent of schools and at a medium level of fidelity in 90 percent of schools. In Year 3, the classroom model was implemented at a high level of fidelity in 13 percent of schools and at a medium level of fidelity at 87 percent of

schools. In Year 4, teachers participated at a high level in 19 percent of schools and at a medium level in 81 percent of schools. Implementation of the classroom model was not studied in Year 5.

Impact of the Whole School Intervention Model

There were no statistically significant impacts of the whole school intervention on student reading outcomes after one, two, or three years of the intervention. The non-significant impacts were -.01, -.05, and .01, respectively.

Summary of the Strengths and Weaknesses of the Impact Evaluation of the Whole School Intervention

Strengths:

- Randomization was used to construct a control group of schools. Randomization helped ensure that the control schools were similar to the Striving Readers schools on both observed and unobserved characteristics prior to the implementation of the intervention.
- The reading test used as an outcome measure, the Illinois Standard Achievement Test (ISAT), assesses vocabulary, reading strategies, comprehension, and literature, and was developed by the state. There is no reason to believe that students in schools assigned to the treatment group had more experience taking the test than did the students in schools assigned to the control group, or that the test measured skills specific to the intervention, both of which could have undermined confidence in the impact estimates.
- While some students were unable to participate in follow-up data collection, the level of attrition did not differ substantially across the treatment and control groups. This suggested that the integrity of the original randomized design was preserved, and that the treatment and control groups continued to be equivalent on all measured and unmeasured characteristics at follow-up.
 - The school-level attrition rate was 1.6 percent; the levels of attrition did not differ substantially across the treatment and control schools (differential attrition rate was 3.1 percent). Some students were unable to participate in follow-up data collection. The overall attrition rates for the one, two and three years of exposure were 7.6 percent, 12.8 percent, and 25.8 percent, respectively. The corresponding differential attrition rates were 1.2 percent, 3.5 percent, and 2.5 percent. This amount of attrition is within the acceptable range established by WWC standards.¹²
- There were no differences in pre-study reading or math achievement between students in the treatment and control schools included in the analysis at follow-up.

¹² For more information, please see Appendix A-Assessing Attrition Bias, of the WWC Procedures and Standards Handbook, available at: <http://ies.ed.gov/ncee/wwc/help/idocviewer/Doc.aspx?docId=19&tocId=7>.

- 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 models to increase the precision of the impact estimates.

Weaknesses:

- The impact of the whole school intervention for struggling readers could not be estimated independently from the targeted intervention because some students in the treatment schools also received the targeted intervention.

Sustainability of the Striving Readers Interventions _____

In summer of 2011, Striving Readers grantees were interviewed about their plans for implementing the targeted and whole school interventions in the 2011-12 school year, after the grant period had ended. The responses are summarized here.

Targeted and Whole School Interventions

- An essential component element of the Chicago Striving Readers program was the LIT. Three of the five Striving Readers' schools retained their LIT, either through the school budget or by expanding their responsibilities. Schools without an LIT planned to continue to try to follow the basic program philosophies about evidence-based practice, small-group and data-drive instruction and collaboration, but expected to have difficulties fully implementing the small-group instruction, use of student data, and staff meetings.
- The district did not continue with the AMP component for struggling readers.
- The teacher training continued, but at a less intensive level.

Final Summary of 2006 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 of the Study

Ten middle schools, nine high schools and two 6-12 schools in seven rural school districts in central, northwest, and eastern Kentucky participated in the Striving Readers project. At the onset of the grant, all schools were eligible for Title I services, and about half of the students (49 percent) served by these schools were 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 served predominantly white students (91 percent), with 5 percent of the students identified as African American. The Striving Readers project was funded for five years, from 2006-07 (Year 1) through 2010-11 (Year 5).

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 were also used.¹

Each classroom had a tablet PC to serve as a method of delivery system to whole or small groups. Some classrooms used tablet for Visual Imagery Strategy. Some classrooms used a listening center where students could access models of fluency, record themselves while reading,

¹ For more information on LSC, please see the Learning Strategies Curriculum Intervention Profile by Abt Associates, available at <http://www2.ed.gov/programs/strivingreaders/performance.html>.

monitor their own fluency levels, and listen to audio books based on individual needs. Some classrooms used blogging or software supports for pre-requisite skills needed prior to strategy instruction.

Professional Development Model as Planned: Teachers who were new to LSC were initially offered five half-day workshops with nine half-day follow-up sessions, totaling 42 hours of training per teacher, all provided by the model developer. Each new teacher was also offered a monthly classroom visit by a CTL mentor literacy coach, as well as ongoing support via email and telephone from the mentor coach. In the second and third years, new and returning teachers were offered a two-day initial workshop and 10-11 half-day follow-up sessions. In the fourth year of implementation, teachers were offered 10 half-day training sessions. Additionally, teachers were offered coaching support. In the second year, this included 3-4 days of on-site coaching by a mentor coach and the developer, while in the third and fourth years, the number dropped to 1-2 days of on-site coaching. Bimonthly distance learning sessions were also available to teachers in all four years. In Year 5, teachers were provided three days of training and up to three days of on-site coaching on an as-needed basis from the CTL mentor literacy coach.

Context for Implementation: The Learning Strategies Curriculum was implemented as a supplement to the district's regular English Language Arts curriculum in the schools, replacing an elective course. The targeted intervention served 6th and 9th 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 were excluded if they were categorized as functionally mentally disabled or were enrolled in special education for all core classes. Struggling readers could receive the intervention for one year. In Years 1-4, all of the schools in the project implemented the targeted intervention. In Year 1, 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 391 students. In the third year, a total of 336 students in 6th and 9th grades were served. In the fourth year of the intervention, 258 6th and 9th graders were served. In Year 5, the study focused on the impact of a second year of the Learning Strategies Curriculum. The curriculum continued to be implemented in nine of the 21 middle and high schools that participated in the full study, selected on the basis of having exhibited high levels of implementation of the targeted intervention in the previous four years. The subset of schools included six middle schools, two high schools, and one school serving grades 6-12. In Year 5, a second year of the targeted intervention was offered to students who had had received the intervention in the previous school year as 6th and 9th graders and were still reading two or more grade levels below their grade.

Whole School Intervention

Classroom Model as Planned: The Adolescent Literacy Model (ALM) was developed by the Collaborative for Teaching and Learning (CTL) 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: In Years 1 and 2 of the intervention, teachers new to the Adolescent Literacy Model were offered five days of training at the Teacher Institute provided by the model developer. This training totaled 30 hours per teacher. New teachers were also offered mentoring opportunities from the school literacy coaches. In the second year, training for returning teachers included one day of common trainings, one day of school-specific sub-domain trainings, two days of school institutes and two half-day department-specific trainings per discipline per school and as needed. These trainings were offered by the model developers and totaled 24 hours per teacher. In the first two years of the implementation, teachers also were offered coaching support through monthly visits from mentor coaches and additional support as-needed. In Years 3 and 4, no distinction was made between new and returning teachers in terms of PD. All teachers attended one day of school institute training, as well as a one-day, project-wide conference organized by CTL mentor coaches and school literacy coaches. In Year 5, teachers were provided one day of training and up to three days of on-site coaching on an as-needed basis from the CTL literacy coach.

Context for Implementation: All students in participating schools received instruction in the whole school intervention. In Years 1-4, between 12,000 and 14,000 students in grades 6-12 were served across the 21 intervention schools. In Year 5, the whole school intervention was implemented in only a subset of the original sample of schools (n = 9 schools), which were selected based on having demonstrated high levels of implementation of the targeted intervention during the previous four years.

Evaluation Designs

Targeted Intervention

Research Questions:

1. What is the impact of the Learning Strategies Curriculum on the reading achievement, reading motivation, and reading strategy use of struggling readers?
2. What is the fidelity of implementation of the Learning Strategies Curriculum in each year of the study?

Impact Study:

Research Design and Methods. For Years 1-4, within schools, students identified as struggling readers were randomly assigned either to receive the supplemental LSC class or to the control group. The impacts of one year of LSC on student outcomes were estimated across these four years, using multilevel models to account for nesting of students within schools. In Year 5, two supplementary analyses were conducted involving comparisons of students with one versus two years of the LSC intervention.² The results of these supplemental analyses are reported in the Year 5 Addendum to the Evaluation Report and are not included in this summary.

² In the first supplementary study, within schools, students in grades 7 and 10 who had been randomly assigned to receive the LSC supplemental intervention in the prior year (when they were in grades 6 and 9) had the opportunity for a second year of LSC. Students in grades 7 and 10 who had been randomly assigned to the control in the prior year were placed in the LSC intervention for one year. The analysis compared the impact of one versus two years of the LSC intervention on student outcomes. Additionally, the study addressed a non-experimental question about differences in outcomes for students who participated in the targeted intervention for two years versus one year, with

U.S. Department of Education, Striving Readers: Danville School District
Office of Elementary and Secondary Education Project Profile: Year 5
Submitted by Abt Associates Inc. 3

Control Condition. In the first four years of the study, students randomized to the control group continued to receive their regular elective courses in place of the LSC class.

Sample Size. All of the impact analyses of one year of exposure to the targeted intervention were based on samples that included four cohorts of students across Years 1-4 of implementation. For the GRADE, the sample for the impact evaluation of one year of exposure to LSC in grade 6 included 605 treatment students and 530 control students across the 12 schools. For the GRADE, the sample for the impact evaluation of one year of exposure to LSC in grade 9 included 593 treatment students and 535 control students across the 11 schools. For the Metacognitive Awareness of Reading Strategies Inventory (MARS), the sample for the impact evaluation of one year of exposure to LSC in grade 6 included 439 treatment students and 390 control students across the 12 schools, while the sample for the impact evaluation of one year of exposure to LSC in grade 9 included 368 treatment students and 342 control students across the 11 schools. For the Motivation to Read Questionnaire (MRQ), the sample for the impact evaluation of one year of exposure to LSC in grade 6 included 439 treatment students and 390 control students across the 12 schools, while the sample for the impact evaluation of one year of exposure to LSC in grade 9 included 368 treatment students and 342 control students across the 11 schools.

The impact findings based on Years 1-4 of implementation include a sample of students large enough to detect an impact (in standard deviation units) of the intervention on student outcomes after one year of LSC equivalent to:

- .14 and .16 on the standardized test (GRADE) of reading achievement for grade 6 and 9, respectively,³
- .18 and .19 on the measure of reading strategies (MARS) for both grades 6 and 9, respectively, and
- .18 and .18 on the measure of reading motivation (MRQ) for grade 6 and 9, respectively.

Key Measures of Student Reading Outcomes (Source):

Group Reading Assessment Diagnostic Evaluation (GRADE): Total Reading Score (External Test Publisher)

Metacognitive Awareness of Reading Strategies Inventory (MARS)

Motivation to Read Questionnaire (MRQ)

Implementation Study:

Research Design and Methods. The fidelity of implementation of the LSC targeted intervention model was studied in the 21 treatment schools for the first four years of implementation. Fidelity of implementation was not studied in the fifth year of the project. In each of the first four years, the study assessed the fidelity of implementation of the *professional development model* and the *classroom instruction* model. For each model, fidelity was defined as

the sample consisting only of students whose reading scores at the end of the prior year were two or more grade levels below grade level.

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 percent power, and with an alpha level of .05, and accounts for clustering and for the inclusion of the covariates in the model.

the extent to which the actual level of implementation measured during the study was consistent with the model as planned. Fidelity of implementation of the professional development model was rated as adequate or not, based on the level of participation of teachers in the training activities that were offered by the district.⁴ Fidelity of implementation of the *classroom model* was rated as adequate or not, based on the extent to which the classroom instruction matched the definition of the key components of the model that were identified by the district.⁵

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. What is the fidelity of implementation of the Collaborative Model for Content Literacy in each year of the study?

Impact Study:

Research Design and Methods. In Year 4, an interrupted time series analysis with a comparison group and four years of baseline and four years of follow-up data compared school-level pre-program student achievement scores with post-program student achievement scores. No additional analyses of the impact of the whole school intervention were conducted in Year 5.

Comparison Group. The sample also included collection of school-level aggregate test scores from 19 comparison schools that did not implement the intervention. Comparison schools were matched to intervention schools on ethnicity, region, and proportion of at-risk students.

Sample Size. The whole school intervention was delivered to all students in the 21 treatment schools (10 middle schools, nine high schools, and two schools with grades 6-12). All students in the schools were included in the sample for the evaluation, totaling approximately 13,000 students in a single year.

Key Measures of Student Reading Outcomes (Source):

Kentucky Core Content Test –KCCT: Reading Achievement (state test)

Kentucky Core Content Test –KCCT: Writing Achievement (state test)

⁴ The definition of fidelity of implementation of the professional development model for the LSC targeted intervention can be found on the website for the U.S. Department of Education, Office of Elementary and Secondary Education in the cross-site summary tables for the 2006-2011 cohort (*Summary of 2006 Striving Readers Projects. Implementation and Evaluation of Targeted Interventions for Struggling readers and Whole School Interventions for All Readers: Years 1 – 5*), Table 3.

⁵ The definition of fidelity of implementation of the classroom model for the LSC targeted intervention can be found on the website for the U.S. Department of Education, Office of Elementary and Secondary Education in the cross-site summary tables for the 2006-2011 cohort (*Summary of 2006 Striving Readers Projects. Implementation and Evaluation of Targeted Interventions for Struggling readers and Whole School Interventions for All Readers: Years 1 – 5*), Table 4.

Implementation Study:

Research Design and Methods. The fidelity of implementation of the MCLA whole school intervention model was studied in the 21 treatment schools for the first four years of implementation but not in the fifth and final year. In each of the first four years, the study assessed the fidelity of implementation of the *professional development model* and the *classroom instruction* model. For each model, fidelity was defined as the extent to which the actual level of implementation measured during the study was consistent with the model as planned. Fidelity of implementation of the professional development model was rated as adequate or not, based on the level of participation of teachers in the MCLA training activities that were offered.⁶ Fidelity of implementation of the *classroom model* was rated as adequate or not, based on the extent to which the classroom instruction matched the definition of the key components of the model that were identified by the developer.⁷

Evaluation Findings: Targeted Intervention _____

Level of Implementation of the Targeted Intervention Model

In terms of fidelity of implementation of the *professional development model*, in the first four years of the intervention, 100 percent of teachers in grades 6 and 9 implemented the intervention at a high level. In Year 5, 100 percent of the teachers in grades 7 and 10 implemented the intervention at a high level.

Ratings of fidelity of implementation of the *classroom model* ratings were based on classroom observations and teacher interviews. In Year 1 of implementation, the grade 6 teachers spent 59 percent of their time, on average, in LSC activities and achieved 91 percent teacher attendance. The grade 9 teachers spent 70 percent of their time, on average, in LSC activities, and also achieved 91 percent teacher attendance. In the second year of implementation, both grade 6 and grade 9 teachers spent about 80 percent of their time, on average, in LSC activities. Grade 6 teachers achieved 78 percent teacher attendance while grade 9 teachers achieved 88 percent teacher attendance. In Year 3, teachers in both grades 6 and 9 spent an average of 87 percent of their time in LSC activities. The grade 6 teachers achieved 82 percent teacher attendance and the grade 9 teachers achieved 87 percent teacher attendance. In Year 4, grade 6 teachers spent 88 percent of their time in LSC activities, and had 84 percent attendance. Grade 9 teachers spent 83 percent of their time in LSC activities, and achieved 85 percent attendance. In Year 5, the grade 7 teachers adhered to the supplemental class time 76 percent of the time, on average, and achieved 85 percent teacher attendance. The grade 10 teachers adhered to the supplementary

⁶ The definition of fidelity of implementation of the professional development model for the ALM whole school intervention can be found on the website for the U.S. Department of Education, Office of Elementary and Secondary Education in the cross-site summary tables for the 2006-2011 cohort (*Summary of 2006 Striving Readers Projects. Implementation and Evaluation of Targeted Interventions for Struggling readers and Whole School Interventions for All Readers: Years 1 – 5*), Table 14

⁷ The definition of fidelity of implementation of the classroom model for the ALM whole school intervention can be found on the website for the U.S. Department of Education, Office of Elementary and Secondary Education in the cross-site summary tables for the 2006-2011 cohort (*Summary of 2006 Striving Readers Projects. Implementation and Evaluation of Targeted Interventions for Struggling readers and Whole School Interventions for All Readers: Years 1 – 5*), Table 15.

class time 100 percent of their time, on average, in LSC activities, and also achieved 87 percent teacher attendance.

Impact of the Targeted Intervention Model

The impacts of one year of the intervention on students in grades 6 and 9 were not updated in Year 5. In the Year 4 analyses, there was a significant impact of the targeted intervention on reading achievement of students in grade 9 who received one year of treatment, with an effect size of .12. There were no significant impacts of the targeted intervention on the reading achievement of students in grade 6 who received one year of the treatment, with an effect size of .08.

There was no significant impact of the targeted intervention on reading strategies of students in grade 6 who received one year of treatment, with an effect size of .13. There was no significant impact of the targeted intervention on reading strategies of students in grade 9 who received one year of treatment, with an effect size of .09.

There were significant impacts of the targeted intervention on the reading motivation of students in grades 6 and 9 who received one year of treatment, with effect sizes of .16 and .23, respectively.

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

Strengths:

- The analyses of the impacts of one year of LSC on 6th and 9th grade reading achievement (GRADE) meet What Works Clearinghouse (WWC) evidence standards. Analyses that meet WWC evidence standards make us the most confident that the estimated effect is due solely to the intervention alone, and not to the many other factors that are at play in schools and in the lives of students, such as teachers, school, and family. Abt did not examine whether the analyses of the impacts of one year of LSC on reading strategies or motivation meet WWC standards because the review was restricted to measures of reading achievement.
- 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.

- Assessment of outcome measures:
 - The assessment of reading uses a standardized test, the GRADE, to measure vocabulary, comprehension, and oral language. There is no reason to believe that students assigned to the treatment group had more experience taking the test than did the control group students, or that the test measured skills specific to the intervention, both of which could have undermined confidence in the impact estimates.
 - The surveys used to collect other outcome measures - the Metacognitive Awareness of Reading Strategies Inventory (MARS) and the Motivation to read Questionnaire (MRQ) - are published measures developed by researchers outside the evaluation team. There is no reason to believe that students assigned to the treatment group had more experience taking the test than did the control group students, or that the tests measured skills specific to the intervention, both of which could have undermined confidence in the impact estimates.
- While some students were unable to participate in follow-up data collection, the level of attrition did not differ substantially across the treatment and control groups. This suggested that the integrity of the original randomized design was preserved, and that the treatment and control groups continued to be equivalent on all measured and unmeasured characteristics at follow-up.
 - Some students (14.2 percent of grade 6 students and 23.7 percent of grade 9 students) were unable to participate in follow-up data collection on the GRADE; the levels of attrition did not differ substantially across the treatment and control groups (differential attrition rate was 5.8 percent in grade 6 and 6.8 percent in grade 9). This amount of attrition is within the acceptable range established by WWC standards.⁸
 - Some students (37.3 percent of grade 6 students and 52.0 percent of grade 9 students) were unable to participate in follow-up data collection on the MARS and MRQ; the levels of attrition did not differ substantially across the treatment and control groups (differential attrition rate was 3.3 percent in grade 6 and 2.9 percent in grade 9). This amount of attrition is within the acceptable range established by WWC standards.³
- No differences in pre-study reading achievement or other demographics were noted between the treatment and control students included 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 models to increase the precision of the impact estimates.

Weaknesses:

- None.

⁸ For more information, please see Appendix A-Assessing Attrition Bias, of the WWC Procedures and Standards Handbook, available at: <http://ies.ed.gov/ncee/wwc/help/idocviewer/Doc.aspx?docId=19&tocId=7>.

Evaluation Findings: Whole School Intervention

Level of Implementation of the Whole School Intervention Model

On ratings of fidelity of implementation of the *professional development model*, in Year 1, 70 percent of teachers in the middle schools, 67 percent of teachers in the high schools and 100 percent of teachers in the 6-12 schools achieved adequate levels of participation. In the second year of implementation, the levels of fidelity of implementation were 80 percent in middle schools, 56 percent in high schools and 50 percent in the 6-12 schools. In Year 3, these same levels were 70 percent in middle schools, 67 percent in high schools and 100 percent in the 6-12 schools. In Year 4, 70 percent of teachers in middle schools, 67 percent of teachers in high schools, and 100 percent of teachers in the 6-12 schools achieved adequate levels of participation.

In Year 1, the observations of the implementation of the *classroom model* resulted in ratings of adequate implementation 26 percent of the time in grade 6 classrooms and 24 percent of the time in grade 9 classrooms. In Year 2, the classroom model was rated as being adequately implemented 30 percent of the time in grade 6 classrooms and 13 percent of the time in grade 9 classrooms. In Year 3, the classroom model was implemented adequately 26 percent of the time in grade 6 classrooms, and 24 percent of the time in grade 9 classrooms. In Year 4, the classroom model was rated as adequately implemented 34 percent of the time in grade 6 classrooms, and 24 percent of the time in grade 9 classrooms.

Impact of the Whole School Intervention Model

There were no statistically significant impacts of the whole school intervention for middle or high school student reading and writing outcomes after one year of the intervention. The impacts were .21 for the KCCT Reading and Writing Achievement state test outcomes in middle school and .20 and .22, respectively, for the Reading and Writing Achievement outcomes in high school.⁹

Summary of the Strengths and Weaknesses of the Impact Evaluation of the Whole School Intervention

Strengths:

- Matched comparison schools were identified by the Kentucky Department of Education based on ethnicity, number of students, percent free and reduced price lunch, and accountability index.
- Striving Readers high schools and comparison high schools were equivalent on pretest reading and writing scores. Striving Readers middle schools and comparison middle schools were equivalent on pretest writing scores only. Teacher demographics at the

⁹ The effect size reported here was calculated relative to the standard deviation of schools means. This effect size is on a different scale from and is not comparable to the effect sizes reported elsewhere in the project profiles and summary tables, where the effect sizes were calculated relative to the standard deviation of student test scores.

Striving Readers and matched schools were similar with respect to gender, ethnicity, and education level.

- The outcome measure, Kentucky Core Content Test (KCCT), is a criterion-based exam that assesses student achievement in the core content areas, including reading, writing, mathematics, science, and social studies. A composite score by content area is derived annually for every school in Kentucky. The reading and writing scores were used to evaluate the impact of the ALM whole-school intervention. The test was developed by the state. There is no reason to believe that students in schools assigned to the treatment group had more experience taking the test than do the students in schools assigned to the control group, or that the test measured skills specific to the intervention, both of which could have undermined confidence in the impact estimates.

Weaknesses:

- The impact of the whole school intervention for struggling readers could not be estimated independently from the targeted intervention because a random sample of eligible students in the treatment schools also received the targeted intervention.
- An Interrupted Time Series model was used to measure the impact of the ALM on the student achievement in the Striving Readers schools. This design did not meet What Works Clearinghouse standards with or without reservations because baseline equivalence of students in the analytic sample could not be demonstrated.
- Striving Readers middle schools had lower pretest reading scores than comparison middle schools ($p=.003$). Because the study had a quasi-experimental design, we were unable to attribute observed impacts to the whole school intervention.

Sustainability of the Striving Readers Interventions _____

In summer of 2011, Striving Readers grantees were interviewed about their plans for implementing the targeted and whole school interventions in the 2011-12 school year, after the grant period had ended. The responses are summarized here.

Targeted Intervention

- Five of the original 21 participating schools continued to implement all of some of the targeted intervention in the 2011-12 school year. The decision to continue was at the discretion of the individual school principals.
- No additional formal training was offered to the teachers trained on the intervention. In some schools, trained teachers worked as peer coaches. Other schools hired literacy coaches as full-time staff.
- The intervention was completed in grades 6 and 9, as in the original study; its use was not expanded to additional middle school or high school grades.

Whole School Intervention

- Principals in twelve of the 21 participating schools elected to continue implementation of the whole school intervention in the 2011-12 school year.
- No additional training was offered to teachers. Trained teachers acted as peer mentors to the other teachers in their schools.

Final Summary of 2006 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 of the Study

Eight middle schools serving over 6,000 students in grades six through eight in Memphis, Tennessee participated in the Striving Readers project. Within the eight middle schools, students in the sixth through eighth grades were selected because they demonstrated the strongest need for reading support, i.e., those who performed in the bottom quartile on the reading/language arts portion of a prior Tennessee Comprehensive Assessment Program (TCAP) test. At the onset of the grant, 95 percent of the students served by these schools were African American and five percent were Hispanic. 88 percent of these students were eligible for free or reduced priced lunch, and three percent were identified as English Language Learners. The Striving Readers project was funded for five years, from 2006-07 (Year 1) through 2010-11 (Year 5). There were no evaluation activities in Year 5.

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. The READ 180 Topic Software provides frequent assessments 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.¹

Professional Development Model as Planned: In the first year of the implementation, teachers were offered an initial two-day training and an additional one-day of follow-up training on the model, provided by the developer, and six networking meetings throughout the year led

¹ For more information on READ 180, please see the READ 180 Enterprise Edition Intervention Profile by Abt Associates, available at <http://www2.ed.gov/programs/strivingreaders/performance.html>.

by district staff. Together, these training sessions totaled 32 hours per teacher. In the second, third, and fourth years of implementation, teachers who were new to READ 180 received the two-day initial training from the developer and four networking meetings throughout the year led by district staff, for a total of 28 hours of professional development. Returning teachers were provided with a one-day initial training and the same four networking meetings. In Year 2 only, both new and returning teachers were encouraged to complete a six-hour online training module from Scholastic on “Best Practices for Reading Intervention.” In addition, in the first year, teachers received ongoing classroom support as needed from the district Resource Teacher Coordinators (RTCs) and from the developer. In Years 2-4 of the project, all teachers received one observation and follow-up meeting from the developer.

Context for Implementation: The READ 180 program was 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 were eligible for READ 180 if they scored in the bottom quartile of the Tennessee Comprehensive Assessment Program (TCAP). All special education students who were struggling readers also were eligible for the interventions. Eligible students were randomly selected to participate in the supplemental program or to serve as control group students. Students could receive the intervention for up to two years. In Year 1 of implementation, 698 students in grades 6-8 were served by the intervention. In the second year, the 8th grade students in Year 1 graduated out of the program and a new cohort of 6th graders were added to READ 180, for a total of 608 students served in Year 2 of implementation. In Year 3, a new cohort of 274 6th graders was added for a total of 802 students served in the third year of the implementation. In the fourth and final year of the intervention, 238 6th graders joined 7th and 8th graders for a total of 512 students who received the intervention. In Year 4, all eligible students received READ 180.

In addition, the eight schools were randomly assigned to implement the whole school intervention or to continue with business-as-usual for the first two years of the program. Starting in the third year of implementation, all eight middle schools implemented the whole school intervention.

Whole School Intervention

Classroom Model as Planned: The Memphis Content Literacy Academy (MCLA) professional development model was 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 in research-based strategies that help strengthen students’ fluency, vocabulary, and comprehension skills before, during, and after reading.

Professional Development Model as Planned: In Years 1-4, English Language Arts, mathematics, science, and social studies teachers in four of the middle schools were offered professional development in the MCLA model. New teachers of the Memphis Content Literacy Academy were offered a two-year course with 30 weekly classes per year provided by model developers, totaling 90 hours per teacher per year. Literacy coaches were 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 consisted of the second half of the MCLA course, totaling 90 hours per teacher per year.

Context for Implementation: The eight participating middle schools were randomly assigned to implement the whole school intervention or to continue with business-as-usual for the first two years of the program. Starting in the third year of implementation, all eight middle schools implemented the whole school intervention. In the first two years, the whole school intervention served approximately 2,400 students in grades 6-8 in each school year in the four treatment schools. In Years 3 and 4, the four control schools added an additional 2,400 students and 3,000 students respectively. The whole school intervention was implemented for a total of four years, although there were treatment and controls schools only in the first two years.

Evaluation Designs

Targeted Intervention

Research Questions:

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?
2. What is the fidelity of implementation of the targeted intervention in each year of the study?

Impact Study:

Research Design and Methods. Students scoring in the lowest quartile on the English/Language Arts component of the TCAP were randomly assigned to receive the supplemental READ 180 class or to a control group. Students continued to receive instruction in the regular language arts curriculum. The impact of READ 180 on student outcomes is modeled using multilevel models to account for the nesting of students within schools.

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

Sample Size. For one of the student reading measures, on the ITBS Total Reading Score, the sample for the Year 4 impact evaluation of one year of exposure to READ 180 included 1,090 treatment students in grades 6-8 and 1,384 control students, across eight schools. On the ITBS Total Reading Score, the analysis of the impact of two years of exposure to READ 180 included 545 treatment students and 728 control students in grades 7 and 8, across eight schools. The sample for the ITBS Comprehension Score included 1119 treatment students and 1405 control students. The sample for the ITBS Vocabulary Score included 1105 treatment students and 1403 control students.

For the second measure of student reading outcomes, the TCAP, the sample for the Year 4 impact evaluation of one year of exposure to READ 180 included 211 treatment and 234 control students who received the intervention in grade 6. On the ITBS Total Reading Score, the analysis of the impact of two years of exposure to READ 180 included 171 treatment and 141 control students in grade 7. (Because the TCAP changed form between Years 3 and 4, there are no impact analyses that combined the Year 4 data with previous years.) The sample for the ITBS

Comprehension Score included 556 treatment students and 739 control students. The sample for the ITBS Vocabulary Score included 562 treatment students and 752 control students.

The Year 4 evaluation findings, which report on the first four years of implementation, are based on a sample of students large enough to detect an impact (in standard deviation units) of the intervention on reading achievement equivalent to:

- .11 on the ITBS Total Reading Scores, .12 on the ITBS Comprehension score, and .12 on the ITBS Vocabulary Score for students with one year of exposure to the interventions (in grades 6-8);
- .26 on the TCAP for students with one year of exposure to the intervention (in grade 6);²
- .17 on the ITBS Total Reading Scores, .18 on the ITBS Comprehension score and .17 on the ITBS Vocabulary Score for students with two years of exposure to the interventions (in grades 7-8); and
- .27 on the TCAP for students with two years of exposure to the intervention (in grade 7).

Key Measures of Student Reading Outcomes (Source):

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

Tennessee Comprehensive Assessment Program (TCAP) (State Test)

Implementation Study:

Research Design and Methods. The fidelity of implementation of the targeted intervention model was studied in the eight treatment schools for the first four years of implementation but not in the fifth and final year. In each of the first four years, the study assessed the fidelity of implementation of the *professional development model* and the *classroom instruction model*. For each model, fidelity was defined as the extent to which the actual level of implementation measured during the study was consistent with the model as planned. Fidelity of implementation of the professional development model was rated as adequate or not, based on the level of participation of teachers in the READ 180 training activities that were offered.³ Fidelity of implementation of the *classroom model* was rated as adequate or not, based on the extent to which the classroom instruction matched the definition of the key components of the model that were identified by the developer.⁴

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 percent power, and with an alpha level of .05, and accounts for clustering and for the inclusion of the covariates in the model.

³ The definition of fidelity of implementation of the professional development model for the READ 180 targeted intervention can be found on the website for the U.S. Department of Education, Office of Elementary and Secondary Education in the cross-site summary tables for the 2006-2011 cohort (*Summary of 2006 Striving Readers Projects. Implementation and Evaluation of Targeted Interventions for Struggling readers and Whole School Interventions for All Readers: Years 1 – 5*), Table 3.

⁴ The definition of fidelity of implementation of the classroom model for the READ 180 targeted intervention can be found on the website for the U.S. Department of Education, Office of Elementary and Secondary Education in the cross-site summary tables for the 2006-2011 cohort (*Summary of 2006 Striving Readers Projects. Implementation and Evaluation of Targeted Interventions for Struggling readers and Whole School Interventions for All Readers: Years 1 – 5*), Table 4.

Whole School Intervention

Research Questions:

1. What are the separate and combined effects of MCLA and READ 180 on reading achievement levels?
2. What is the fidelity of implementation of the whole school model in each year of the study?

Impact Study:

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 were taught by teachers trained in the MCLA model. Within any given MCLA school, some of the students were randomized to the READ 180 group and therefore received both treatments while the other students only received the whole-school intervention. Conversely, in non-MCLA schools, some of the students only received the READ 180 treatment while the other students received neither treatment. At the end of Year 2, a cluster randomized control trial analysis was used to compare pre-program student achievement scores with post-program student achievement scores in the two sets of schools. Two-level hierarchical linear models (students nested within schools) were fit to assess the impact of MCLA on student outcomes. A cross-level interaction term was included to estimate the differential effect of MCLA on student outcomes with and without READ 180. A regression-adjusted comparison of mean outcomes was reported.

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 two years of the program. In the first two years of the program, the whole school intervention was delivered to all students in the four treatment middle schools, which involved a sample of approximately 2,400 students in grades 6–8. The sample in the four control schools was comparable, with a total estimated enrollment of total of 2,500 students in grades 6–8. Starting in Year 3, all eight middle schools implemented the whole school intervention to a sample of approximately 5,000 students. Because all schools implemented the intervention in Years 3 and 4, the impact analyses are based only on the first two years of implementation. Impacts of the whole school intervention were not studied in Years 4 or 5.

For one of the student reading measures, the ITBS, the sample for the impact evaluation of one year of exposure to READ 180 included 698 treatment students in grades 6–8 and 1,042 control students, across eight schools. The analysis of the impact of two years of exposure to READ 180 included 414 treatment students and 620 control students in grades 7 and 8.

For the second measure of student reading outcomes, the TCAP, the sample for the impact evaluation of one year of exposure to READ 180 included 698 treatment students in grades 6–8 and 1,042 control students, across eight schools. The analysis of the impact of two years of exposure to READ 180 included 414 treatment students and 620 control students in grades 7 and 8.

The Year 2 evaluation findings, which report on the first two years of implementation, are based on a sample of students large enough to detect an impact (in standard deviation units) of the intervention on reading achievement equivalent to:

- .40 on the ITBS and .40 on the TCAP for students with one year of exposure to the intervention (in grades 6-8),⁵ and
- .23 on the ITBS and .43 on the TCAP for students with two years of exposure to the intervention (in grades 7-8).

Key Measures of Student Reading Outcomes (Source):

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

Tennessee Comprehensive Assessment Program (TCAP) (State Test)

Implementation Study:

Research Design and Methods. The fidelity of implementation of the whole school intervention model was studied in the four treatment schools for the first two years of implementation and in all eight study schools in years three and four. Implementation was not studied in the fifth year of the project. In each of the first four years, the study assessed the fidelity of implementation of the *professional development model* and the *classroom instruction model*. For each model, fidelity was defined as the extent to which the actual level of implementation measured during the study was consistent with the model as planned. Fidelity of implementation of the professional development model was rated as adequate or not, based on the level of participation of teachers in the training activities that were offered by the district.⁶ Fidelity of implementation of the *classroom model* was rated as adequate or not, based on the extent to which the classroom instruction matched the definition of the key components of the model that were identified by the district.⁷

Evaluation Findings: Targeted Intervention _____

Level of Implementation of the Targeted Intervention Model

In terms of fidelity of implementation of the *professional development model*, in Year 1, the majority of teachers (68 percent) participated in the READ 180 professional development activities at an adequate level. The level of participation in professional development increased slightly in the second year of implementation, with 74 percent of teachers participating at an

⁵ 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 percent power, and with an alpha level of .05, and accounts for clustering and for the inclusion of the covariates in the model.

⁶ The definition of fidelity of implementation of the professional development model for the MCLA whole school intervention can be found on the website for the U.S. Department of Education, Office of Elementary and Secondary Education in the cross-site summary tables for the 2006-2011 cohort (*Summary of 2006 Striving Readers Projects. Implementation and Evaluation of Targeted Interventions for Struggling readers and Whole School Interventions for All Readers: Years 1 – 5*), Table 14.

⁷ The definition of fidelity of implementation of the classroom model for the MCLA whole school intervention can be found on the website for the U.S. Department of Education, Office of Elementary and Secondary Education in the cross-site summary tables for the 2006-2011 cohort (*Summary of 2006 Striving Readers Projects. Implementation and Evaluation of Targeted Interventions for Struggling readers and Whole School Interventions for All Readers: Years 1 – 5*), Table 15.

adequate level. The level of participation continued to increase in the third and fourth years of implementation, with 79 percent and 88 percent of teachers, respectively, participating at an adequate level.

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, teacher surveys and ratings from the SAM data management system. According to classroom observations, in Year 1, 63 percent of teachers implemented the model at an adequate level, 78 percent in Year 2, 79 percent in Year 3, and 88 percent in Year 4. According to teacher surveys, 79 percent of teachers implemented the model at an adequate level in Year 1, and 84 percent in Years 2 and 3. (Teacher surveys were not administered in Year 4.) According to data from the data management system, 42 percent of teachers implemented the model at an adequate level in Year 1, 53 percent in Year 2, 58 percent in Year 3, and 69 percent in Year 4. The intervention was not implemented in Year 5.

Impact of the Targeted Intervention

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 -.04 on the ITBS Total Reading Score, -.01 on the ITBS Comprehension Score, -.02 on the ITBS Vocabulary Score, and -.07 on the TCAP.

There were no statistically significant impacts of two years of exposure to READ 180 on the reading achievement of struggling readers who entered the sample in grades 6 or 7, with effect sizes of .02 on the ITBS Total Reading Score, -.01 on the ITBS Comprehension Score, .06 on the ITBS Vocabulary Score, and -.02 on the TCAP.

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

Strengths:

- The analyses of the impact of one and two years of READ 180 on reading achievement (ITBS and TCAP) meet What Works Clearinghouse (WWC) evidence standards. Analyses that meet WWC evidence standards make us the most confident that the estimated effect is due solely to the intervention alone, and not to the many other factors that are at play in schools and in the lives of students, such as teachers, school, and family.
- 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 other factors (e.g., other reading programs or district policies) were implemented in ways that would have undermined the evaluators’ ability to attribute impacts to READ 180.
- The evaluation employed two reading tests as outcome measures. The ITBS assesses vocabulary, word analysis, listening and comprehension. The 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 had more experience taking the tests than did the control group students, or that the tests measured skills specific to the intervention, both of which could have undermined confidence in the impact estimates.
- 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 models to increase the precision of the impact estimates.
- While some students were unable to participate in follow-up data collection, the level of attrition did not differ substantially across the treatment and control groups. This suggested that the integrity of the original randomized design was preserved, and that treatment and control groups continued to be statistically equivalent on all measured and unmeasured characteristics at follow-up.
 - 27.4 percent of grade 6-8 students who received one year of READ 180 were unable to participate in follow-up data collection on the ITBS. The level of attrition did not differ substantially across the treatment and control groups; the differential attrition rate was 0.7 percent. This amount of attrition is within the acceptable range established by WWC standards.⁸
 - 20.5 percent of grade 7-8 students who received two years of READ 180 were unable to participate in follow-up data collection on the ITBS. The level of attrition did not differ substantially across the treatment and control groups; differential attrition rate was 0.1 percent. This amount of attrition is within the acceptable range established by WWC standards.³
 - 10.5 percent of grade 6 students who received one year of READ 180 in Year 4 were unable to participate in follow-up data collection on the TCAP. The level of attrition did not differ substantially across the treatment and control groups; the differential attrition rate was 1.7 percent. This amount of attrition is within the acceptable range established by WWC standards.³
 - 0.0 percent of grade 7 students who began the study in Year 3 and received two years of READ 180 were unable to participate in follow-up data collection on the TCAP. The level of attrition did not differ substantially across the treatment and control groups; differential attrition rate was 0.0 percent. This amount of attrition is within the acceptable range established by WWC standards.³

Weaknesses:

- None.

⁸ For more information, please see Appendix A-Assessing Attrition Bias, of the WWC Procedures and Standards Handbook, available at: <http://ies.ed.gov/ncee/wwc/help/idocviewer/Doc.aspx?docId=19&tocId=7>.

Evaluation Findings: Whole School Intervention _____

Level of Implementation of the Whole School Intervention Model

In terms of fidelity of implementation of the *professional development model*, in all four years, 100 percent of teachers participated at an adequate level. In Year 1, 62 percent of teachers participated in the PD at a high level. In Year 2, 66 percent of teachers participated at a high level. In Year 3, 86 percent of teachers participated at a high level and in Year 4, 71 percent of teachers participated at a high level.

In Years 2, 3 and 4, fidelity of implementation was also calculated for *principal involvement in PD*, and 100 percent of schools were given a principal involvement score indicating a high level of fidelity of implementation. Fidelity of implementation of “materials use” was assessed starting in Year 2. In Years 2 and 3, no schools were rated as having either high or medium level of materials use. In Year 4, 50 percent of schools were given a medium rating on materials use. Starting in Year 3, schools were given a coach-assigned rating on classroom implementation. In Year 3, 25 percent of teachers were rated as having high implementation and 75 percent were rated as having medium implementation. In Year 4, none of the schools were given a coach-assigned rating indicating a high or medium level of classroom implementation. The intervention was not implemented in Year 5.

Impact of the Whole School Intervention Model

Findings on the impacts of the whole school intervention are based on only the first two years of implementation. At the end of Year 3, there were no statistically significant impacts of the whole school intervention on student reading outcomes after one or two years of the intervention. The effect sizes were .01 and -.08 respectively on the ITBS for one and two years of exposure, and -.18 and -.34 respectively on the TCAP for one and two years of exposure.

Summary of the Strengths and Weaknesses of the Impact Evaluation of the Whole School Intervention

Strengths:

- Randomization was used to construct a control group of schools. Randomization ensures that the control schools are similar to the Striving Readers schools on both observed and unobserved characteristics prior to the implementation of the intervention.
- 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 MCLA professional development activities.
- The evaluation employed 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 measure skills specific to the intervention, both of which could undermine confidence in the impact estimates.

- The full sample of eight schools was included in the analyses of impacts. Within schools, few students were unable to participate in either the one- or two-year follow-up data collections, suggesting that the integrity of the original randomized design was preserved, and that treatment and control groups continue to be equivalent on all measured and unmeasured characteristics at the one- and two-year follow-up time points.
- When estimating impacts, appropriate analytic steps were taken to account for the clustering of students within schools.

Weaknesses:

- None.

Sustainability of the Striving Readers Interventions _____

In summer of 2011, Striving Readers grantees were interviewed about their plans for implementing the targeted and whole school interventions in the 2011-12 school year, after the grant period had ended. The responses are summarized here.

Targeted Intervention

- The Memphis Public Schools decided not to continue implementing READ 180 after the end of the Striving Readers grant period, for budgetary reasons.

Whole School Intervention

- The Memphis Public Schools decided not to continue implementing the Memphis Content Literacy Academy (MCLA) professional development model after the end of the Striving Readers grant period, for budgetary reasons.

Final Summary of 2006 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 for the Study

Nineteen middle schools participated in the Newark Striving Readers Project. These schools were selected because at the outset of the grant 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. At the onset of the grant, in these schools, 58 percent of students were African American, 41 percent were Hispanic, 88 percent were identified as low-income, and 7 percent were identified as being English Language Learners (ELL). The Striving Readers project was funded for five years, from 2006-07 (Year 1) through 2010-11 (Year 5).

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. READ 180 offers rSkills Tests that align with the rBook curriculum and instruction. In addition, diagnostic testing using the Scholastic Reading Inventory (SRI) is conducted three times a year. READ 180 also provides a data management system (Scholastic Achievement Manager) for tracking student attendance, grades, and test scores.¹

Professional Development Model as Planned: In the first year of the study, teachers were offered an initial two-day training on the model with a follow-up session on use of data and an individual conference, all provided by the model developer. These training modalities comprised about 18 hours of professional development. In the first year of the study, teachers also received classroom visits from a READ 180 coach on an as-needed basis. In the second year of the study, teachers (those who were new to READ 180 and returning teachers) were offered a one-day

¹ For more information on READ 180, please see the READ 180 Enterprise Edition Intervention Profile by Abt Associates, available at <http://www2.ed.gov/programs/strivingreaders/performance.html>.

initial training and a follow-up session. In Years 2 through 5, professional development was offered only to new teachers and consisted of the one day initial training only. In all five years of implementation, teachers were offered in-class technical assistance from the district Resource Teacher Coordinator as needed.

Context for Implementation: The READ 180 program was implemented in ten middle schools, as a replacement of the district's regular core language arts curriculum. Students in grades 6-8 were eligible for READ 180 if they scored at least one 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 could receive the interventions for up to three years (grades 6-8). All special education students who were struggling readers were eligible for the interventions. In the first year of the implementation, approximately 700 students in grades 6-8 were assigned to READ 180 classes in the ten 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 650 including new 6th graders and students in grades 7 and 8 who were eligible to continue in READ 180 for a second year. In the third year of the intervention, approximately 640 students were served, including a new cohort of 6th graders. In the fourth year of the implementation, the number of students served by the intervention was approximately 575, including a new cohort of 6th graders. In Year 5, the targeted intervention was implemented only with students in grade 8 who were eligible to continue in READ 180 for a third year. No new students were added to the sample in Year 5. Across the five years of the study, READ 180 was implemented for four years for 6th-7th grade students and for five years for 8th grade students in their third year of exposure to the intervention.

Whole School Intervention

Classroom Model as Planned: The whole school intervention combined two professional development programs on literacy instruction from two providers, New Jersey City University (NJCU) and the National Urban Alliance (NUA). NJCU provides 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 professional development for other content teachers, to help them conduct instruction using 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 were offered initial Summer Institutes lasting either three or four half-days, with the training conducted by NUA or NCJU, respectively. During Year 1 of implementation, language arts teachers also had three follow-up training sessions with NCJU trainers during the year and NCJU coaches visited each of the 19 schools five times a year, for observation and discussion with teachers. Other content area teachers had two follow-up training sessions with NUA during the year, and NUA coaches visited each school 15 times to observe and work with teachers. District resource teacher coordinators were also available to visit schools to provide technical assistance on the whole school model on an as-needed basis. In the second year of the implementation, the professional development model delivered by NCJU to the language arts teachers increased in intensity, with the addition of three follow-up training

sessions. NCJU coaches increased their visits to the language arts teachers to ten visits in each school. In the third year, the number of follow-up sessions offered by NJCU dropped to two, but the structure of the Summer Institutes remained the same for both NJCU and NUA. The school visits remained at the same level as in Year 2. In the fourth year of the implementation, the professional development offered by both NJCU and NUA decreased to a one-day group training for both new and returning teachers, while the number of school visits was the same as in Year 2. No additional group training was offered to teachers in Year 5; professional development for teachers in Year 5 only consisted of in-class support from coaches, with eight visits to each school by NCJU and NUA coaches.

Context for Implementation: All teachers of language arts, mathematics, science, social studies, and special education in the 19 participating middle schools were trained on the whole school interventions. All students in the participating schools were taught by teachers who were part of the model. In a single school year, this involved between 2,400 and 3,600 students in grades 6-8 across the 19 schools, depending on the year of implementation. The whole school intervention was implemented for a total of five years.

Evaluation Designs

Targeted Intervention

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?
4. What is the fidelity of implementation of READ 180 in each year of the study?

Impact Study:

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 providing 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 was assessed using multilevel models to account for the nesting of students within schools. Analyses were run to disaggregate effects by grade level, gender, ELL, and special education.

Control Condition. Students in schools randomized to the control condition continued 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. The impact analysis of one year of exposure to READ 180 was conducted on a sample of 6th, 7th, and 8th graders who were assigned in Year 1 and the new cohorts of 6th graders added in Years 2, 3 and 4. In Year 4, the sample included 1,350 treatment students in ten schools and 1,205 control students in nine schools. The analysis of the impact of

two years of READ 180 was conducted on a sample of 814 treatment students in ten schools and 706 control students in nine schools, which included 7th graders from Years 2, 3 and 4 and 8th graders from Year 2. The analysis of the impact of three years of READ 180 was conducted on a sample of 552 8th grade treatment students from Years 3, 4 and 5 in ten schools and 471 8th grade control students from Years 3, 4 and 5 in nine schools.

Findings on the impact of one or two years of exposure to READ 180 include data from the first four years of implementation. These analyses are based on a sample of students large enough to detect an impact (in standard deviation units) of the intervention on student outcomes equivalent to:

- .12, .11, and .08 on the standardized test (SAT 10) of vocabulary, comprehension, and language arts respectively, for students in grades 6-8 who received one year of READ 180;²
- .11, .14, and .21 on the standardized test (SAT 10) of vocabulary, comprehension, and language arts respectively, for students in grades 7-8 who received two years of READ 180;
- .01 on the attendance measure, for students in grades 6-8 who received one year of READ 180;
- .01 on the attendance measure, for students in grades 7-8 who received two years of READ 180.

Findings on the impact of three years of exposure to READ 180 are based on the entire sample of 8th grade students who, across the study period, received three years of READ 180 (in Years 3, 4 and 5). The final sample of students was large enough to detect an impact (in standard deviation units) of the intervention on student outcomes equivalent to:

- .21, .18, and .19 on the standardized test (SAT 10) of vocabulary, comprehension, and language arts respectively, for students in grade 8 who received three years of READ 180; and
- .02 on the attendance measure, for students in grade 8 who received three years of READ 180.

Key Measures of Student Reading Outcomes (Source):

Stanford Achievement Test-10 (Vocabulary and Reading Comprehension subtests and Overall Language score) (External Test Publisher)
Attendance (School Records)

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 percent power, and with an alpha level of .05, and accounts for clustering and for the inclusion of the covariates in the model.

Implementation Study:

Research Design and Methods. The fidelity of implementation of the targeted intervention model was studied in the ten treatment schools for the first four years of implementation but not in the fifth and final year. In each of the first four years, the study assessed the fidelity of implementation of the *professional development model* and the *classroom instruction model*. For each model, fidelity was defined as the extent to which the actual level of implementation measured during the study was consistent with the model as planned. Fidelity of implementation of the professional development model was rated as high, moderate, or low, based on the level of participation of teachers in the READ 180 training activities that were offered.³ Fidelity of implementation of the *classroom model* was rated as high, moderate or low, based on the extent to which the classroom instruction matched the definition of the key components of the model that were identified by the developer.⁴

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?
4. What is the fidelity of implementation of the ongoing literacy development program in each year of the study?

Impact Study:

Research Design and Methods. The 19 schools that served as treatment and control schools for the evaluation of the targeted intervention, Read 180, were the treatment schools for the evaluation of the whole school model. An interrupted time series design with 19 treatment schools, which received the whole school intervention, and 19 comparison schools was used to compare treatment and comparison group student reading proficiency scores on the New Jersey state proficiency test, controlling for pre-program school-level student reading proficiency scores. (The sample did not include all 19 treatment schools and 19 comparison schools each year because of missing data.) Impacts were estimated at one, two, and three years post-treatment, with one year of baseline data.

³ The definition of fidelity of implementation of the READ 180 professional development model for the targeted intervention can be found on the website for the U.S. Department of Education, Office of Elementary and Secondary Education in the cross-site summary tables for the 2006-2011 cohort (*Summary of 2006 Striving Readers Projects. Implementation and Evaluation of Targeted Interventions for Struggling readers and Whole School Interventions for All Readers: Years 1 – 5*), Table 3.

⁴ The definition of fidelity of implementation of the READ 180 classroom model for the targeted intervention can be found on the website for the U.S. Department of Education, Office of Elementary and Secondary Education in the cross-site summary tables for the 2006-2011 cohort (*Summary of 2006 Striving Readers Projects. Implementation and Evaluation of Targeted Interventions for Struggling readers and Whole School Interventions for All Readers: Years 1 – 5*), Table 4.

Comparison Group. The remaining 19 middle schools in the district were considered comparison schools, although the number of schools included in the analyses each year varied depending on whether schools had the data required to be included in the impact analysis.

Sample Size. The sample for the impact analysis included all of the students in the 38 treatment and control schools. The sample consisted of students in grades 6-8: 24 schools with grade 6, 21 schools with grade 7, and 20 schools with grade 8.

Key Measures of Student Reading Outcomes (Source):

New Jersey State Language Arts assessment (State Test)

Implementation Study:

Research Design and Methods. The fidelity of implementation of the whole school intervention model was studied in the 19 treatment schools for the first four years of implementation but not in the fifth and final year. In each of the first four years, the study assessed the fidelity of implementation of the *professional development model* and the *classroom instruction* model. For each model, fidelity was defined as the extent to which the actual level of implementation measured during the study was consistent with the model as planned. Fidelity of implementation of the professional development model was rated as high, moderate, or low, based on the level of participation of teachers in the training activities that were offered by the developers and the district.⁵ Fidelity of implementation of the *classroom model* was rated as high, moderate or low, based on the extent to which the classroom instruction matched the definition of the key components of the model that were identified by the developers and the district.⁶

Evaluation Findings: Targeted Intervention _____

Level 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 percent) or fully (56 percent). The level of participation in professional development declined in Year 2 of implementation, with 24 percent of teachers participating at an adequate level and 8 percent participating fully. In Year 3 and Year 4, only new teachers were offered training, though there were no new teachers to be trained in Year 3. In Year 4, the new teachers who were trained participated at either an adequate level (40 percent) or

⁵ The definition of fidelity of implementation of the professional development model for the whole school intervention model can be found on the website for the U.S. Department of Education, Office of Elementary and Secondary Education in the cross-site summary tables for the 2006-2011 cohort (*Summary of 2006 Striving Readers Projects. Implementation and Evaluation of Targeted Interventions for Struggling readers and Whole School Interventions for All Readers: Years 1 – 5*), Table 14.

⁶ The definition of fidelity of implementation of the classroom model for the whole school intervention model can be found on the website for the U.S. Department of Education, Office of Elementary and Secondary Education in the cross-site summary tables for the 2006-2011 cohort (*Summary of 2006 Striving Readers Projects. Implementation and Evaluation of Targeted Interventions for Struggling readers and Whole School Interventions for All Readers: Years 1 – 5*), Table 15.

a full level (60 percent). Implementation of the professional development model was not studied in Year 5.

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. Classrooms were rated on their use of student formative assessments and student time on the READ 180 instructional software. In all four years of READ 180, the student assessments were implemented in line with the READ 180 guidelines in nearly all of the classrooms (over 90 percent each year). In Year 1, in early all of the classrooms (91 percent), students spent an adequate amount of time using the READ 180 instructional software, compared to the program guidelines. In Year 2, this proportion dropped to fewer than 10 percent of the classrooms. Although this proportion rose in Year 3 to 50 percent of the classrooms, in Year 4, students in only 10 percent of classrooms spent an adequate amount of time using the instructional software. Implementation of the classroom model was not studied in Year 5.

Impact of the Targeted Intervention Model

For treatment students who had one year of READ 180, there were no significant effects on the three subtests of the Stanford Achievement Test. The effect sizes for the three subtests – vocabulary, comprehension, and language arts – were .04, .04, and .03, respectively.

For two years of exposure to READ 180, there was a significant effect on the comprehension subtest of the Stanford Achievement Test, where the effect size was .14. No significant effects were found on the other two subtests (vocabulary and language arts), where the effect sizes were .06 and .08, respectively.

For three years of exposure to READ 180, there were no significant effects on the three subtests of the Stanford Achievement Test. The effect sizes for the vocabulary, comprehension, and language arts subtests were .05, .06, and .07, respectively.

For attendance, there were no significant effects. Effect sizes were .00 for one and two years of exposure to READ 180 and -.01 for three years of exposure to READ 180.

Strengths and Weaknesses of the Impact Evaluation of the Targeted Intervention

Strengths:

- The analyses of the impacts of one, two, and three years of READ 180 on reading achievement (SAT 10) meet What Works Clearinghouse (WWC) evidence standards. Analyses that meet WWC evidence standards make us the most confident that the estimated effect is due solely to the intervention alone, and not to the many other factors that are at play in schools and in the lives of students, such as teachers, school, and family. Abt did not examine whether the analysis of the impact of READ 180 on attendance meets WWC standards because the review was restricted to measures of reading achievement.

- 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)).
- School-level 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.
- 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 models to increase the precision of the impact estimates.
- Assessment of student outcomes:
 - 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 in schools assigned to the treatment group had more experience taking these tests than do the students in schools assigned to the control group, or that the test measures skills specific to the intervention, both of which could undermine confidence in the impact estimates.
 - The measure of student attendance was extracted from district student records. Since it was measured the same way for all students, there is no reason to believe that the measurement undermines confidence in the impact estimates.
- All schools were able to participate in follow-up data collection in Years 4 and 5. While some students within schools were unable to participate in follow-up data collection, the level of attrition did not differ substantially across the treatment and control groups. This suggests that the integrity of the original randomized design was preserved, and that the treatment and control groups continue to be equivalent on all measured and unmeasured characteristics at follow-up.
 - Some students (6.8 percent of grade 6-8 students) were unable to participate in follow-up data collection on the SAT 10 after one year of treatment; the levels of attrition did not differ substantially across the treatment and control groups (differential attrition rate was 1.1 percent). This amount of attrition is within the acceptable range established by WWC standards.⁷
 - Some students (16.6 percent of grade 7-8 students) were unable to participate in follow-up data collection on the SAT 10 after two years of treatment; the levels of attrition did not differ substantially across the treatment and control groups (differential attrition rate was 3.7 percent). This amount of attrition is within the acceptable range established by WWC standards.

⁷ For more information, please see Appendix A-Assessing Attrition Bias, of the WWC Procedures and Standards Handbook, available at: <http://ies.ed.gov/ncee/wwc/help/idocviewer/Doc.aspx?docId=19&tocId=7>.

- Some students (12 percent of grade 8 students) were unable to participate in follow-up data collection on the SAT 10 after three years of treatment; the levels of attrition did not differ substantially across the treatment and control groups (differential attrition rate was 1 percent). This amount of attrition is within the acceptable range established by WWC standards.
- Despite random assignment and low attrition, differences in treatment and control schools in eligibility for free and reduced priced lunch were noted in Years 1 and 3. The effects of these differences are mitigated by the inclusion of this measure in the statistical models estimating the impact of the program.

Weaknesses:

- None.

Evaluation Findings: Whole School Intervention _____

Level of Implementation of the Whole School Intervention Model

In terms of fidelity of implementation of the *professional development model*, in Year 1 of implementation, across the two models (NUA and NJCU), teachers participated at a moderate-to-high level in the whole school professional development in 42 percent of the schools. In Year 2, the percentage of schools in which teachers achieved moderate-to-high participation dropped to 16 percent. In Year 3, five percent of schools achieved high levels of teacher participation in professional development and 47 percent of schools achieved moderate-to-high levels of participation. In Year 4, for either model, there were no teachers who participated at a high level, while 21 percent and 37 percent of teachers participated at an adequate level in NJCU and NUA’s professional development activities respectively. No additional professional development was offered to teachers in Year 5.

With respect to the implementation of *in-class support or coaching*, in the first year, in 68 percent of schools teachers received a high level of coaching support and in another 32 percent of schools teachers received a moderate-to-high level of coaching support. These percentages increased over the next two years of the study. In the second year, in 89 percent of schools, teachers received a high level of coaching support and in all of the remaining schools teachers received a moderate-to-high level of coaching support. In the third and fourth years, teachers received a high level of coaching support in 100 percent of the schools. Fidelity of implementation was not assessed in Year 5.

Impact of the Whole School Intervention Model

There were no statistically significant impacts of the whole school intervention on student reading outcomes after one, two, or three years of the intervention. The non-significant impacts after all years were .20 for grades 6-8.⁸

Summary of the Strengths and Weaknesses of the Impact Evaluation of the Whole School Intervention

Strengths:

- A comparison group of schools was constructed by selecting all other schools in the same districts as the Striving Readers schools that serve students in at least one of the middle grades (6, 7 or 8). This method of selecting a comparison group attempted to establish a group of schools that is similar to the Striving Reader schools in terms of student achievement and demographic characteristics. Nevertheless, we cannot assume that students in treatment and comparison schools were alike in all characteristics, observed and unobserved, that could have affected their reading achievement.
- The achievement levels of students in Striving Readers schools and the comparison schools, as measured by the Language Arts Literacy (LAL) section of the NJ ASK, were statistically equivalent (at each grade level, 6, 7 and 8) prior to the implementation of the Striving Readers Program; however, the sample of schools in the baseline equivalence test was smaller than the sample of schools included in the impact. This is consistent with WWC evidence standards, with reservations.
- The reading test used as an outcome measure, the NJ ASK-LAL, assesses language arts literacy, including reading and writing skills, and was developed by the state. There is no reason to believe that students in schools assigned to the treatment group had more experience taking these tests than do the students in schools assigned to the control group, or that the test measured skills specific to the intervention, both of which could undermine confidence in the impact estimates.

Weaknesses:

- There is no evidence that there were 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 whole school intervention. However, they may have been pre-existing differences between the two groups that were unobserved and might be responsible for any observed impacts. Therefore, we were unable to attribute observed impacts to the whole school intervention.
- The impacts of the whole school intervention for struggling readers cannot be estimated independently from the targeted intervention because some students in the 19 treatment schools also received READ 180 instruction.

⁸ The effect size reported here was calculated relative to the standard deviation of schools means. This effect size is on a different scale from and is not comparable to the effect sizes reported elsewhere in the project profiles and summary tables, where the effect sizes were calculated relative to the standard deviation of student test scores.

Sustainability of the Striving Readers Interventions _____

In summer of 2011, Striving Readers grantees were interviewed about their plans for implementing the targeted and whole school interventions in the 2011-12 school year, after the grant period had ended. The responses are summarized here.

Targeted Intervention

- Since Newark has site-level management, the decision about whether or not to continue implementing READ 180 was left to the discretion of the individual school principals.
- 90 percent of the original Striving Readers treatment schools decided to implement READ 180 in the school year following the end of the study.
- Two-thirds of the original Striving Readers control schools decided to implement READ 180 in the school year following the end of the study.
- Schools vary in terms of whether they used READ 180 as a core language arts curriculum or as a supplement to a different core curriculum.
- Reasons for continuing to implement READ 180 were its alignment with district and school objectives and the positive response of the teachers to the curriculum.
- The district ended its support for literacy coaches for READ 180 teachers, and the district did not purchase continuing professional development from Scholastic. The district used funds from a technology grant to help support the hardware needs for READ 180
- Principals expressed a desire to upgrade to the newest version of READ 180 (*Next Generation*), because this version includes a writing component, which is a recognized gap in the *Enterprise* version that is being used in Newark.

Whole School Intervention

- The district decided not to implement either of the whole school interventions because they are perceived as being ineffective at improving student outcomes.

Final Summary of 2006 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 for the Study

The ODYS system included juvenile correction facilities serving youths aged 14-21. The youths who had not yet attained a high school diploma or a GED were required to be enrolled in the high school located within their youth detention facility. Of the 1,628 students enrolled in the middle of May 2006, seven percent were female, 48 percent were African American, and 46 percent were white. The average length of stay for a student was about 10.5 months, although this varied substantially across students. Students were assigned to a facility based on gender, type of offense, and availability of space. Upon entry into ODYS, all students were processed through a common reception center located at one high school, and then assigned to another facility. Seven facilities existed at the start of the grant period, and all were part of the Striving Readers project. Six of the facilities were designated as male facilities and one as a female facility. In the third year of the project, one of the all-male facilities closed and individuals (staff and youth) were reassigned; in the fourth year of the project, another facility was closed and staff and youth reassigned. The Striving Readers project in ODYS was funded for five years, from 2006-07 (Year 1) through 2010-11 (Year 5).

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.¹

Professional Development Model as Planned: In the first year of implementation, teachers were offered an initial two-day training on the model and semi-annual follow up training sessions, all provided by the model developer, for a total of 15 hours. In Years 2-4,

¹ For more information on READ 180, please see the READ 180 Enterprise Edition Intervention Profile by Abt Associates, available at <http://www2.ed.gov/programs/strivingreaders/performance.html>.

teachers continued to be offered a two-day training but no follow-up sessions. In Year 5, teachers were offered a single day of training. In Years 1 through 5, teachers were also offered semi-annual classroom visits by the model developer. Ongoing classroom support was provided as needed by the on-site literacy coach.

Context for Implementation: The READ 180 program was 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 participating ODYS facilities who scored at a below-grade reading level but above a “below basic” level, as measured by the Scholastic Reading Inventory (SRI), were eligible for the targeted intervention. All special education students who were struggling readers were eligible for the intervention. Eligible students could receive the intervention for the duration of their stay in the correctional facility (an average of ten months). Over five years, 1,058 high school-aged students were randomized to the intervention. The targeted intervention was 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 were implemented as the whole school interventions in Year 1. 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 to affect adolescent literacy: orthographic knowledge, vocabulary knowledge, fluency, and comprehension. The Writing Academy is focused specifically on Ohio’s Writing Academic Content Standards, and was designed for teachers to understand the relationship between writing and learning; to learn strategies for before, during, and after lessons; and to learn to analyze rubrics and other methods of writing assessment. 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 Years 2 through 5, 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: In the first year of implementation only, teachers were offered 28 hours of training on SIRI-AL and 18 hours at the Writing Academy, both provided by local literacy experts. In Years 2-5 of implementation, training modules on HYS were offered by the literacy coaches, with the number of hours of professional development dependent upon how many modules teachers were trained on. In all five years, literacy coaches were also available on-site to provide technical assistance on the whole school model on an as-needed basis.

Context for Implementation: All students in the facilities were included in the evaluation of the whole school intervention. The intervention served between 1,300 and 3,300 students in a single school year, depending on the implementation year.

Evaluation Designs

Targeted Intervention

Research Questions:

1. What is the impact of READ 180 on the reading achievement of struggling readers after one year of intended treatment (four 10-week educational blocks)?
2. What is the impact of READ 180 on the reading achievement of struggling readers at the end of their participation in the treatment (which varied depending on their stay in the youth facility)?
3. What is the fidelity of implementation of READ 180 in the treatment classrooms?

Impact Study:

Research Design and Methods. Incoming students scoring below grade level but above “below basic,” as measured by the SRI, were randomly assigned to either the READ 180 class or to a control group. Students maintained their assignment until released from the facility. The impact of READ 180 on student outcomes was modeled using multilevel models. Models were also run to disaggregate effects by gender, as well as other demographic subgroups. Impacts were estimated for all students tested at the end of one year of participation; impacts were also estimated for students at the end of their participation in READ 180, even if their stay in the youth facility was shorter or longer than one year.

Control Condition. Students randomized to the control group received their regular English Language Arts curriculum and then transferred to another course (i.e., technology education, mathematics), while treatment students received the READ 180 instruction as their ELA curriculum and during a second course period.

Sample Size. Across five years of implementation, the impact analysis on the SRI was conducted on 677 treatment students and 568 control students in grades 9-12 across the sample of juvenile correction facilities. The impact analysis on the CAT, after one year of intervention, was conducted on 133 treatment students and 110 control students in grades 9-12. The impact of the CAT at the end of the students’ participation in the intervention was conducted on 504 treatment students and 430 control students in grades 9-12.

The Year 5 evaluation report, which includes findings across the five 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:

- .12 on the SRI for students in grades 9-12, and
- .28 on the CAT for grades 9-12 at the end of one year of participation,² and
- .16 on the CAT at the end of students’ participation.

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 percent power, and with an alpha level of .05, and accounts for clustering and for the inclusion of the covariates in the model.

Key Measures of Student Reading Outcomes (Source):

Scholastic Reading Inventory (SRI) Assessment (Published by Scholastic as part of READ 180 program)

California Assessment Test (CAT) (State Test)

Implementation Study:

Research Design and Methods. The fidelity of implementation of the targeted intervention model was studied in all of the treatment facilities for the first four years of implementation but not in the fifth and final year. In each of the first four years, the study assessed the fidelity of implementation of the *professional development model* and the *classroom instruction model*. For each model, fidelity was defined as the extent to which the actual level of implementation measured during the study was consistent with the model as planned. Fidelity of implementation of the professional development model was rated as high, moderate, or low, based on the level of participation of teachers in the READ 180 training activities that were offered.³ Fidelity of implementation of the *classroom model* was also rated as high, moderate, or low, based on the extent to which the classroom instruction matched the definition of the key components of the model that were identified by the developer.⁴

Whole School Intervention

Impact Study:

Research Design and Methods. There was no evaluation of the impact of the whole school intervention on student reading outcomes because of major shifts in the characteristics of the student population over the course of the study that occurred largely because of budget constraints in the state. These changes in the composition of the population of students undermined the comparability of the facilities over time, making it difficult to attribute any observed changes to the whole school intervention.

Implementation Study:

Research Design and Methods. The fidelity of implementation of the whole school intervention model was studied in all of the treatment facilities for the first four years of implementation but not in the fifth and final year. In each of the first four years, the study assessed the fidelity of implementation of the *professional development model*. Fidelity was defined as the extent to which the actual level of implementation measured during the study was consistent with the model as planned. Fidelity of implementation of the professional

³ The definition of fidelity of implementation of the professional development model for the READ 180 targeted intervention can be found on the website for the U.S. Department of Education, Office of Elementary and Secondary Education in the cross-site summary tables for the 2006-2011 cohort (*Summary of 2006 Striving Readers Projects. Implementation and Evaluation of Targeted Interventions for Struggling readers and Whole School Interventions for All Readers: Years 1 – 5*), Table 3.

⁴ The definition of fidelity of implementation of the classroom model for the READ 180 targeted intervention can be found on the website for the U.S. Department of Education, Office of Elementary and Secondary Education in the cross-site summary tables for the 2006-2011 cohort (*Summary of 2006 Striving Readers Projects. Implementation and Evaluation of Targeted Interventions for Struggling readers and Whole School Interventions for All Readers: Years 1 – 5*), Table 4.

development model was rated as high, moderate, or low, based on the level of participation of teachers in the training activities that were offered on the whole school model.⁵

Evaluation Findings: Targeted Intervention _____

Level of Implementation of the Targeted Intervention Model

In terms of fidelity of implementation of the *professional development model*, in Year 1, all teachers participated in the READ 180 professional development activities at a high (71 percent) or moderate (29 percent) level. Participation in professional development remained high in Year 2 of implementation with 100 percent of teachers participating at a high level. In Year 3, only 28 percent of teachers participated at a high level and 28 percent of teachers participated at a moderate level. In Year 4, 80 percent of teachers participated in professional development activities at a high level and 0 percent at a moderate level. In the final year of implementation, Year 5, 80 percent of teachers participated in professional development activities at a high level and 20 percent at a moderate level.

Fidelity of implementation of the *classroom model* was based on the number of minutes of READ 180 instruction provided to students. In Year 1 of implementation, 14 percent of teachers provided a high level of minutes of READ 180 instruction and 71 percent provided a moderate level of instruction. In Year 2 of implementation, this proportion changed to 43 percent of teachers implementing at a high level and 43 percent at a moderate level. In Year 3, 43 percent of teachers were implementing at a high level and 28 percent at a moderate level. In Year 4, 20 percent of teachers participated at a high level, and 40 percent participated at a moderate level. In Year 5, 20 percent of teachers participated at a high level, and 20 percent participated at a moderate level.

Impact of the Targeted Intervention Model

There was not a significant impact of READ 180 on the CAT at the end of the students stay in the facility. The effect size was .09. There was a significant impact of READ 180 on grade 9-12 student reading scores on the CAT after one year of intended treatment. The effect size was .26.⁶ There was a significant impact of READ 180 on grade 9-12 student reading scores on the SRI assessment. The effect size was .21.⁷

⁵ The definition of fidelity of implementation of the professional development model for the whole school intervention can be found on the website for the U.S. Department of Education, Office of Elementary and Secondary Education in the cross-site summary tables for the 2006-2011 cohort (*Summary of 2006 Striving Readers Projects. Implementation and Evaluation of Targeted Interventions for Struggling readers and Whole School Interventions for All Readers: Years 1 – 5*), Table 3.

⁶ This impact estimate meets WWC standards with reservations because of high attrition.

⁷ The analysis of impacts on the SRI does not meet WWC standards because of over-alignment of the measure with the intervention.

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

Strengths:

- The analysis of the impact of READ 180 at the end of each student's stay at the facility on reading achievement (CAT) meets What Works Clearinghouse (WWC) evidence standards. Analyses that meet WWC evidence standards make us the most confident that the estimated effect is due solely to the intervention alone, and not to the many other factors that are at play in schools and in the lives of students, such as teachers, school, and family.
- The analysis of the impact of one year of READ 180 on reading achievement (CAT) meets What Works Clearinghouse (WWC) evidence standards with reservations, due to high attrition. Analyses that meet WWC evidence standards with reservations make us reasonably confident that the estimated effect is due solely to the intervention alone, and not to the many other factors that are at play in schools and in the lives of students, such as teachers, school, and family.
- Eligibility for random assignment was determined systematically, using a predetermined cutoff score on a test of reading achievement, the 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 other factors (e.g., other reading programs or district policies) were implemented in ways that would have undermined the evaluators' ability to attribute impacts to READ 180. However, the READ 180 classes were composed of students whom had tested below grade level at baseline, while students assigned to the control group were in mixed-ability classrooms with both below grade level and higher achieving students.
- 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 models to increase the precision of the impact estimates.
- There were no differences in baseline reading achievement between the treatment and control students included in the impact analysis.
- The California Achievement Test (CAT) measures general reading achievement, and was developed by an external test publisher. There is no reason to believe that student assigned to the treatment group had more experience taking the test than did the control group students, or that the test measured skills specific to the intervention, both of which could have undermined confidence in the impact estimates.
- Follow-up data collection was conducted at 1) the end of each student's stay at the facility and 2) at the end of one year of the intervention. While some students were unable to participate in follow-up data collection at the end of their stay in the facility,

the level of attrition did not differ substantially across the treatment and control groups. This suggested that the integrity of the original randomized design was preserved, and that treatment and control groups continued to be statistically equivalent on all measured and unmeasured characteristics at follow-up.

- Some students were unable to participate in follow-up data collection at the end of their stay in the facility for the SRI and CAT (37 percent and 52.9 percent, respectively); the levels of attrition did not differ substantially across the treatment and control groups (differential attrition rate was 2.5 percent for the SRI and 1.1 percent for the CAT). This amount of attrition is within the acceptable range established by WWC standards.⁸

Weaknesses:

- 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 received instruction that was more closely aligned to the test than the control group's instruction. This reduced the confidence with which the estimated impacts on SRI scores can be considered a true impact of READ 180 on reading comprehension.
- The analysis of the impact of READ 180 on reading achievement as measured by the Scholastic Reading Inventory (SRI) does not meet WWC evidence standards because of over-alignment of the measure with the intervention, as described above.
- Follow-up data collection was conducted at 1) the end of each student's stay at the facility and 2) at the end of one year of the intervention. Some students (87.7 percent) were unable to participate in follow-up data collection on the CAT at the end of one year of the intervention. This suggested that the integrity of the original randomized design may not have been preserved, and that the high level of overall attrition may have biased the estimated effect. This amount of overall attrition is considered high according to standards established by the WWC.

⁸ For more information, please see Appendix A-Assessing Attrition Bias, of the WWC Procedures and Standards Handbook, available at: <http://ies.ed.gov/ncee/wwc/help/idocviewer/Doc.aspx?docId=19&tocId=7>.

Evaluation Findings: Whole School Intervention _____

Level of Implementation of the Whole School Intervention Model

In terms of fidelity of implementation of the *professional development model*, in Year 1, none of the facilities implemented SIRI-AL at a high level but 71 percent implemented the intervention at a moderate level. The Writing Academy was implemented at a high level in 100 percent of the facilities. In Year 2 of implementation, 57 percent of facilities implemented HYS at a high level and 43 percent implemented at a moderate level. In Years 3 and 4, 50 percent of facilities implemented HYS at a high level and 50 percent implemented at a moderate level. Implementation of the whole school intervention was not studied in Year 5.

Impact of the Whole School Intervention Model

Only descriptive analyses were conducted on the whole school intervention. No impact estimates were computed.

Sustainability of the Striving Readers Interventions _____

In summer of 2011, Striving Readers grantees were interviewed about their plans for implementing the targeted and whole school interventions in the 2011-12 school year, after the grant period had ended. The responses are summarized here.

Targeted Intervention

- ODYS continued to implement READ 180 as its ELA curriculum for struggling readers in the four remaining juvenile detention facilities.
- The implementation involved one change in the student eligibility criteria. READ 180 was offered to all struggling readers, including those whose test scores showed them to be more than two years below their grade level in reading.
- ODYS altered the criteria for moving students out of READ 180. Whereas during the study, students remained in READ 180 until such time as reading at grade level on two proficiency tests, students were later moved back to the regular ELA curriculum on the basis of one proficiency test score indicating that they were reading at grade level.
- For the 2011-12 school year, ODYS still contracted with the developer to train teachers. Instead of district literacy coaches, experienced READ 180 teachers provided in-class coaching and support to newer teachers.

Whole School Intervention

- ODYS continued to implement the whole school interventions during the 2011-12 school year.
- No additional training was provided to teachers during this schools year, under the assumption that the teacher training in March 2011 should have been sufficient to support teachers in the facilities have already been trained. Also, the district did not provide coaching to teachers on implementation of the whole school interventions.

Final Summary of 2006 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 of the Study

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 the second year, ten schools participated in the study: four high schools, two middle schools, two K-8 schools, and one 8th grade academy. In the third and fourth years of the implementation, four high schools, three middle schools, and three K-8 schools participated in the program. At the onset of the grant, all of the participating schools received Title I funding and an average of 65 percent of the students in these schools were identified as low income. All schools had a substantial number of students struggling to read; on average, 28 percent of the students served by these schools were 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 were identified as English Language Learners, and 59 percent were non-white. Overall, Striving Readers involved nearly 6,500 students and 450 teachers in the participating schools. The Striving Readers project was funded for five years, from 2006-07 (Year 1) through 2010-11 (Year 5).

Intervention Models

Targeted Intervention

Classroom Model as Planned: Xtreme Reading was 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 seven 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 two 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 (two class periods) to 9th graders in the morning, and Xtreme Reading and Language Arts (two class periods) to 10th graders in the afternoon. Starting 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.¹

Professional Development Model as Planned: In the first year of implementation, teachers were offered approximately 67 hours of professional development, provided by Strategic Learning Center (SLC), professional developers under contract to the model developer. The training included five days of initial workshops and six follow-up workshops. In the second year of implementation, new and returning teachers were offered the same five days of summer training, but no follow-up workshops, for a total of 37 hours of professional development. In the third year of implementation, teachers were offered the five days of summer training plus 10 monthly meetings, led by the district team. Together, this training totaled 76 hours of professional development. In the fourth year of implementation, teachers were offered the same five days of summer training and eight monthly meetings, for a total of 82 hours of professional development. In all four years of implementation, teachers were offered approximately 14 hours of in-class visits from the district and 14 hours of in-class visits from the professional developers. In Year 5, professional development was provided only to new teachers. Professional development consisted of five days of summer training, and six follow-up meetings, led by the district team which, together, added up to 68 hours of training.

Context for Implementation: Xtreme Reading was offered to struggling readers in middle school (grades 7 and 8) and high school (grades 9 and 10). In middle school, Xtreme Reading was implemented as a replacement for the district's regular English Language Arts curriculum. For high school students, Xtreme Reading was implemented as a supplement that replaced an elective course. Eligible students were students reading at least two years below grade level as measured either by their total reading score on the Oregon Assessment of Knowledge and Skills (OAKS), formerly called the Oregon State Assessment Test (OSAT), or by their total reading score on the Group Reading Assessment and Diagnostic Evaluation (GRADE). The previous year's spring OAKS score was used as the primary criterion for eligibility unless the student was new to the district or a spring OAKS score was not available. Potential targeted intervention participants with no OAKS scores were administered the GRADE to determine eligibility for random assignment. Special education students were included in the sample unless their Individual Education Plans (IEPs) prohibited them from being able to be scheduled for the Xtreme Reading classes. Students were eligible to receive Xtreme Reading for a single school year. In the first year of implementation, 659 students were assigned to Xtreme Reading classes in grades 7-10. In the second year of implementation, 219 students were assigned to Xtreme Reading in these same grade levels. In the third year of the implementation, 345 students were assigned to Xtreme Reading classes. In the fourth year, 230 students were assigned to Xtreme Reading classes. Starting in Year 5, the targeted intervention continued to be implemented but all eligible students in the district could receive the intervention. In addition, in Year 5, ten new schools in the district (nine middle schools and one K-8 school) began implementation of Xtreme Reading with all eligible students.

¹ For more information on Xtreme Reading, please see the Xtreme Reading Intervention Profile by Abt Associates, available at <http://www2.ed.gov/programs/strivingreaders/performance.html>.

Whole School Intervention

Classroom Model as Planned: Content Enhancement Routines for Teachers (SIM-CERT) was 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 (CER) 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 Portland, the whole school model was phased in over three years. 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 offer optional training on the Concept Anchoring, Concept Comparison, Lesson Organizer, and Course Organizer content enhancement routines. In Year 3, arts, physical education (PE), and health teachers were trained in the Unit Organizer, Framing, and Order routines. In addition, arts teachers were trained on the Concept Mastery routine, and the PE and health teachers were trained on the Concept Comparison routine. Optional training on the Question Exploration, Clarifying, Order, Lesson Organizer, and Course Organizer CERs were also offered in Year 3. In Year 4, content teachers had the option of learn the basic CERs or learning to teach embedded reading strategies and advanced CERs.

Professional Development Model as Planned: In the first year of implementation, teachers were offered approximately 55 hours of professional development, provided by Strategic Learning Center (SLC), professional developers under contract to the model developer. In addition, teachers were offered ongoing training (approximately 18 hours), with the amount depending on which new Content Enhancement Routines school administrators elected to have their teachers trained on. In Year 2, teachers were offered three days of summer training, and optional training in additional content enhancement routines. In Year 3, the professional development included the summer training session for the new middle schools only. Ongoing professional development changed from being centralized to being school-based, so that amount and topics varied depending on individual school needs and interests. In the first three years of implementation, professional development was provided by the developer. Starting in Year 4, professional development was provided by district staff (except for the two schools that were only in their second year of implementation). In Year 4, for the remaining schools, professional development was offered in the summer at a central location for any new or experienced content teachers who wished to participate. Special education, ESL, and other subject area teachers participated in training at their discretion. In Year 5, only middle school teachers were expected to participate in the whole school intervention. Professional development was provided by district staff to teachers in the six middle schools only. This training consisted primarily of facilitated work time to assist content teachers in integrating the content enhancement routines in their lessons.

Context for Implementation: In Years 1-4, SIM-CERT was offered to all students in participating middle and high schools, which included grades 6-12. In Years 1-4, the total number of students receiving SIM-CERT each year was between 4,500 and 6,000 students,

depending on the implementation year. In Year 5, only middle schools were expected to participate.

Evaluation Designs

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?
3. What is the fidelity of implementation of Xtreme Reading in each year of the study?

Impact Study:

Research Design and Methods. Prior to the start of each school year, eligible students in Grades 7-10 were randomly assigned to either the Xtreme Reading group or the control group. The Xtreme Reading curriculum covered one school year; after the treatment year, students originally placed in the control group were eligible to participate in the Xtreme Reading class. The impact of Xtreme Reading on student outcomes was modeled on ANCOVA, to test the effect of Xtreme Reading on achievement score gains and control 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 were not randomly assigned to the treatment group received 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 could have enrolled in the Xtreme Reading class.

Sample Size. Across Years 1-4 of implementation, the analysis of the impact of one year of intervention on the GRADE Total Reading score included 401 treatment students in grades 7-8 and 421 control students in the five or six middle/K-8 schools. In the four high schools, the analysis included 355 treatment students in grades 9-10 and 402 control students. The analysis of the impact of one year of intervention on the OAKS included 472 treatment students in grades 7-8 and 482 control students in the five or six middle/K-8 schools. In the four high schools, the analysis included 260 treatment students in grade 10 and 254 control students. Across Years 2-4 of implementation, the analysis of the impact on student motivation included 342 treatment students and 426 control students in grades 7-10.

The Year 4 evaluation report, which includes findings from the first four years of implementation, also includes a sample of grade 7-8 students large enough to detect an impact equivalent to .13 on the GRADE and .14 on the OAKS, and a sample of grade 9-10 students large enough to detect an impact (in standard deviation units) equivalent to .16 on the GRADE and .21 on the OAKS.² The sample of grade 7-10 students across Years 2-4 was large enough to detect an impact equivalent to .17 on the student motivation score. Since the district did not

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 percent power, and with an alpha level of .05, and accounts for clustering and for the inclusion of the covariates in the model.

continue with the randomization of students in Year 5, the student impact estimates are based on the first four years of implementation.

Key Measures of Student Reading Outcomes (Source):

Oregon Assessment of Knowledge and Skills (OAKS) (State Test)

Group Reading Assessment and Diagnostic Evaluation (GRADE): Total Reading Score³
(External Test Publisher)

Motivation for Reading (District-developed student survey)

Implementation Study:

Research Design and Methods. The fidelity of implementation of the targeted intervention model was studied in the 10 treatment schools for the first four years of implementation but not in the fifth and final year. In each of the first four years, the study assessed the fidelity of implementation of the *professional development model* and the *classroom instruction model*. For each model, fidelity was defined as the extent to which the actual level of implementation measured during the study was consistent with the model as planned. Fidelity of implementation of the professional development model was rated as high, medium, or low, based on the level of participation of teachers in the Xtreme Reading training activities that were offered.⁴ Fidelity of implementation of the *classroom model* also was rated as high, medium, or low, based on the extent to which the classroom instruction matched the definition of the key components of the model that were identified by the developer.⁵

Whole School Intervention

Research Questions:

1. To what extent do students in grades 6-12 improve their reading scores after implementation of the content enhancement routines?
2. What is the fidelity of implementation of the whole school intervention in each year of the study?

Impact Study:

Research Design and Methods. The analysis used an interrupted time series approach to estimate the change in reading achievement, by comparing three years of baseline prior to the implementation of the Content Enhancement Routines and two to four years of implementation of the intervention. (The number of years of implementation varied across schools depending on when the school started in the study.) No Year 5 results could be included in the impact analyses

³ The full report includes findings for the Total Reading score and for the Vocabulary and Comprehension subscales separately.

⁴ The definition of fidelity of implementation of the professional development model for the Xtreme Reading targeted intervention can be found on the website for the U.S. Department of Education, Office of Elementary and Secondary Education in the cross-site summary tables for the 2006-2011 cohort (*Summary of 2006 Striving Readers Projects. Implementation and Evaluation of Targeted Interventions for Struggling readers and Whole School Interventions for All Readers: Years 1 – 5*), Table 3.

⁵ The definition of fidelity of implementation of the classroom model for the Xtreme Reading targeted intervention can be found on the website for the U.S. Department of Education, Office of Elementary and Secondary Education in the cross-site summary tables for the 2006-2011 cohort (*Summary of 2006 Striving Readers Projects. Implementation and Evaluation of Targeted Interventions for Struggling readers and Whole School Interventions for All Readers: Years 1 – 5*), Table 4.

because between Years 4 and 5, the state test was used as the student reading outcome. The analysis model accounted for within-student repeated measures over time.

Comparison Group. All schools in the study participated in the whole school intervention. Therefore, there was no comparison group.

Sample Size. All grade 6-12 students in the participating schools were included in the evaluation of the whole school intervention.

The Year 5 evaluation report, which includes findings from the first four years of implementation, also includes a sample of schools large enough to detect an impact (in standard deviation units) of the intervention on reading achievement equivalent to .55 (in standard deviation units) on the OAKS.

Key Measures of Student Reading Outcomes (Source):
Oregon Assessment of Knowledge and Skills (OAKS) (State Test)

Implementation Study: Research Design and Methods

The fidelity of implementation of the whole school intervention model was studied in all of the participating schools for five years of implementation. In each of the first four years, the study assessed the fidelity of implementation of the *professional development model* and the *classroom instruction* model. For each model, fidelity was defined as the extent to which the actual level of implementation measured during the study was consistent with the model as planned. Fidelity of implementation of the professional development model was rated as high, medium, or low, based on the level of participation of teachers in the SIM-CERT training activities that were offered.⁶ Fidelity of implementation of the *classroom model* also was rated as high, medium, or low, based on the extent to which the classroom instruction matched the definition of the key components of the model that were identified by the developer.⁷

Evaluation Findings: Targeted Intervention _____

Level of Implementation of the Targeted Intervention Model

In terms of fidelity of implementation of the *professional development model*, in Year 1 of implementation, 44 percent of teachers had a high level of participation in the professional development activities and 33 percent of teachers had a moderate level of participation. In Year 2, 89 percent of teachers had a high level of participation and the remaining 11 percent had a

⁶ The definition of fidelity of implementation of the professional development model for the SIM-CERT whole school intervention can be found on the website for the U.S. Department of Education, Office of Elementary and Secondary Education in the cross-site summary tables for the 2006-2011 cohort (*Summary of 2006 Striving Readers Projects. Implementation and Evaluation of Targeted Interventions for Struggling readers and Whole School Interventions for All Readers: Years 1 – 5*), Table 14.

⁷ The definition of fidelity of implementation of the classroom model for the SIM-CERT whole school intervention can be found on the website for the U.S. Department of Education, Office of Elementary and Secondary Education in the cross-site summary tables for the 2006-2011 cohort (*Summary of 2006 Striving Readers Projects. Implementation and Evaluation of Targeted Interventions for Struggling readers and Whole School Interventions for All Readers: Years 1 – 5*), Table 15.

moderate level of participation. In the third year of implementation, 85 percent of teachers had a high level of participation and 8 percent had a moderate level of participation. In both Years 4 and 5 of implementation, 90 percent of teachers had a high level of participation and the remaining 10 percent had a moderate level of participation. In the 10 new schools that implemented the targeted intervention for the first time in Year 5, 70 percent of teachers had a high level of participation and the remaining 30 percent had a moderate level of participation

Ratings of fidelity of implementation of the *classroom model* were based on a combination of classroom observations and staff surveys. In Year 1, 44 percent of the teachers implemented the Xtreme Reading classroom model with high fidelity and an additional 33 percent implemented the model at a medium level of fidelity. Fidelity of implementation declined somewhat in the second year of implementation, with only 25 percent of teachers implementing at a high level of fidelity and 38 percent at a medium level of fidelity. In Year 3, 50 percent of teachers implemented the model at a high level of fidelity and 30 percent implemented at a medium level. In Year 4, 40 percent of teachers had a high level of implementation and 30 percent had a moderate level of implementation. In Year 5, 20 percent of teachers had a high level of implementation and 50 percent had a moderate level of implementation. For the new schools that implemented the targeted intervention for the first time in Year 5, 30 percent of teachers had a high level of participation and 40 percent had a moderate level of participation

Impact of the Targeted Intervention Model on Student Reading Outcomes

Across Years 1-4 of implementation, there was a significant impact of one year of Xtreme Reading on the reading achievement of grade 7 and 8 students on the GRADE and on the OAKS. The effect sizes of the impacts were .29 and .12, respectively. There was a significant impact of one year of treatment on the reading scores of grade 9 and 10 students on the GRADE assessment, with an effect size of .12. There was no significant impact on the OAKS for grade 10 students; the effect size was .02.

For Years 2-4, there was a significant impact of one year of treatment on reading motivation in grade 7-10 students, with an effect size of .13.

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

Strengths:

- The analysis of the impact of one year of Xtreme Reading on reading achievement (GRADE and OAKS) meets What Works Clearinghouse (WWC) evidence standards. Analyses that meet WWC evidence standards make us the most confident that the estimated effect is due solely to the intervention alone, and not to the many other factors that are at play in schools and in the lives of students, such as teachers, school, and family. Abt did not examine whether the analysis of the impact of Xtreme Reading on reading motivation meets WWC standards because the review was restricted to measures of reading achievement.
- Eligibility for random assignment was determined systematically, using a predetermined cutoff score on a test of reading achievement (Oregon Assessment of Knowledge and Skills (OAKS) or Degrees of Reading Power (DRP)).

- Random assignment was faithfully executed. The evaluators noted that there were nine students in the control group who received the intervention. This corresponded to 0.4 percent of the student sample, and was a minimal crossover rate.
- There is no evidence that other factors (e.g., other reading programs or district policies) were implemented in ways that would undermine the evaluators' ability to attribute impacts to Xtreme Reading.
- 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 models to increase the precision of the impact estimates.
- The evaluation employed two reading tests as outcome measures. The GRADE assesses vocabulary, comprehension, and oral language and was developed by an external test publisher. The OAKS 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.
- While some students were unable to participate in follow-up data collection, the level of attrition did not differ substantially across the treatment and control groups. This suggests that the integrity of the original randomized design was preserved, and that the treatment and control groups continued to be equivalent on all measured and unmeasured characteristics at follow-up.
 - Some grade 7-8 students (20.5 percent for the GRADE and 7.7 percent for the OAKS), some grade 9-10 students (38.7 percent for the GRADE), and some grade 10 students (10.9 percent for the OAKS) were unable to participate in follow-up data collection; the levels of attrition did not differ substantially across the treatment and control groups (differential attrition rate was 2.6 percent for grade 7-8 students for the GRADE and .5 percent for the OAKS, 5.5 percent for grade 9-10 students for the GRADE, and 3 percent for grade 10 students for the OAKS). This amount of attrition is within the acceptable range established by WWC standards.⁸
- In the combined sample of grade 7-10 students, small, statistically significant differences in pre-study reading achievement (GRADE) that favored the treatment group were noted on the students included in the analysis at follow-up. The effect of this difference was mitigated by the inclusion of the pre-test measure in the statistical models estimating the impact of the program.

Weaknesses:

- None.

⁸ For more information, please see Appendix A-Assessing Attrition Bias, of the WWC Procedures and Standards Handbook, available at: <http://ies.ed.gov/ncee/wwc/help/idocviewer/Doc.aspx?docId=19&tocId=7>.

Evaluation Findings: Whole School Intervention _____

Level of Implementation of the Whole School Intervention Model

On fidelity of implementation of the *professional development model*, in Year 1, there were no schools for which staff participated at a high level; in 78 percent of schools, staff participated at a medium level. The levels of participation remained similar in the second year of implementation: no schools achieved a high level of participation and 67 percent of schools achieved a medium level of participation. In Year 3, 10 percent of schools had a high level of staff participation and 40 percent had medium participation. In Year 4, 10 percent of schools again had high participation and 30 percent had medium participation. In Year 5, fidelity of implementation of the professional development model was calculated only for middle schools, since the literacy coaches were no longer provided training at the high school level. Across the middle schools, 60 percent had a high level of staff participation in the professional development sessions and 40 percent had a medium level.

Ratings of fidelity of implementation of the *classroom model* were based on observations of the implementation of the Content Enhancement Routines in middle schools and high schools. In Year 1, none of the schools were rated as having a high level of implementation of the classroom model and 33 percent of schools were rated as having a medium level of implementation. In Year 2, the comparable percentages were 0 percent of schools at a high level of implementation and 44 percent of schools at a medium level. In Year 3, although there were still no schools rated at a high level of implementation, 60 percent of schools were rated as implementing the model at a medium level. In both Years 4 and 5, none of the ten participating schools had high implementation, while 50 percent had medium implementation.

Impact of the Whole School Intervention Model on Student Reading Outcomes

There were no statistically significant impacts of the whole school intervention on student reading outcomes. There were no significant gains in reading from pre- to post-implementation of the intervention. The effect size of the non-significant impact was .01.

Summary of the Strengths and Weaknesses of the Impact Evaluation of the Whole School Intervention

Strengths:

- The evaluation employed the OAKS, which assesses reading and literature, and was developed by the state. There is no reason to believe that students exposed to the whole school intervention group has more experience taking the test than did the students attending the same schools in the years prior to implementation, or that the test measured skills specific to the intervention, both of which could undermine confidence in the impact estimates.
- When estimating impacts, appropriate steps were taken to account for having scores from the same schools for multiple school years. An interrupted time series compared school-level measures of student achievement for three years prior to the implementation of the program and for four years after program implementation, on a sample of treatment schools only.

Weaknesses:

- No comparison group was used in the analysis; impacts of the whole-school program were estimated by comparing school-level measures of student achievement in Striving Readers schools to achievement in the same schools prior to implementation. It was possible that there were unobservable factors (such as school reconfigurations and staffing changes, and changes to the OAKS test) that may have affected students' performance at some time points. Therefore, the study design would not meet WWC standards, with or without reservations.
- The impact of the whole school intervention for struggling readers could not be estimated independently from the targeted intervention because a random sample of eligible students in the treatment schools also received the targeted intervention.

Sustainability of the Striving Readers Interventions _____

In summer of 2011, Striving Readers grantees were interviewed about their plans for implementing the targeted and whole school interventions in the 2011-12 school year, after the grant period had ended. The responses are summarized here.

Targeted Intervention

- The district continued to implement Xtreme reading in some of its middle schools but did not use the curriculum at the high school level.
- Training was provided by certified teachers in the district; the developer was not involved in any of the professional development activities.
- Teachers were not provided with systematic coaching as part of the implementation of the curriculum.

Whole School Intervention

- The district did not continue to implement the whole school intervention, based primarily on the lack of evidence of impacts in the Striving Readers evaluation.

Final Summary of 2006 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 of the Study

The San Diego Unified School District Striving Readers project was implemented in four high schools, two small schools in a larger high school complex, and the four middle schools that fed into them.¹ The district served approximately 138,000 students in 187 schools, making it the eighth largest school district in the nation at the time. At the onset of the grant, 64 percent of students in the study schools were eligible for free and reduced priced lunch, 39 percent were Hispanic, 16 percent were African American, and 22 percent were identified as English Language Learners. The Striving Readers project was funded for five years, from 2006-07 (Year 1) through 2010-11 (Year 5).

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 an understanding of 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 is therefore 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 strategies through scaffolded instruction, independent reading, and writing practice. SLIC uses expository, narrative and persuasive text, including textbooks, novels, short stories, and magazines, which are either provided by the developer or selected by the teacher. The program includes periodic administrations (every two to three 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.²

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

² For more information SLIC, please see the SLIC Intervention Profile by Abt Associates, available at <http://www2.ed.gov/programs/strivingreaders/performance.html>.

Professional Development Model as Planned: SLIC involved extensive professional development for teachers. The program included a two-day introductory workshop, three all-day follow-up training sessions, monthly meetings with district staff and teachers to discuss implementation, and four rounds of discussions between teachers and developers across the school year, which lasted between three and four days per school. Together, these activities totaled approximately 200 hours of professional development time per teacher in each of the first four years of implementation. In addition, on-site school literacy coaches were available for daily in-class support and district staff and program consultants provided regular monitoring and support approximately two days a month per school. The same level of in-class coaching support continued throughout the first four years of implementation. In Year 5, the developers and district followed a “sustainability” model which meant that there was little or no formal professional development for teachers.

Context for Implementation: SLIC was implemented in middle schools and high schools for students in grades 7-10, as a supplement to the regular English Language Arts classes. SLIC replaced an hour-long elective course for students in treatment schools. Students were eligible for SLIC if they scored two years below grade level as measured by the Degrees of Reading Power (DRP) assessment at the end of the prior school year, were reading at a ‘basic’ level or below as measured by the California Standards Test–English Language Arts (CST-ELA) score, or were labeled ‘intermediate’ or below on the California English Language Development Test (CELDT). Struggling readers could receive SLIC for up to four years. In the first year of the program, SLIC was implemented in two high schools and three middle schools, in grades 7 and 9. In Years 2, 3, and 4, SLIC was implemented in four middle schools and four high schools. In Years 2 through 4 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, between 250 and 750 students were assigned to SLIC classes each year. The targeted intervention was implemented for five years.

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 on how to teach 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: For Years 1-4 of the study, the content area teachers implementing SLIC as a whole school model were offered approximately 25 hours of professional development. This included 15 to 20 hours of conferences on the whole school program for teachers from all content areas and another eight hours of smaller group seminars for teachers in the same content areas. In addition, the on-site literacy coaches provided individual in-class support to teachers on an as-needed basis. In Year 5, the developers and district followed a “sustainability” model which meant that there was little or no formal professional development for teachers.

Context for Implementation: The whole school model of the SLIC intervention was implemented by all content teachers in the treatment schools (four middle schools and four high schools), starting in Year 2 of implementation. Altogether, in grades 6-12, between 4,000 and 7,000 students each year were taught by content teachers trained in SLIC. The whole school intervention was implemented for a total of four years, starting in Year 2.

Evaluation Designs

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 10th grade, enroll and successfully complete AP classes in 11th/12th 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?
4. What is the fidelity of implementation of the SLIC targeted intervention in each year of the study?

Impact Study:

Research Design and Methods. In the second year of the program, eligible incoming 7th through 10th grade students were randomly assigned to participate in the SLIC intervention class or a regular elective class.³ Both treatment and control students participated in the regular Language Arts class as well as received instruction from teachers trained as part of the whole school intervention. A new cohort of students in grades 7-10 were randomized in Year 3 of the study. Treatment group students who continued to read at least two years behind grade level could have received the targeted intervention for up to four years (through 10th grade). The Year 3 analyses examined the impacts of one or two years of exposure to SLIC. No new random assignment occurred in Years 4 or 5. The Year 4 analyses examined the impact of two or three years of exposure to SLIC. No additional impact analyses were conducted in Year 5.

³ Because of low compliance with random assignment in Year 1 of the study, assignments from three of five participating schools were not treated as valid and were excluded from all analyses.

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

Sample Size. The analyses of the impacts of the targeted intervention were based on eight cohorts of students who were randomized in Years 2 and 3. No new students were randomized in Years 4 or 5. The analyses of the impact of one year of exposure to SLIC on the CST-ELA for students in grades 7 and grade 8 included 503 treatment and 533 control students in four middle schools. On the DRP, the sample included 495 treatment and 532 control students in grades 7 and 8. For students in grades 9 and 10, the analyses of the impact of one year of exposure to SLIC on the CST-ELA included 371 treatment and 405 control students; the sample for the DRP included 248 treatment and 234 control students. The analyses of the impact of two years of exposure to SLIC on the CST-ELA for students assigned in grades 7 and grade 8 (who were in grades 8 and 9 in the second year of exposure) included 414 treatment and 426 control students. On the DRP, the sample included 412 treatment and 419 control students. For students assigned in grades 9 and 10 (who were in grades 10 and 11 in their second year of exposure) the analyses of the impact of two years of exposure to SLIC on the CST-ELA included 368 treatment and 366 control students; the sample for the DRP, which included only students in grade 10, included 175 treatment and 172 control students. The impact of three years of exposure to SLIC was based on students who started the study in Year 2 and were in the third year in the intervention in Year 4. The impacts for students who were assigned in grades 7 or 8 (who were in grades 9 and 10 in their third year of exposure) included 171 treatment and 173 control students; the impact on the DRP included 165 treatment and 155 control students. For the students who were assigned in grades 9 and 10, the impact of three years of exposure was estimated only for students who started in the study in grade 9; these students were in grade 11 in their third year of exposure. The sample for in the analysis of impacts on the CST-ELA included 134 treatment and 128 control students. No impact on the DRP was estimated for students in grade 11.

The impact of SLIC on reading motivation was estimated for one, two and three years of exposure, for students who were assigned in grades 7-10. The impacts of one year of exposure were estimated separately for the students assigned in Years 2 and 3. For the grade 7 and 8 students assigned to the study in Year 2, the impacts were estimated on a sample that included 275 treatment and 312 control students. The Year 3 sample sizes were 273 treatment and 287 control students. For the grade 9 and 10 students assigned to the study in Year 2, the impacts were estimated on a sample that included 266 treatment and 235 control students. The Year 3 sample sizes were 152 treatment and 159 control students. The impacts of two years of exposure were estimated for the students assigned in Years 2 and 3 combined. For the grade 7 and 8 students assigned to the study in Years 2 and 3 (who were in grades 8 and 9 in their second year of exposure) the impacts were estimated on a sample that included 146 treatment and 141 control students. For the grade 9 and 10 students assigned to the study in Years 2 and 3 (who were in grades 10 and 11 in their second year of exposure) the impacts were estimated on a sample that included 85 treatment and 79 control students. The impacts of three years of exposure also were estimated for students assigned in Years 2 and 3 combined. For the students assigned in grades 7 and 8 (who were in grades 9 and 10 in their third year of exposure) the impacts were estimated on a sample that included 69 treatment and 64 control students. Only the high school students

assigned in grade 9 were assessed at the end of three years of exposure, when they were in grade 11. The impacts were estimated on a sample that included 57 treatment and 61 control students.

The findings from the second, third and fourth years of implementation are based on a sample of students large enough to detect an impact (in standard deviation units) of the intervention on student outcomes equivalent to:

- .14 and .29 on the state test of reading achievement (CST-ELA) after one year of exposure to SLIC for middle and high school students, respectively;⁴
- .14 and .37 on the standardized test of reading achievement (DRP) after one year of exposure to SLIC for middle and high school students, respectively;
- .17 and .19 on the state test of reading achievement (CST-ELA) after two years of exposure to SLIC for middle and high school students, respectively;
- .16 and .23 on the standardized test of reading achievement (DRP) after two years of exposure to SLIC for middle and high school students, respectively;
- .26 and .63 on the state test of reading achievement (CST-ELA) after three years of exposure to SLIC for middle and high school students, respectively;
- .26 on the standardized test of reading achievement (DRP) after three years of exposure to SLIC for middle school students;
- .24 and .37 on the measure of student reading motivation after one year of exposure to SLIC for middle school students, and .26 and .35 after one year of exposure to SLIC for high school students;
- .38 and .44 on the measure of student reading motivation after two years of exposure to SLIC for middle and high school students, respectively; and
- .44 and .51 on the measure of student reading motivation after three years of exposure to SLIC for middle and high school students, respectively.

San Diego did not randomly assign a new group of students in Year 5; therefore, the Year 5 report does not have additional students to add to the estimates of the impact of one or two years of exposure to SLIC. In Year 5, although San Diego continued to offer the intervention to previously randomized students, no additional impact analyses were conducted of the impacts of multiple years of exposure.

Key Measures of Student Reading Outcomes (Source):

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

California Standards Test–English Language Arts (CST-ELA) (State Test)

Reading Motivation (study-specific student survey)

Implementation Study:

Research Design and Methods

The fidelity of implementation of the targeted intervention model was studied in all of the treatment schools for the first four years of implementation but not in the fifth and final year. In

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 percent power, and with an alpha level of .05, and accounts for clustering and for the inclusion of the covariates in the model.

each of the first four years, the study assessed the fidelity of implementation of the *professional development model* and the *classroom instruction* model. For each model, fidelity was defined as the extent to which the actual level of implementation measured during the study was consistent with the model as planned. Fidelity of implementation of the professional development model was rated as high, moderate, or low, based on the level of participation of teachers in the SLIC training activities that were offered by the district and the developer.⁵ Fidelity of implementation of the *classroom model* also was rated as high, moderate, or low, based on the extent to which the classroom instruction matched the definition of the key components of the model that were identified by the developer.⁶ Minimal implementation data were collected in Year 5, including limited observation of some professional development and informal email contact with teachers and a remaining coach. Measurement of implementation fidelity focused on high schools, to align with the Year 5 student impact analyses.

Whole School Intervention

Research Questions:

1. Will students who attend 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 who attend comparison schools that did not implement either component?
3. What is the fidelity of implementation of the whole school component of the SLIC intervention program in each year of the study?

Impact Study:

Research Design and Methods. A quasi-experimental design, with eight treatment and eight comparison schools, followed for two years, was used to assess the effect of the whole school intervention (only Years 2-4 were included in these impact analyses).

Comparison Group. The evaluation included eight comparison schools that were similar to the SLIC schools and that were using the district's regular language arts program. All students in both the treatment and comparison groups of schools were included in the evaluation of the whole school intervention.

⁵ The definition of fidelity of implementation of the professional development model for the SLIC targeted intervention can be found on the website for the U.S. Department of Education, Office of Elementary and Secondary Education in the cross-site summary tables for the 2006-2011 cohort (*Summary of 2006 Striving Readers Projects. Implementation and Evaluation of Targeted Interventions for Struggling readers and Whole School Interventions for All Readers: Years 1 – 5*), Table 3.

⁶ The definition of fidelity of implementation of the classroom model for the SLIC targeted intervention can be found on the website for the U.S. Department of Education, Office of Elementary and Secondary Education in the cross-site summary tables for the 2006-2011 cohort (*Summary of 2006 Striving Readers Projects. Implementation and Evaluation of Targeted Interventions for Struggling readers and Whole School Interventions for All Readers: Years 1 – 5*), Table 4.

Sample Size. All grade 7-10 students in the participating schools were included in the evaluation of the whole school intervention.

Findings on student impacts include analyses based on the second, third, and fourth years of implementation. Findings are based on a sample of students large enough to detect an impact (in standard deviation units) of the intervention on student outcomes equivalent to:

- .10 and .36 on the state test of reading achievement (CST-ELA) after one year of the whole school intervention for middle and high school students, respectively;
- .23 and .42 on the standardized test of reading achievement (DRP) after one year of the whole school intervention for middle and high school students, respectively; and
- .17 and .17 on the reading motivation survey after one year of the whole school intervention for middle and high school students, respectively.

Key Measures of Student Reading Outcomes (Source):

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

California Standards Test–English Language Arts (CST-ELA) (State Test)

Reading Motivation (Study-specific student survey)

Implementation Study:

Research Design and Methods

The fidelity of implementation of the SLIC whole school intervention component was studied in all of the participating schools for the first four years of implementation but not in the fifth and final year. In each of the first four years, the study assessed the fidelity of implementation of the *professional development model* and the *classroom instruction model*. For each model, fidelity was defined as the extent to which the actual level of implementation measured during the study was consistent with the model as planned. Fidelity of implementation of the professional development model was rated as high, moderate, or low, based on the level of participation of teachers in the SLIC training activities that were offered by the district and the developer.⁷ Fidelity of implementation of the *classroom model* also was rated as high, moderate, or low, based on the extent to which the classroom instruction matched the definition of the key components of the model that were identified by the developer.⁸ Minimal implementation data were collected in Year 5, including limited observation of some professional development and informal email contact with teachers and a remaining coach. Measurement of implementation fidelity focused on high schools, to align with the Year 5 student impact analyses.

⁷ The definition of fidelity of implementation of the professional development model for the SLIC targeted intervention can be found on the website for the U.S. Department of Education, Office of Elementary and Secondary Education in the cross-site summary tables for the 2006-2011 cohort (*Summary of 2006 Striving Readers Projects. Implementation and Evaluation of Targeted Interventions for Struggling readers and Whole School Interventions for All Readers: Years 1 – 5*), Table 14.

⁸ The definition of fidelity of implementation of the classroom model for the SLIC targeted intervention can be found on the website for the U.S. Department of Education, Office of Elementary and Secondary Education in the cross-site summary tables for the 2006-2011 cohort (*Summary of 2006 Striving Readers Projects. Implementation and Evaluation of Targeted Interventions for Struggling readers and Whole School Interventions for All Readers: Years 1 – 5*), Table 15.

Evaluation Findings: Targeted Intervention _____

Level of Implementation of the Targeted Intervention Model

In terms of fidelity of implementation of the *professional development model*, in the first year of implementation, all schools reached either a high level (60 percent) or a medium level (40 percent) of participation in professional development activities. The level of participation declined substantially in Years 2 and 3, with no schools reaching a high level of participation in either year and 13 percent and 25 percent of schools at a medium level of participation in Years 2 and 3, respectively. In Year 4, 12 percent of schools had a high level of participation, and 37 percent had a medium level of participation. Fidelity of implementation of professional development was not calculated in Year 5.

For implementation of *coaching support*, in each of the three years of implementation, 100 percent of the schools were at a high or medium level of participation. In Year 1, 60 percent of schools had a high level of participation and 40 percent had a medium level. In Year 2, 13 percent of schools had a high level of participation and 88 percent of schools had a medium level of participation. In Year 3, 25 percent of schools had a high level of participation and 75 percent of schools had a medium level. Fidelity of implementation of coaching support was not calculated in Years 4 and 5.

The fidelity of implementation of the *classroom model* was not calculated for the first year of the program. In Year 2, none of the schools reached a high level of fidelity of implementation and 88 percent were at a medium level of fidelity. In Years 3 and 4, none of the school had a high level of implementation; however, 100 percent reached a medium level of participation in both years. In Years 2-5, teachers were asked about their use of six instructional strategies such as surface reading strategies, surface writing strategies, etc. In Year 5, fidelity of implementation was assessed only for high schools (because the impact analyses included only high school students) and was based only on teacher self-reports. Across the implementation years, there was little difference in instruction in two strategies: surface writing strategies and deep reading and writing skills. There was an increase across the years in provision of feedback to students and a decrease in instruction in surface reading strategies, student independent work, and teacher self-assessed understanding/use of SLIC.

Impact of the Targeted Intervention Model

After one year of intervention, there were no significant impacts on the reading achievement of grade 7-8 or grade 9-10 struggling readers. The effect sizes were .04 and .05, respectively, on the CST-ELA. The effect sizes on the DRP were .12 and .05, respectively. On the student reading motivation survey, the effect sizes for one year of implementation for the two cohorts of grade 7 and 8 students who started the study in Years 2 and 3 were -.03 and -.02, respectively; for the cohorts of grade 9 and 10 students, the effect sizes were .03 and -.10, respectively.

After two years of intervention, there were no significant impacts on the reading achievement of grade 7-8 or grade 9-10 struggling readers. The effect sizes were .05 and -.03, respectively, on the CST-ELA. The effect sizes on the DRP were .08 and .12, respectively. After three years of intervention, there were no significant impacts on the reading achievement of grade 7-8 or grade

9-10 struggling readers. The effect sizes were .02 and -.17, respectively, on the CST-ELA, and -.00 on the DRP for grade 7 and 8 struggling readers.

On the student reading motivation survey, after two years of intervention, there were no significant impacts on middle school students or high school students. The effect sizes were .05 and -.09, respectively. After three years of intervention, there were no significant impacts on middle school or high school students. The effect sizes were .30 and -.11, respectively.

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

Strengths:

- The analyses of the impact of one year (CST-ELA and DRP) and two years (CST-ELA) of SLIC on the reading achievement of middle school students and high school students combined meet What Works Clearinghouse (WWC) evidence standards. Analyses that meet WWC evidence standards make us the most confident that the estimated effect is due solely to the intervention alone, and not to the many other factors that are at play in schools and in the lives of students, such as teachers, school, and family.
- The analyses of the impact of two years (DRP) and three years (CST-ELA and DRP) of SLIC on the reading achievement of middle school students and high school students combined meet What Works Clearinghouse (WWC) evidence standards with reservations, because although baseline sample sizes could not be determined and attrition could not be calculated, baseline equivalence on a pre-test of the outcome measure was established for the analytic sample. Analyses that meet WWC evidence standards with reservations make us reasonably confident that the estimated effect is due solely to the intervention alone, and not to the many other factors that are at play in schools and in the lives of students, such as teachers, school, and family. Abt did not examine whether the analysis of the impact of SLIC on reading motivation meets WWC standards because the review was restricted to measures of reading achievement.
- Eligibility for random assignment was determined systematically, using a predetermined cutoff score on one of three tests of reading achievement (California Standards Test–English Language Arts (CST-ELA), California English Language Development Test (CELDT) or Degrees of Reading Power (DRP)).
- There is no evidence that other factors (e.g., other reading programs or district policies) were implemented in ways that would have undermined the evaluators’ ability to attribute impacts to SLIC. The evaluators noted that there was a possibility that students in both the treatment and control groups may have taken classes with teachers who had been taught SLIC instructional strategies as part of the Whole-School Striving Readers program, and that some control students in some schools had access to supplemental literacy classes. This might have made it more difficult for researchers to detect an effect of SLIC.

- The evaluation employed two reading tests as outcome measures. The first (CST-ELA) assesses English 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 had more experience taking the tests than did the control group students, or that the tests measured skills specific to the intervention, both of which could have undermined confidence in the impact estimates.
- The evaluation also measured students' motivation to read, using a 12-item survey on which students responded using a 5-point Likert style scale. There is no reason to believe that students assigned to the treatment group had more experience taking the measure than did the control group students, or that the survey measured skills specific to the intervention, both of which could have undermined confidence in the impact estimates.
- While some students were unable to participate in follow-up data collection, the level of attrition for some outcomes did not differ substantially across the treatment and control groups. This suggested that the integrity of the original randomized design was preserved, and that the treatment and control groups continued to be equivalent on all measured and unmeasured characteristics at follow-up.
 - Some students in middle and high school who received one year of SLIC in Years 2 and 3 (20.4 percent for the CST-ELA and 33.7 percent for the DRP) and some students in middle and high school who received two years of SLIC (30.9 percent for the CST-ELA) were unable to participate in follow-up data collection; the levels of attrition did not differ substantially across the treatment and control groups (differential attrition rate for one year was 9.8 percent for the CST-ELA and 1.4 percent for the DRP, and for two years was 2.7 percent for the CST-ELA). This amount of attrition is within the acceptable range established by WWC standards.⁹
- No differences in pre-study reading achievement or other demographics were noted between the treatment and control students included 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 models to increase the precision of the impact estimates.

Weaknesses:

- Random assignment was faithfully executed in all participating schools in Years 2-4, and in some schools in Year 1 of the study, and estimated impacts are based only on data collected when random assignment was faithfully executed. However, the authors reported that in Years 2 and 3, there were 34 students (3.6 percent) in the control condition who received the intervention, and 188 students (21.6 percent) randomized to the treatment who did not receive it. While this represented a minimal amount of crossover, it revealed that approximately a fifth of the students that were randomized to

⁹ For more information, please see Appendix A: Assessing Attrition Bias, of the WWC Procedures and Standards Handbook, available at: <http://ies.ed.gov/ncee/wwc/help/idocviewer/Doc.aspx?docId=19&tocId=7>.

the treatment were not treated. These students were, however, included in the estimates of the impact of SLIC.

- Attrition rates were unable to be calculated after 2 years of participation (DRP) and 3 years of participation (CST-ELA and DRP), because baseline sample sizes could not be determined.

Evaluation Findings: Whole School Intervention _____

Level of Implementation of the Whole School Intervention Model

For fidelity of implementation of the *professional development model*, in the first year of implementation, 20 percent of schools had a high level of participation. In Years 2 and 3, no school reached a high level of participation. In Year 4, 13 percent of schools had a high level of participation. For *coaching support*, no schools had a high level of participation in the first two years of implementation. In Years 3 and 4, 13 percent of schools had a high level of participation in coaching support.

Level of fidelity to the *classroom model* was not calculated in Year 1. In subsequent years, fidelity ratings were based on classroom observations and interviews with teachers and coaches. In Year 2, no schools implemented the classroom model at a high level of fidelity. In Years 3 and 4, 13 percent of schools were rated as implementing the model at a high level.

Across Years 2-5, based on teacher surveys, it appeared that the program gained momentum through Year 3 and then the understanding and use of the model decreased gradually in Years 4 and 5, as indicated by a decreasing proportion of teachers who reported using whole-school SLIC strategies regularly.

Impact of the Whole School Intervention Model

There were no statistically significant impacts of the whole school intervention on student reading outcomes or motivation after one year of the intervention. The effect sizes of the non-significant impacts were .03 for grade 7-8 students and .07 for grade 9-10 students on the CST-ELA. On the DRP, the effect size was .11 for grade 7-8 students and -.15 for grade 9-10 students. The effect sizes on motivation were -.15 for grade 7-8 students and .01 for grade 9-10 students.

Summary of the Strengths and Weaknesses of the Impact Evaluation of the Whole School Intervention

Strengths:

- The study compared the reading achievement of students in grades 6-12 in treatment schools with students in a comparison group of schools chosen because they were somewhat similar in demographic characteristics and reading achievement prior to implementation of the intervention. However, we could not assume that students in treatment and comparison schools were alike in all characteristics, observed and unobserved, that could affect their reading achievement.

- Students in the intervention and comparison groups were statistically equivalent in terms of their reading/language arts achievement at baseline, based on their scores on the California Standards Test-English Language Arts (CST-ELA) and the Degrees of Reading Power (DRP).
- The evaluation employed two reading tests as outcome measures. The first (CST-ELA) assesses English 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 had more experience taking the tests than do the control group students, or that the tests measured skills specific to the intervention, both of which could have undermined confidence in the impact estimates.
- The evaluation also measured students' motivation to read using a 12-item survey to which students responded using a 5-point Likert style scale. There is no reason to believe that students assigned to the treatment group had more experience taking the measure than did the control group students, or that the survey measured skills specific to the intervention, both of which could have undermined confidence in the impact estimates.
- Achievement data and demographic data were available for the full study sample of schools over multiple time points (i.e., years).
- When estimating impacts, appropriate analytic steps were taken to account for the clustering of students within schools.

Weaknesses:

- There is no evidence that other factors (e.g., other reading programs or district policies) were implemented in ways that would have undermined the evaluators' ability to attribute impacts to the whole school intervention. However, there may have been pre-existing differences between the two groups that were responsible for any observed impacts. Therefore, we were unable to attribute observed impacts to the whole school intervention.
- The impacts of the whole school intervention for struggling readers could not be estimated independently from the targeted intervention because some students in the eight treatment schools also received the targeted intervention. Also, of the eight treatment schools, three in Year 3 and four in Year 4 also implemented Literacy Advancement Academies, the same literacy program implemented in all of the comparison schools.

Sustainability of the Striving Readers Interventions _____

In summer of 2011, Striving Readers grantees were interviewed about their plans for implementing the targeted and whole school interventions in the 2011-12 school year, after the grant period had ended. The responses are summarized here.

Targeted Intervention

- The district continued to implement SLIC in the same middle schools and high schools that were part of the study. In middle schools with 6th grade students, SLIC was extended downward to include this grade level.
- An important factor in the decision to continue to implement SLIC was the positive response from teachers about the changes in their instructional approach that SLIC had affected. Teachers developed new SLIC units that integrated the SLIC strategies into their lesson plans.
- The district did not provide coaches to support the implementation of SLIC. One of the study schools hired its SLIC coach as a full-time teacher, and this teacher was able to provide coaching support to other teachers in that school. A second school hired its own literacy coach to support teachers in using the SLIC strategies.
- For the 2011-12 school year, the Striving Readers project director in the district continued to be funded by the grant and was responsible for providing the SLIC professional development for teachers. The long-term plan was to develop teacher leaders for future teacher training and as support for SLIC.
- The one component of SLIC that was not implemented by most of the schools was the BEAR diagnostic assessment.

Whole School Intervention

- The SLIC curriculum was implemented among ELA teachers, but generally was not supported with other content teachers.
- The professional development was the same as described for the SLIC targeted intervention.

Final Summary of 2006 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 for the Study

The Springfield-Chicopee Striving Readers project was implemented in two high schools in Chicopee, Massachusetts and three high schools in Springfield, Massachusetts. At the onset of the grant in Springfield, 29 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); 3 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. The Striving Readers project was funded for five years, from 2006-07 (Year 1) through 2010-11 (Year 5).

Intervention Models

Targeted Interventions

Classroom Model as Planned: Two targeted interventions for struggling readers were implemented in both participating school districts: READ 180 Enterprise Edition and Xtreme Reading, Level 3 of the Content Literacy Continuum (SIM-CLC). Treatment group students received either READ 180 or Xtreme Reading, but not both.¹

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 is also designed to promote self-directed learning. The READ 180 Topic Software provides frequent assessments and the Scholastic Achievement Manager (SAM)

¹ For more information on READ 180 and Xtreme Reading, please see the READ 180 Enterprise Edition Intervention Profile and the Xtreme Reading Intervention Profile by Abt Associates, available at <http://www2.ed.gov/programs/strivingreaders/performance.html>.

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 seven 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: For READ 180, in the first year of implementation, teachers were offered 36 hours of professional development, involving a two-day initial training, six follow-up seminars, and the Scholastic online course. Starting in the second year of implementation, new READ 180 teachers were offered the same professional development as the teachers in Year 1, while returning teachers were offered only the online course, if they did not complete it in Year 1. Returning teachers with one year of experience using READ 180 were encouraged to complete the Scholastic online course. Returning teachers with two or more years of experience using READ 180 were again offered the online course and two follow-up seminars. In the first two years of implementation, teachers were also offered eight monthly in-class technical assistance visits by the developer over the school year (approximately two hours per session for a total of 16 hours of ongoing and individual training and support). In the third and fourth years of implementation, new teachers and returning teachers with one year of experience with READ 180 were offered this same level of in-class support, while teachers with two years of experience with READ 180 were offered four in-class visits rather than eight. In Year 5, there were no new teachers, and no professional development was provided to the returning teachers.

For Xtreme Reading, in the first and second years of implementation, teachers were offered 42 hours of professional development, across initial training and follow-up workshops. In the third year of implementation, new teachers received slightly reduced professional development (36 hours). Returning teachers were offered one full-day workshop in the second year of implementation and no additional training in the third year of implementation. Starting in the third year of implementation, teachers received in-class coaching visits from the professional developer (seven to nine visits/school year, depending on the district). In the fourth and fifth years of implementation, there was no required training for new or returning teachers. Any necessary SIM-CERT training was embedded in Xtreme Reading sessions or monthly coaching.

Context for Implementation: Both models were implemented as supplements to the district regular English Language Arts curriculum in the schools, replacing an elective course. 9th grade students reading at least two levels below grade level (but not lower than a 4th grade reading level) were eligible to be randomly assigned to participate in the one of the two targeted interventions, or to the control condition. Incoming 9th grade students were 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.

The evaluation focused only on 9th graders in their first year of participation in the interventions. Special education students were eligible for the interventions, unless their Individual Educational Plans (IEPs) prohibited them from being assigned to one of the intervention classes or their overall level of functionality precluded them from participating. In Year 1, 70 grade 9 students were served by the READ 180 intervention and 72 grade 9 students were served by Xtreme Reading. In Year 2, 66 grade 9 students were served by the READ 180 intervention and 57 grade 9 students were served by Xtreme Reading. In Year 3, 49 grade 9 students were served by both the READ180 and Xtreme Reading interventions. In Year 4, 49 grade 9 students were again served by READ 180, while 52 grade 9 students were served by Xtreme Reading. In Year 5, 81 grade 9 students were served by READ 180, and 81 grade 9 students were served by Xtreme Reading. Over the five years of implementation, a total of 311 grade 9 students were served by READ 180, and 315 grade 9 students were served by Xtreme Reading.

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 offer optional training on concept anchoring, concept comparison, lesson organizer, and course organizer.

Professional Development Model as Planned: In the first year of implementation, SIM-CERT teachers were offered about 24 hours of professional development, provided by Strategic Learning Center (SLC), a professional developer under contract to the model developer. This included a two-day initial summer training on the Content Enhancement Routines (CERs) and two days of ongoing professional development where teachers selected from a menu of training sessions on new content enhancement routines. After the first year of implementation, returning teachers were offered approximately 12 hours of ongoing training on additional CERs. After Year 1, new teachers were offered the same 24 hours of training but the initial and follow-up training sessions were combined into a four-day initial training. In all five years of implementation, teachers were offered monthly classroom visits and feedback (approximately 16-18 hours), provided by the professional trainers.

Context for Implementation: The implementation of SIM-CERT was phased in over the five years of the project, with the goal of training approximately 90 percent of all teachers in the participating schools by the end of the grant. The districts planned to train approximately 25 teachers per school per year, resulting in 125 total teachers trained per year. The training began first with ELA, social studies, math and science teachers in 10th through 12th grade, and then expanded to teachers in other subject areas. As teachers received 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 represented Levels 1 and 2 of an integrated model in which the targeted intervention was Level 3. For students assigned to READ 180, SIM-CERT represented a separate model. The whole school intervention was delivered to all of the students in the five participating high schools. As the intervention was phased in, the number of students receiving the intervention increased from approximately 1,400 to 6,700 students. The whole school intervention was implemented for a total of five years.

Evaluation Designs

Targeted Intervention

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?
3. What is the fidelity of implementation of the two targeted interventions in each year of the study?

Impact Study:

Research Design and Methods

The effectiveness of each targeted intervention was tested in 9th grade.² Eligible 9th grade students were randomly assigned to participate in one of the two supplemental programs (READ 180 or Xtreme Reading) or to “business-as-usual,” which consisted of the standard ELA curriculum. Eligible teachers were also randomly assigned to classrooms of either READ 180, Xtreme Reading, or control students. Students in Xtreme Reading also received instruction from ELA teachers trained as part of the whole school intervention (SIM-CERT), which was part of the same model as the targeted intervention. The evaluation was designed so that students in READ 180 and in the control group did not receive instruction from ELA or other content teachers who were trained in the whole school model; the whole school model was phased in over the five 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) were fit to assess the impact of each targeted intervention on student outcomes.

Control Condition

All students in the study received the regular 9th grade English Language Arts curriculum. The interventions were delivered as supplementary classes. The business-as-usual condition for control students consisted of any supplemental support that was normally provided in the district to students struggling in reading, such as tutoring. In the absence of supplemental support, control students participated in other electives during the same class period that the treatment students participated in one of the two targeted interventions.

² 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.

Sample Size

Across the five years of implementation, the evaluation of READ 180 included a total sample of 231 grade 9 treatment students and 225 control students across the five participating high schools. For Xtreme Reading, the evaluation included 223 treatment students and 225 control students across the five participating high schools.

The Year 5 analyses were based on data from all five years of implementation. The sample of students was large enough to detect an impact (in standard deviation units) of READ 180 on reading achievement equivalent to .22 on the standardized test (Stanford Diagnostic Reading Tests – 4th Ed. (SDRT-4)) for grade 9.³ For Xtreme Reading, the sample of students was large enough to detect an impact (in standard deviation units) on reading achievement equivalent to .23 on the SDRT-4 for grade 9.

Key Measures of Student Reading Outcomes (Source)

Stanford Diagnostic Reading Test, 4th Edition (External Test Publisher)

Implementation Study:

Research Design and Methods

The fidelity of implementation of each of the targeted intervention models was studied in the five treatment schools for all five years of implementation. In each year, the study assessed the fidelity of implementation of the *professional development model* and the *classroom instruction model*. For each model, fidelity was defined as the extent to which the actual level of implementation measured during the study was consistent with the model as planned. Fidelity of implementation of the professional development model was rated as adequate or not, based on the level of participation of teachers in the training activities that were offered by the developers and the district.⁴ Fidelity of implementation of the *classroom model* also was rated as adequate or not, based on the extent to which the classroom instruction matched the definition of the key components of the model that were identified by the developers.⁵

Whole School Intervention

Research Questions:

1. To what extent is the whole-school model (SIM-CERT) associated with improvements in students' reading proficiency over time?
2. What is the fidelity of implementation of the whole-school model?

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 percent power, and with an alpha level of .05, and accounts for clustering and for the inclusion of the covariates in the model.

⁴ The definition of fidelity of implementation of the professional development models for the READ 180 and Xtreme Reading targeted interventions can be found on the website for the U.S. Department of Education, Office of Elementary and Secondary Education in the cross-site summary tables for the 2006-2011 cohort (*Summary of 2006 Striving Readers Projects. Implementation and Evaluation of Targeted Interventions for Struggling readers and Whole School Interventions for All Readers: Years 1 – 5*), Table 3.

⁵ The definition of fidelity of implementation of the classroom model for the READ 180 and Xtreme Reading targeted interventions can be found on the website for the U.S. Department of Education, Office of Elementary and Secondary Education in the cross-site summary tables for the 2006-2011 cohort (*Summary of 2006 Striving Readers Projects. Implementation and Evaluation of Targeted Interventions for Struggling readers and Whole School Interventions for All Readers: Years 1 – 5*), Table 4.

Impact Study:

Research Design and Methods

An interrupted time series analysis was used to compare pre-program student achievement scores with post-program student achievement scores. The analysis included five treatment schools and six comparison schools from four districts selected as comparable to the treatment districts on baseline prior performance on the outcome measure (MCAS: ELA, state reading test) and on student demographic characteristics. Five years of baseline (2001-02 to 2005-06) and four years of implementation (2006-07 to 2009-10) were included in the analysis, which is reported in the Year 5 evaluation report. As the whole-school model was phased in, students in the classrooms of trained teachers received instruction using this model. Therefore, variation in the timing of the whole school model (SIM-CERT) implementation was used to identify pre- versus post-differences in student outcomes across the different schools. The outcome analysis was conducted with four successive cohorts of treatment and comparison 10th graders, using schools as the unit of analysis.

Comparison Group

Schools in four comparison districts served as the comparison group for the whole school analysis.

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). In each of the school years included in the interrupted time series, the analysis is based on the 10th grade scores for all students who were in the study in 9th grade in the five participating schools.

Key Measures of Student Reading Outcomes (Source)

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

Implementation Study:

Research Design and Methods

The fidelity of implementation of the SIM-CERT whole school intervention models was studied in the five treatment schools for all five years of implementation. In each year, the study assessed the fidelity of implementation of the *professional development model* and the *classroom instruction model*. For each model, fidelity was defined as the extent to which the actual level of implementation measured during the study was consistent with the model as planned. Fidelity of implementation of the professional development model was rated as adequate or not, based on the level of participation of teachers in the training activities that were offered by the developers and the district.⁶ Fidelity of implementation of the *classroom model* also was rated as adequate or

⁶ The definition of fidelity of implementation of the professional development models for the SIM-CERT whole school intervention can be found on the website for the U.S. Department of Education, Office of Elementary and Secondary Education in the cross-site summary tables for the 2006-2011 cohort (*Summary of 2006 Striving Readers Projects. Implementation and Evaluation of Targeted Interventions for Struggling readers and Whole School Interventions for All Readers: Years 1 – 5*), Table 14.

not, based on the extent to which the classroom instruction matched the definition of the key components of the model that were identified by the developers.⁷

Evaluation Findings: Targeted Intervention

Level of Implementation of the Targeted Intervention Model

For READ 180, on fidelity of implementation of the *professional development model*, in Year 1 of implementation, 33 percent of teachers had an adequate level of participation and another 33 percent had a moderate level of implementation. In Years 2, 3 and 4, all teachers participated at either an adequate level or a moderate level. In Year 2, 40 percent of teachers participated at an adequate level and 60 percent at a moderate level; in Year 3, 80 percent participated at an adequate level and 20 percent at a moderate level; and, in Year 4, 75 percent participated at an adequate level and 25 percent at a moderate level. In Year 1, no READ 180 teachers received an adequate level of *coaching support*. However, in Year 2, 40 percent of teachers received an adequate amount of coaching, and in Years 3 and 4, 100 percent of teachers received coaching at an adequate level. In Year 5, no additional professional development was offered, since there were no new teachers.

For READ 180, fidelity of implementation of the *classroom model* was rated based on a combination of classroom observations and staff surveys. In Year 1, 67 percent of the teachers were rated at adequate level of fidelity and 33 percent of teachers at a moderate level. In Year 2, 80 percent of teachers were rated as adequate and 20 percent as moderate. In Year 3, 20 percent of teachers were rated as having an adequate level of fidelity of implementation and 60 percent at moderate. In Year 4, 40 percent of teachers were rated as being at an adequate level of fidelity of implementation and 60 percent were rated as being at a moderate level. In Year 5, 80 percent of teachers were rated as being at an adequate level of fidelity of implementation and 0 percent were rated as being at a moderate level.

For READ 180, an overall fidelity score was computed in Years 4 and 5, which combined ratings for inputs, materials and technology, and classroom organization, structure and content. In Year 4, 100 percent of teachers had an adequate level of overall implementation. In Year 5, 80 percent of teachers had an adequate level of implementation, and 20 percent of teachers had a moderate level.

For Xtreme Reading, on fidelity of implementation of the *professional development model*, in Year 1 of implementation, 40 percent of teachers had an adequate level of participation and another 40 percent had a moderate level of implementation. In Year 2, 80 percent of teachers were rated as adequate, and in Year 3, 100 percent were adequate. Fidelity of implementation of professional development was not rated for Year 4, since no additional training was provided to teachers in that year. For fidelity of implementation of *coaching support*, 67 percent of teachers had adequate levels of participation in Year 1. This rose to 80 percent in Year 2 and 100 percent

⁷ The definition of fidelity of implementation of the classroom model for the SIM-CERT whole school intervention can be found on the website for the U.S. Department of Education, Office of Elementary and Secondary Education in the cross-site summary tables for the 2006-2011 cohort (*Summary of 2006 Striving Readers Projects. Implementation and Evaluation of Targeted Interventions for Struggling readers and Whole School Interventions for All Readers: Years 1 – 5*), Table 4.

in Year 3. In Years 4 and 5, fidelity of implementation was not calculated for coaching support, since coaching was provided on an as needed basis and was not required for teachers in those years. On fidelity of implementation of the *classroom model*, in Year 1, 60 percent of the teachers were rated as having reached an adequate level of fidelity and 20 percent of teachers as having reached a moderate level of implementation. In Year 2, 0 percent of teachers were rated as adequate and 40 percent as moderate. In Years 3 and 4, the numbers increased, with 40 percent of teachers at an adequate level of implementation and 40 percent at a moderate level. In Year 5, 20 percent of teachers reached an adequate level of implementation and 80 percent reached a moderate level.

For Xtreme Reading, an overall fidelity score was computed in Years 4 and 5, which combined ratings for inputs, materials and technology, and classroom organization, structure and content. In Year 4, 100 percent of teachers had an adequate level of overall implementation. In Year 5, 80 percent of teachers had an adequate level of implementation, and 20 percent of teachers had a moderate level.

Impact of the Targeted Intervention Model

After one year of implementation, READ 180 had statistically significant impacts on students reading scores at the end of grade 9. The effect size was .06. Xtreme Reading had no statistically significant impacts on student reading scores at the end of grade 9 after one year of implementation. The effect size was .00.

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

Strengths:

- The analysis of the impacts of one year of READ 180 or Xtreme Reading on reading achievement (SDRT-4) meets What Works Clearinghouse (WWC) evidence standards. Analyses that meet WWC evidence standards make us the most confident that the estimated effect is due solely to the intervention alone, and not to the many other factors that are at play in schools and in the lives of students, such as teachers, school, and family.
- 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 that students received the intervention after being randomized to the control condition. Schools were allowed to exclude students from the study sample after random assignment (reasons include conflicts with IEPs, insufficient English language skills, high grade histories or high state test scores in the prior year).
- There is no evidence that other factors (e.g., other reading programs or district policies) were implemented in ways that would have undermined the evaluators' ability to attribute impacts to Read180 or Xtreme Reading.

- The reading test used as outcome measure, the SDRT-4, assesses 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 had more experience taking the test than did the control group students, or that the test measured skills specific to the intervention, both of which could have undermined confidence in the impact estimates.
- 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. This was true for both the Read 180 analysis sample and the Xtreme Reading analysis sample.
- While some students were unable to participate in follow-up data collection, the level of attrition did not differ substantially across the treatment and control groups. This suggested that the integrity of the original randomized design was preserved, and that treatment and control groups continued to be statistically equivalent on all measured and unmeasured characteristics at follow-up.
 - For the test of the impact of Xtreme Reading, while some students were unable to participate in follow-up data collection (31 percent), the level of attrition did not differ substantially across the treatment and control groups (2.1 percent). This suggested that the integrity of the original randomized design was preserved, and that treatment and control groups continued to be statistically equivalent on all measured and unmeasured characteristics at follow-up. This amount of attrition is within the acceptable range established by WWC standards.⁸
 - For the test of the impact of READ 180, while some students were unable to participate in follow-up data collection (31.3 percent), the level of attrition did not differ across treatment and control groups (1.4 percent). This suggested that the integrity of the original randomized design was preserved, and that treatment and control groups continued to be statistically equivalent on all measured and unmeasured characteristics at follow-up. This amount of attrition is within the acceptable range established by WWC standards.
- 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:

- None.

⁸ For more information, please see Appendix A-Assessing Attrition Bias, of the WWC Procedures and Standards Handbook, available at: <http://ies.ed.gov/ncee/wwc/help/idocviewer/Doc.aspx?docId=19&tocId=7>.

Evaluation Findings: Whole School Intervention _____

Level of Implementation of the Whole School Intervention Model

Fidelity of implementation of the *professional development model* was studied in Years 1-4 only. In Year 1 of implementation, nearly all of the teachers who were designated to be trained (92 percent) attended the initial training, and 35 percent participated at an adequate level 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 percent) and ongoing training (24 percent). Among teachers in their second year of implementation, 65 percent participated in the follow-up training. Starting in Year 3, there was a new schedule for the initial training of teachers. In Year 3, 25 percent of new teachers and 75 percent of returning teachers participated at an adequate level. In Year 4, 24 percent of new teachers and 54 percent of returning teachers participated at an adequate level.

The fidelity of implementation of the *classroom model* was not calculated in Year 1. In Year 2, 79 percent of teachers met the minimum requirements for fidelity and three-quarters of these teachers exceeded the minimum requirements. In Year 3, 81 percent of teachers met minimum usage requirements and three-quarters of these teachers exceeded the minimum requirements. In Year 4, 73 percent of teachers met minimum usage requirements and 70 percent of these teachers exceeded the minimum requirements.

Impact of the Whole School Intervention Model

SIM-CERT had no statistically significant impacts on student reading scores at the end of grade 10. Scores on the state reading test increased in both the treatment and the comparison schools before and after the treatment years, the increase was not significantly different for the two groups of schools. Nor was there a significant treatment effect on the growth in scores in the treatment years.

Summary of the Strengths and Weaknesses of the Impact Evaluation of the Whole School Intervention

Strengths:

- The evaluation employed the ELA test given as part of the MCAS state assessment system. It assesses reading achievement, and was developed by the state. There is no reason to believe that students exposed to the whole school intervention group has more experience taking the test than did the students attending the same schools in the years prior to implementation, or that the test measured skills specific to the intervention, both of which could undermine confidence in the impact estimates.
- When estimating impacts, appropriate steps were taken to account for having scores from the same schools for multiple school years. An interrupted time series compared school-level measures of student achievement for five years prior to the implementation of the program and for four years after program implementation.

- A comparison group was used in the analysis; impacts of the whole-school program were estimated by comparing school-level measures of student achievement in five Striving Readers schools to achievement in six comparison schools. Inclusion of the comparison schools in the analysis helped control for unobservable factors that may have provided alternative explanations for observed effects.

Weaknesses:

- The impact of the whole school intervention for struggling readers could not be estimated independently from the targeted intervention because eligible students in the treatment schools also received the targeted intervention.

Sustainability of the Striving Readers Interventions _____

In summer of 2011, Striving Readers grantees were interviewed about their plans for implementing the targeted and whole school interventions in the 2011-12 school year, after the grant period had ended. The responses are summarized here.

Targeted Intervention

- Both of the participating school districts continued to implement the targeted interventions in their 9th grades in the school year after the Striving Readers project ended. One district only continued with READ 180, while the other district continued to implement both of the targeted interventions.
- One district continued to implement READ 180 but not Xtreme Reading. This decision was based on the fact that the evaluation of the targeted interventions showed impacts only for READ 180.
- The second district continued to implement both READ 180 and Xtreme Reading.
- Based on the availability of carryover funding from the Striving Readers grant, the district that implemented READ 180 was able to provide teachers with the same types and level of support from the district and the developer through the first semester of the 2011-12 school year. This included intensive training of the district literacy coaches. In the second semester, the district no longer purchased support from the developer, but the trained literacy coaches continued to function in their same roles with teachers, at least for the remainder of the 2011-12 school year.
- In the district that implemented both of the targeted interventions, there was no additional funding for teacher training. The teachers who remained in the schools and that had been trained on one of the interventions continued to implement the interventions.

Whole School Intervention

- Both of the participating school districts continued to implement the whole school intervention in their high schools in the school year after the Striving Readers project ended.
- Neither district provided additional professional development to new or returning teachers.

- One district used carry-over funds from the Striving Readers project to support a consultant to work with teachers in the high schools on content enhancement (the primary focus of the whole school intervention).
- The second district funded one literacy coach to support teachers in both of the district's high schools in using the whole school intervention.