

ACCOUNTABILITY REVIEW COUNCIL

Report to the School Reform Commission

**Promoting the Science of Reading Instruction in Philadelphia Public Elementary Schools:
Early Implementation Lessons**

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Accountability Review Council

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Executive Summary

Introduction

In fall of 2001, the Commonwealth of Pennsylvania asserted its intention to take control of the School District of Philadelphia (SDP) to improve management and academic achievement. To avert the perception of a “hostile” takeover of SDP, the Governor of Pennsylvania and the Mayor of Philadelphia entered into a unique partnership to jointly manage SDP. The reform legislation enacted by the Commonwealth created the five-member School Reform Commission (SRC) and also mandated the establishment of an “independent assessment and reporting center” to evaluate the outcomes of the district’s reform efforts. The statutory obligation to establish an assessment and reporting center was fulfilled by SRC when it created the Accountability Review Council (ARC), an independent entity composed of national experts charged with monitoring the District’s reform efforts.

Over the last decade, the Accountability Review Council (ARC) has served as an independent entity that assesses key reform initiatives and their impact on student achievement in the School District of Philadelphia (SDP). The ARC summarizes its findings and recommendations in an annual report to the School Reform Commission (SRC). All ARC reports are available to the public on the SDP website. This ARC report focuses on the initial implementation of instructional strategies in reading as stated in Action Plan 3.0’s Anchor Goal 2 during 2015-16.

Strong Commitment on the Science of Teaching Reading

The School District of Philadelphia and the City of Philadelphia share a unified vision on literacy in the early elementary grades. This vision of reading improvement is unprecedented in the history of education reform in Philadelphia. Philadelphia has adopted a “collective impact” approach, where cross-sector partners are committed, over a sustaining period of time, to foster measurable improvement on a key communitywide challenge such as reading (Kania and Kramer 2011).

The district’s commitment to implementing research-based, highly effective reading instructional practices constitutes a significant shift in reading instruction. In 2014, the Philadelphia Grade Level Reading (GLR) campaign and the School District of Philadelphia “developed a working operational agreement” that established a shared agenda and a system of assessment of reading instructional strategies (READ! By 4th, 2014: 23).

Further, the District’s reading initiative is grounded in the five pillars of evidence-based reading instruction as recommended by the National Reading Panel (NRP) in 2000. These pillars are the essential components of teaching and learning to read. They form the basis for improving teachers’ knowledge and skills in the science of teaching reading.

The five core components or pillars, identified by the NRP are phonics, phonemic awareness, fluency, vocabulary, and comprehension. The District incorporates these key components and several evidence-based instructional strategies into a broader literacy framework for pre-K to grade 5 (School District of Philadelphia 2016).

To be sure, there is urgency in addressing reading needs. According to the 2014 Philadelphia Community Solutions Action Plan, only 46% of all third graders in District schools were reading on grade level in 2012. Proficiency level was lower for Black and Latino third-graders, where only 39% and 38% respectively were reading on grade level in 2012.

Beginning in the summer of 2015, the School District of Philadelphia has launched four major efforts to support high quality, evidence-based reading instruction in kindergarten through third grade: (1) summer literacy workshop on the science of reading instruction for elementary school faculty and administrators; (2) school-based literacy coaches to provide ongoing professional support to teachers on reading instruction; (3) district-wide commitment to using a highly regarded tool for teaching phonics; and (4) commitment to using a highly regarded assessment tool to facilitate individualized instruction/intervention. This ARC report examines the early implementation of these 4 components of the early literacy program during 2015-16.

Because 2015-16 was the initial implementation year, ARC does not see student reading achievement as a useful measure for understanding the program effects. A more meaningful time frame for an outcome assessment is 2018-19, when kindergarteners in 2015-16 become third-graders. The 2015-16 cohort of kindergarteners will have gone through the instructional program in each of the early elementary grades. A full and thorough examination of the PSSA third-grade reading performance in 2018-19 will allow us to learn about the effects of the full treatment of the science of reading instruction on students since kindergarten.

Early Implementation Process: Promising with Mixed Progress toward Comprehensive Literacy Framework

This ARC report uses responses from three surveys to examine the progress in early implementation on the 14 key elements and strategies as specified in the District's *Comprehensive Literacy Framework*. The three surveys are pre-post surveys from the summer institute to show changes in participants' knowledge (see Appendices 2 & 3), survey responses from ELS coaches after one semester of being placed in schools to show perception of their confidence in teacher support activities (see Appendix 4), and survey responses from teachers after one semester of working with ELS coaches to show perception of their confidence and success in instructional practices (see Appendices 5, 6, 7, & 8). Appendix 1 provides the methodology used to analyze the surveys. To assess the degree of implementation, this ARC report examines survey responses on key elements of the science of reading instruction in 2015-16.

Overall, responses from the three surveys showed clear progress in six areas of instructional practices during early implementation:

- Vocabulary
- Read Aloud
- Guided Reading
- Independent Reading
- Organizing the Literacy Block
- Administration of AIMSweb Assessment (based on SDP data on percentage of students taking AIMSweb Assessment in the first cohort schools)

Further, survey responses suggested *mixed progress* in three areas during early implementation:

- Phonics
- Reader's Workshop
- English Language Learners

The survey responses showed a general *lack of progress* in the three areas during early implementation:

- Fluency
- Supporting the Literacy Block
- Assessment

There was insufficient survey data to allow for the implementation analysis in the areas below during early implementation:

- Phonemic Awareness
- Comprehension
- Shared Reading

Recommendations

Since 2015-16 is the first full academic year that engaged SDP literacy support activities, it should be considered as the baseline year for measuring the effects of literacy reform. Even at this early phase, ARC found promising results. Clearly, teachers who participated in the summer institute showed an increase in early literacy knowledge. Both new and veteran teachers gained knowledge on the science of reading instruction. Further, the ELS coaches provided appropriate support for teachers in building their skills and knowledge on evidence-based literacy instruction. Administering AIMSweb assessments across a high percentage of classrooms in the first cohort schools, teachers had the opportunity to build a database to track and facilitate individualized reading intervention for students.

Based on the findings during the initial implementation phase, ARC offers several recommendations:

First, based on an analysis of several surveys, this ARC report found that the early implementation process was uneven across key elements in the science of reading instruction, as specified in the District's *Comprehensive Literacy Framework* for Pre-K to Grade 5. Clearly, the District should continue to broaden its progress in the 6 areas showing clear progress, including Vocabulary, Read Aloud, Guided Reading, Independent Reading, Organizing the Literacy Block, and the administration of the AIMSweb Assessment. The District should accelerate its support and ensure high quality training efforts in areas that showed mixed progress or lack of progress, including Phonics, Reader's Workshop, English Language Learners, Fluency, Supporting the Literacy Block, and Assessment. ARC also recommends the District to fully track areas that were not included in the 2015-16 surveys, including Phonemic Awareness, Comprehension, and Shared Reading.

Second, with its high degree of AIMSWeb assessment administration, the District seemed ready to improve the alignment of phonics instruction and other instructional strategies to the reading needs of individual students. ARC recommends the District to facilitate a high degree of phonics/assessment alignment across all the schools as the literacy initiative continues.

Third, ARC found that teachers in kindergarten and first-grade showed a higher level of perceived success in their classroom practices with the support of their ELS coaches. Teachers in second-grade and higher were less confident with their instructional practices. In light of this potential instructional gap across grade levels, ARC recommends SDP to identify supportive strategies for teachers in second- and third-grades. In this regard, assistant superintendents may be in a position to play an instrumental role in setting a clear priority in promoting the literacy initiative across grades and across schools. For example, they may provide additional support for teachers using high quality tools to teach Phonics successfully. Assistant superintendents can continue to strengthen principal accountability on Anchor Goal 2 as well as ensuring that resources are strategically targeted to support the implementation of the District's *Comprehensive Literacy Framework for Pre-K to Grade 5*.

Fourth, ARC found that teachers who had daily, weekly, or bi-weekly interaction with coaches mentioned a high level of instructional successes. In contrast, teachers who had monthly or infrequent interaction with coaches showed a much lower level of reported instructional successes, suggesting the need for the SDP to make sure that coaches engage in regular interaction with teachers.

Fifth, the Office of Research and Evaluation (ORE) is playing a key role in providing evaluation findings to support the implementation of the literacy initiative. In this regard, it is important for ORE to continue to track implementation practices at the school and classroom levels. For example, this report shows uneven gains in knowledge and skills based on the pre-post surveys of the summer institute. Using the data on skills and knowledge gap, the ORE can more closely support the work of the Office of Curriculum, Instruction, and Assessment as well as the Office of Early Learning. Equally important, ORE needs to monitor the implementation progress (or lack thereof) on each of the key programmatic components that drive the theory of action, including the instructional focus on Phonics, the use of leveled libraries, and scheduled literacy block.

Finally, in light of the strong district commitment to the science of reading instruction and early implementation lessons we identified in this report, ARC recommends SDP to stay the course. ARC encourages SDP to continue to invest in ELS coaches and other strategies that build the instructional capacity of teachers to fully implement the early literacy initiative. Strong implementation fidelity will contribute to measureable improvement in early literacy performance.

Promoting the Science of Reading Instruction in Philadelphia Public Elementary Schools: Early Implementation Lessons

Introduction

In fall of 2001, the Commonwealth of Pennsylvania asserted its intention to take control of the School District of Philadelphia (SDP) to improve management and academic achievement. To avert the perception of a “hostile” takeover of SDP, the Governor of Pennsylvania and the Mayor of Philadelphia entered into a unique partnership to jointly manage SDP. The reform legislation enacted by the Commonwealth created the five-member School Reform Commission (SRC) and also mandated the establishment of an “independent assessment and reporting center” to evaluate the outcomes of the district’s reform efforts. The statutory obligation to establish an assessment and reporting center was fulfilled by SRC when it created the Accountability Review Council (ARC), an independent entity composed of national experts charged with monitoring the District’s reform efforts.

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A Citywide Vision on Reading Instruction

Building Citywide Commitment to Improve Reading in Early Elementary Grades

The School District of Philadelphia and the City of Philadelphia share a unified vision on literacy in the early elementary grades. This vision of reading improvement is unprecedented in the history of education reform in Philadelphia. Philadelphia has adopted a “collective impact” approach, where cross-sector partners are committed, over a sustaining period of time, to foster measurable improvement on a key communitywide challenge such as reading (Kania and Kramer 2011).

The broad-based commitment to reading is a result of several developments in recent years. In 2010 the Annie E. Casey Foundation launched a nationwide campaign for Grade-Level Reading (GLR) (Annie E. Casey Foundation 2010). The ongoing GLR campaign is motivated by research that shows reading proficiency by the end of third grade is a strong predictor for success in high school and a future career. Yet research shows that 4 out of 5 low-income children are not proficient readers by 4th grade. The campaign aims at engaging broad based community-wide support to significantly increase the number of proficient readers in the elementary grade across states and communities. The campaign’s Network Communities Support Center supports

communities and states to address issues of school readiness, attendance, and summer learning loss. The initial campaign period involved over 140 communities, then Mayor Michael Nutter and Superintendent William Hite, Jr. formally announced the Philadelphia GLR campaign in December 2013.

An outcome of the Philadelphia GLR campaign was the development of Community Solutions Action Plans (CSAPs) where local stakeholders collaborated on comprehensive strategies to address the challenge of reading gap. Since 2014, the School District of Philadelphia (SDP) and over 100 local stakeholders, co-led by Public Citizens for Children and Youth (PCCY) and Urban Affairs Coalition (UAC) have not only embraced the GLR campaign but also took significant steps to foster actions to address the reading gap; they are able to collaborate on a vision of reading improvement for the elementary grades. Included among the broad range of committed stakeholders are Philanthropy Network Greater Philadelphia, Independence Blue Cross Foundation, United Way, Philadelphia School Partnership, Archdiocese of Philadelphia, YMCA, Philadelphia Federation of Teachers, Clear Channel, Free Library of Philadelphia, Black Alliance for Educational Options, and the Mayor’s Office for Education. Since 2014, the Philadelphia GLR campaign has been successful in engaging cross-sector stakeholders in five core initiatives, including early learning, family engagement, summer learning, school attendance, and instructional strategy (READ! By 4th, 2014).

To reach its goal of 100% of 3rd grade students reading at grade-level, SDP has focused on two sets of policy strategies. First, SDP focuses on the “implementation of research-based highly effective instructional practices” (SDP Action Plan 3.0, p.20, footnote 26). Second, progress is monitored by two outcome measures: (1) Percentage of K-2 students reading at target level; and (2) percentage of 3rd graders reading at the proficient or advanced levels of the PSSA (SDP Action Plan 3.0, p. 41).

Strong District Commitment on the Science of Teaching Reading

The district’s commitment to implementing research-based, highly effective instructional practices constitutes a significant shift in reading instruction. In 2014, the Philadelphia GLR campaign and the School District of Philadelphia “developed a working operational agreement” that established a shared agenda and a system of assessment on reading instructional strategies (READ! By 4th, 2014: 23).

This unified vision formally introduces the science of teaching reading to all elementary schools in SDP. Goal II of the Philadelphia Community Solutions Action Plan (CSAP) focuses on Evidence-Based Instruction for All Readers (READ! By 4th, 2014: 15): “Quality, evidence-based instruction in reading is the heart of Philadelphia’s strategy . . . the Philadelphia Coalition articulated a strategy for institutionalizing and investing in instructional practices based on *the science of reading instruction* and that teach all students to read.” Goal II further identifies several strategies (READ! By 4th, 2014: 15):

- Identify and standardize across schools a research-based practice and program of reading instruction that teaches all students how to read.
- Identify and standardize across schools a model of professional training and coaching to implement and sustain designated practices.

- Populate the professional pipeline with teachers and principals who are educated in the theory and practice strategies adopted.
- Target investment and resources to schools and personnel that implement reading instruction practices effectively and with fidelity.

Further, the District’s reading initiative is grounded in the five pillars of evidence-based reading instruction as recommended by the National Reading Panel (2000). These pillars are designed to improve teachers’ knowledge and practice in the science of teaching reading. Research conducted by the National Reading Panel has identified five core components or pillars, including phonics, phonemic awareness, fluency, vocabulary, and comprehension. The District incorporates these key components and several evidence-based instructional strategies into a broader literacy framework for pre-K to grade 5 (School District of Philadelphia 2016).

To be sure, there is urgency in addressing reading needs. According to the 2014 Philadelphia Community Solutions Action Plan, only 46% of all third graders in District schools were reading on grade level in 2012. Proficiency level was lower for Black and Latino third-graders, where only 39% and 38% respectively were reading on grade level in 2012.

Beginning in the summer of 2015, the School District of Philadelphia has launched four major efforts to support high quality, evidence-based reading instruction in kindergarten through third grade: (1) summer literacy workshop on the science of reading instruction for elementary school faculty and administrators; (2) school-based literacy coaches to provide ongoing professional support to teachers on reading instruction; (3) district-wide commitment to using a highly regarded tool for teaching phonics; and (4) commitment to using a highly regarded assessment tool to facilitate individualized instruction/intervention. This ARC report examines the early implementation of these 4 components of the early literacy program during 2015-16.

Objectives of the ARC Report

This ARC report examines the early implementation of the SDP early literacy efforts in 58 schools during 2015-16. Early Literacy Specialist (ELS) coaches were assigned to the 58 schools. Further, teachers from 40 of the 58 schools attended a weeklong Summer Institute for professional training in the science of reading in July 2015.

Taking into consideration the early phase of the SDP initiative, this report examines a key question: To what extent was the SDP early literacy initiative implemented during 2015-16? More specifically:

- What were the teachers’ responses at the school and classroom levels?
- How effective were the Early Literacy Summer Institute and the Early Literacy Specialist (ELS) coaches?
- Did teachers gain knowledge and build professional confidence in evidence-based instructional practices?

This ARC report draws from several sources of data. Regarding the implementation process, the SDP Office of Research and Evaluation (ORE) has conducted pre- and post- summer workshop surveys with participating teachers. The district also surveyed all the Early Literacy Specialist (ELS) coaches. Of the 58 ELS coaches, 52 completed the survey. ORE also conducted focus groups and interviewed 24 K-3 teachers on the effectiveness of ELS in 5 ELS schools during 2015-16. In addition, ORE conducted mid-year teacher surveys.

Early Implementation Process: Promising with Mixed Progress toward Comprehensive Literacy Framework

The School District of Philadelphia's *Comprehensive Literacy Framework for Pre-K to Grade 5* (2016) has identified 14 key elements and strategies in the science of reading instruction. Among the key elements include:

- **Phonemic Awareness** – The ability to hear, identify and manipulate the phonemes, which is the smallest unit of sound in spoken words.
- **Phonics** – Phonics teaches the knowledge that phonemes correspond to graphemes (the alphabetic principle).
- **Fluency** – The ability to read text with speed, accuracy, and expression, effortlessly.
- **Vocabulary** – Good vocabulary instruction helps children gain ownership of words.
- **Comprehension** –The active process of constructing meaning from text.
- **Reader's Workshop** – Applying appropriate strategies to support literacy.
- **Read Aloud** – The teacher is the only one holding the text. The teacher selects an engaging text that is above the reading level of most students in class and models fluent reading with expression.
- **Shared Reading** –The teacher provides explicit instruction in a reading concept, a decoding skill or a comprehension strategy, and demonstrates how readers use and apply the concept, skill or strategy.
- **Guided Reading** – Teachers select a text that is challenging, but within students' skill range, and introduces the text by previewing the content to support comprehension, introducing new and interesting vocabulary and setting a purpose for the reading. Each student reads the text selection on his/her own.
- **Independent Reading** – Students spend time each day quietly reading books they select to read.
- **English Language Learners** – Support students whose primary or home language is not English.
- **Organizing the Literacy Block** –Teachers provide purposeful, worthwhile reading experiences for all students in the class, including the social environment, the physical environment, and establishing routines.
- **Supporting the Literacy Block (MTSS/RtII)** –_An early intervening support process where the goal is to improve student achievement using research base interventions/programs matched to the instructional need and level of the student.
- **Assessment** – The systematic collection and synthesis of data used to inform instruction and document learning and growth. Early childhood educators must use both informal and formal assessments to understand children's progress.

This ARC reports uses responses from three surveys to examine the progress in early implementation on the 14 key elements and strategies as specified in the District's *Comprehensive Literacy Framework*. The three surveys are: pre-post surveys from the summer institute to show changes in participants' knowledge (see Appendices 2 & 3), survey responses from ELS coaches after one semester of being placed in schools to show perception of their confidence in teacher support activities (see Appendix 4), and survey responses from teachers after one semester of working with ELS coaches to show perception of their confidence and success in instructional practices (see Appendices 5, 6, 7, & 8). Appendix 1 provides the methodology used to analyze the surveys. This ARC report relies on positive survey responses to items pertaining to the key instructional strategies to assess the degree of progress made in the early implementation of the science of reading instruction in 2015-16.

Overall, responses from the three surveys showed *clear progress* in six areas of instructional practices during early implementation:

- Vocabulary
- Read Aloud
- Guided Reading
- Independent Reading
- Organizing the Literacy Block
- Administration of AIMSweb Assessment (based on SDP data on percentage of students taking AIMSweb Assessment in the first cohort schools)

Further, survey responses suggested *mixed progress* in three areas during early implementation:

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- Fluency
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- Assessment

There was insufficient survey data to allow for the implementation analysis in the areas below during early implementation:

- Phonemic Awareness
- Comprehension
- Shared Reading

To be sure, the District has continued to gather data on the implementation process in its literacy initiatives. However, much of this data was designed for internal administrative use and was not organized for research analysis. Consequently, this ARC report primarily relies on the surveys in developing our overall assessment of early implementation of each of the key instructional strategies during 2015-16:

Phonics. Pre- and Post-survey results indicated that summer institute participants had significant gains in knowledge in the definition of phonics (gains = 15.09%, $p < 0.001$). However, there was no significant change in correctly identifying the syllable form of “rain” and “cow.” When disaggregated by teaching experience, teachers in their first year of teaching (gains = 35.65%, $p = 0.008$), and teachers in their eighth or ninth year of teaching (gains = 51.97%, $p = 0.001$) showed significant gains. Other teachers who had different teaching experience did not show significant gain in knowledge in phonics.

Following the placement of ELS coaches in schools, teachers responded positively in their perception in small and whole group phonics instruction. Fifty-seven percent agreed or strongly agreed that they were successful with small group instruction because of working with their ELS coach, and 59% felt successful with whole group phonic instruction. When disaggregated by teaching level, kindergarten teachers reported the most success (small group = 86%, whole group = 79%), and second grade teachers felt the least successful (small group = 58%, whole group = 61%).

Vocabulary. Coaches responded positively in their confidence in supporting teachers in vocabulary, specifically vocabulary development and word wall instructional practices. Seventy-nine percent of coaches agreed or strongly agreed that they had confidence in supporting teachers in vocabulary development, and 81% felt confident in supporting word wall instruction.

Further, teachers reported growing confident about their abilities in vocabulary development and word wall instructional practices after working with an ELS coaches. Seventy-seven percent felt more confidence in their ability in implementing vocabulary development, and 81% reported more confident in their ability in implementing word walls.

Fluency. The pre- and post-survey of summer institute participants showed a slight decline in their understanding of the definition of fluency from 96.32% to 92.45%, however this change was not statistically significant ($p = 0.060$).

Reader’s Workshops. Overall, there was no significant change in knowledge of the five essential components of effective reading. However, when disaggregated by teaching experience, teachers in their second or third year of teaching showed a significant gain (gains = 20.08%, $p = 0.023$). There was no significant change in the knowledge of critical thinking with stories.

Fifty-eight percent of the coaches agreed or strongly agreed in their ability to support teachers in reader’s workshops. Likewise, 66% of teachers reported growing confidence in their instructional practices in reader’s workshops after working with ELS coaches, but only 48% of all teachers felt they were more successful in reader’s workshops.

Third grade teachers felt the most success. Sixty-three percent agreed or strongly agreed that they were more successful in their reader’s workshop instructional practices after working with ELS coaches, whereas only 52% of second-grade teachers felt successful.

Read Aloud. Participants at the summer institute showed a significant gain in knowledge about intentional read aloud instructional practices (gains = 14.72%, $p < 0.001$). When disaggregated

by teaching experience, teachers in their 6th or 7th years of teaching showed significantly higher level of gains in knowledge (gains = 29.41%, $p = 0.006$) when compared to their peers at other grades.

Fifty-eight percent of teachers felt more successful in intentional read aloud practices after working with ELS coaches. First-grade teachers felt the most successful, whereas second-grade teachers felt the least successful.

Guided Reading. Summer participants gained in knowledge on effective strategies during guided reading (gains = 21.89%, $p < 0.001$). When disaggregated by teaching experience, teachers in the first year (gains = 46.30%, $p = 0.001$), second or third year (gains = 27.89%, $p = 0.011$), or had ten or more years (gains = 27.57%, $p < 0.001$) all showed significant gains in knowledge. At the same time, there was no significant change in teachers' knowledge of book introduction instructional knowledge during guided reading.

Of the respondents of the teacher survey, 77% of teachers felt more confident in their abilities in guided reading practices after working with ELS coaches. Furthermore, 60% of teachers felt they were more successful in guided reading practices.

Independent Reading. Teachers in their eighth or ninth year of teaching showed significant gains in knowledge of independent reading levels (gains = 34.87%, $p = 0.027$). Further, 81% of coaches felt confident in supporting teachers with independent reading.

English Language Learners. The summer institute participants showed significant gains of knowledge in the academic language proficiency levels for ELL students (gains 32.83%, $p < 0.001$). In addition, participants showed significant gains in knowledge of years to acquiring academic language (gains = 21.89%, $p < 0.001$). However, when disaggregated by teaching experience, only teachers in the first year of teaching (gains = 32.02%, $p = 0.015$) and those with ten or more years of teaching showed significant gains (gains = 31.21%, $p < 0.001$). Also, there was no significant change in teachers' knowledge of best practices in working with ELL students.

Regarding the definition of academic language proficiency levels for ELL students, the following showed significant gains:

- Teachers in their first year of teaching (gains = 40.28%, $p = 0.003$)
- Teachers in their second or third year of teaching (gains = 47.87%, $p < 0.001$)
- Teachers in their fourth or fifth year of teaching (gains = 32.37%, $p = 0.022$)
- Teachers in their sixth or seventh year of teaching (gains = 50.00%, $p < 0.001$)
- Teachers in their eighth or ninth year of teaching (gains = 52.96%, $p < 0.001$)
- Teachers with ten or more years of teaching (gains = 30.76%, $p < 0.001$)

Further, 50% of coaches felt confident in their ability to support teachers in meeting the needs of ELL students.

Organizing the Literacy Block. For developing a positive classroom culture, 75% of coaches felt confident in their ability to support teachers. Eighty-five percent of teachers felt more

confident in their ability to develop a positive classroom culture because of working with their ELS coach.

Sixty-five percent of teachers felt more successful in classroom culture (such as planning, procedure, teacher and student language, and teacher responsibilities), as well as fostering a literacy environment (such as the physical space of the classroom) because of working with ELS coaches. Additionally, 66% of teachers reported feeling more successful in grouping students for small group reading instruction.

Supporting the Literacy Block (MTSS/RTI). Summer institute participants showed no changes in their knowledge of the RTI intervention tiers.

Assessment. The summer institute asked six knowledge-based questions around assessments, specifically the AIMSweb assessment. Institute participants showed a significant decline in their knowledge of the discontinue rule (declines = 9.06%, $p = 0.014$). There was no significant change in the knowledge of the percentile score of the average student, reading level reflection, and curriculum engine. When disaggregated by teaching experience, only teachers with ten or more years of experience showed significant gains in their knowledge of the components of the assessment (gains = 16.06%, $p = 0.015$) and curriculum engine (gains = 12.79%, $p = 0.009$).

According to the survey, 81% of the coaches felt confident in their abilities to support teachers in using assessment data to inform instruction. Further, after working with ELS coaches, 54% of teachers felt successful in keeping a running record of student assessments, and 58% of teachers felt successful in analyzing student data and work.

Implementation of Summer Institute in 2015: A Key Component of the Early Literacy Initiative

Early Literacy Summer Institute as a Support Strategy

Early Literacy Summer Institute for 40 Cohort 1 schools and 58 Early Literacy Specialist coaches was conducted in one week in July 2015. The 40 schools were selected based on several criteria:

- Either Title I Focus or Title I Priority status
- Higher percentage of 3rd graders performing basic or below basic on the 3rd grade reading Pennsylvania System of School Assessment (PSSA)
- Geographically located to ensure representation from all the SDP learning networks
- At least 65% of K-3 teachers and the principal committed to the institute to foster whole school participation.

The first summer institute in 2015 engaged 40 schools as well as 58 Early Literacy Specialist (ELS) coaches who would be working in 58 first-cohort schools during 2015-16. The second summer cohort of 53 schools started with the 2016 summer literacy workshop. The SDP plans to

involve 61 schools in the 2017 summer workshop as the 3rd cohort. Within a three-year period, the three school cohorts combined account for all the elementary schools in the district. This 3-year reading instructional initiative is estimated at \$30 million. In 2015, the William Penn Foundation and Lenfest Foundation provided a total of \$10 million for the initiative. The District is able to make up the remaining \$20 million from federal funds and other in-kind operational resources.

Over 580 teachers and principals from the 40 schools attended 14 sessions of professional development on literacy instruction during the weeklong institute. The first two sessions introduced teachers to two key foundational skills to support student reading, namely “explicit phonological and phonemic awareness instruction” and “explicit phonics/code instruction.” Literacy coaches led the presentation on these two topics. Coaches were subsequently placed in the schools to provide teachers with ongoing instructional support. Other sessions in the institute focused on “read aloud and shared reading during the literacy block,” “guided reading,” “creating a literacy-rich environment in the classroom,” “independent reading, leveled libraries and fluency,” and the use of AIMSweb assessment to measure student progress.

Training on Science of Reading Instruction

During the summer institute in 2015, participating teachers gained new knowledge in the science of reading instruction. The Office of Research and Evaluation conducted pre- and post-survey and daily participant surveys. Of the 580 participants, almost 80% completed the pre-survey and about 50% completed the post-survey, yielding a matched sample of about 45% of the total participants.

Using the matched sample, this ARC report examines the participants’ gains in their knowledge on early literacy strategies. In several areas, institute participants in the matched sample showed substantial gains in their knowledge following their attendance at the summer institute.

Overall, the participants showed statistically significant gains in the following areas (see Appendices 2 and 3):

- Foundations of Literacy: Definition of phonics
- Instructional Literacy: Independent writing & writer’s workshop
- Instructional Literacy: Intentional read aloud
- Instructional Literacy: Effective strategies during guided reading
- ELL Instruction: Years to acquiring academic language
- ELL Instruction: Academic language proficiency for ELLs

The only knowledge area that the participants showed a statistically significant decline between the pre- and post-scores was AIMSWeb Assessment: Discontinue Rule. The remaining items showed varying degree of changes, but they were not statistically significant.

The summer institute survey also gathered information on the participants’ years of teaching in K-3 literacy. Using responses to this question, this analysis examines the relationship between the gains in knowledge and the number of years teaching K-3 literacy (see Appendix 3).

Pearson's 2x2 Chi-square test was used to analyze the statistical significance of the gains at the 95% confidence level ($p < 0.05$).

First year K-3 literacy teachers showed statistically significant gains in the following areas:

- Definitions of "phonics"
- Effective strategies during guided reading
- Independent & writer's workshop
- Academic language proficiency for ELLs

Teachers with 2-3 years of K-3 literacy teaching experience showed statistically significant gains in the following areas:

- Five essential components of effective reading
- Effective strategies during guided reading
- Independent and writer's workshop
- Academic language proficiency for ELLs

Teachers with 4-5 years of K-3 literacy teaching experience showed statistically significant gains in the following areas:

- Independent & writer's workshop
- Academic language proficiencies for ELLs

Teachers with 6-7 years of K-3 literacy teaching experience showed statistically significant gains in the following areas:

- Intentional read aloud
- Academic language proficiencies for ELLs

Teachers with 8-9 years of K-3 literacy teaching experience showed statistically significant gains in the following areas:

- Definition of "phonics"
- Independent & writer's workshop
- Definition of independent reading level
- Academic language proficiencies for ELLs

Teachers with 10 and more years of K-3 literacy teaching experience showed statistically significant gains in the following areas:

- Effective strategies during guided reading
- Independent & writer's workshop
- Academic language proficiencies for ELLs
- Years to acquire academic language
- Curriculum Engine – Interactive Scope and Sequence
- Components of the AIMSWeb assessment
- Intentional read aloud

Teachers who have never taught K-3 literacy did not make any statistically significant gains.

Overall, the summer institute enhanced the knowledge and skills in the science of reading instruction for both new and veteran teacher.

Early Literacy Specialist (ELS) Coaches as a Strategy of Support

Early Literacy Specialist (ELS) coaches were hired and placed in 58 schools during 2015-16. ELS coaches aimed to:

- Promote evidence-based practices for teaching reading and writing
- Support the implementation of effective literacy practices
- Improve teacher content knowledge, instructional practices, classroom environments and classroom structure

This report examines the ELS coaches' experience in supporting the implementation of the science of reading instruction, based on the survey data from ELS coaches.

Coaches generally had a positive experience working with teachers (see Appendix 4):

- Eighty-one percent of the coaches agreed with or strongly agreed with teachers being open to their coaching.
- Eighty-eight percent of coaches agreed with or strongly agreed that they had a clear understanding of the needs of all the teachers they coached, and 87% agreed with or strongly agreed that they felt confident in their abilities to meet the needs of all the teachers they coached.
- Eighty-eight percent of the coaches agreed or strongly agreed that they have the capacity (time, resources, support, etc.) to meet the needs of all their teachers.
- The only item on teacher interaction that received mixed response from the coaches pertained to teacher resistance. Half of the coaches indicated that teachers were resistant to their professional support.

Further, ELS coaches rated favorably the teacher attendance and quality of professional development activities (see Appendix 4):

- Seventy-five percent of the coaches agreed or strongly agreed that their professional development activities were well attended, based on topics and themes designed to meet the need of their teachers, and scheduled at a time when all teachers could attend.
- At the same time, 60% pointed out that the SDP centrally determined the topics and themes.

Given the SDP investment in ELS coaches, ARC is interested in the professional expertise and experience of the coaches in early literacy. Based on an analysis of the coaches' surveys, this analysis found that coaches who were recruited to support the first cohort schools seemed to show uneven levels of confidence across areas of instructional practices (see Appendix 4):

- Coaches showed a lack of confidence with Message Time Plus: only 12% agreed or strongly agreed that they were confident in their abilities to support teachers.
- Fifty percent of coaches agreed or strongly agreed that they were confident in meeting the needs of ELL students.
- The coaches were a lot more confident in their abilities in guided reading, word wall, independent reading, using assessments to inform instruction, and creating student groups for small group work, with 81% coaches responding positively.

Regarding their perceived professional impact on teachers, three out of four coaches indicated a positive response (see Appendix 4):

- Seventy-nine percent of the coaches agreed or strongly agreed that they have had a positive impact on teachers: teachers know more about literacy instruction, teachers made progress in teacher's professional development in the future, and teachers have made progress in their professional development since ELS coaches were placed in schools.

The coaches perceived positive professional impact was related to their generally favorable rating of their professional preparedness (see Appendix 4):

- Seventy-three percent of the coaches agreed or strongly agreed that they felt prepared to lead/turnaround PD at their school.
- At the same time, coaches wanted to have more opportunities to collaborate with other coaches, as only 67% of coaches agreed or strongly agreed that they have had the opportunities to collaborate with other coaches.
- Further, 67% of coaches agreed or strongly agreed that the trainings they received prepared them for their work, and 69% responded positively that the training was relevant to their work.

Finally, coaches identified several challenges in their work (see Appendix 4):

- 54% of the coaches encountered problems with teacher availability
- 35% of coaches said teacher absences constituted a challenge
- 35% of coaches identified conflicting district policies and guidelines
- About a fourth of the coaches pointed out the challenge of diverse teacher needs, inadequate materials and resources, and a lack of support from the school administration
- At the same time, coaches were clear about their role, with only 6% stating unclear expectations was a challenge
- Finally, coaches felt they had the professional capacity to meet the needs of ELL students, with only 13% mentioned their lack of capacity to meet the needs of ELL students. This response was consistent with a similar item in Table 5 above, which showed that 50% of coaches agreed or strongly agreed that they were confident in meeting the needs of ELL students.

To develop a more complete understanding of the coaches' work, this ARC report draws on the teacher survey data in 2015-16. Teachers were surveyed on their experience with the ELS coaches, including the perceived impact on their instructional practices. The teacher survey focused on the first semester ELS coaches who were placed in the first cohort schools.

Overall, teachers rated somewhat favorably the professional support provided by the ELS coaches during 2015-16. Appendix 5 shows the percentage of teacher respondents who selected a "4" or "5" response (out of the 5-point Likert Scale) in all the survey items across several domains:

- Only 46% of the teachers viewed the coaches' professional development activities as positively or strongly positively impacting on the teachers' work
- Sixty percent of the teachers rated positively ELS coaches' effectiveness
- Sixty-three percent of the teachers rated favorably ELS coaches' knowledge about instructional practices

- Seventy percent of the teachers felt more confidence with their instructional practice in the science of reading instruction
- Fifty-six percent of the teachers believed their classroom practices were successful
- Sixty-six percent of the teachers agreed or strongly agreed that the CLI framework aligned with district and state policies

Further, when disaggregated by grade level, teachers in kindergarten, and to some extent first-grade, seemed to show a higher level of perceived success in their classroom practices (see Appendix 6):

- Eighty-six percent of kindergarten teachers viewed their whole group phonics instruction as successful, as compared to only 61% of the teachers in second-grade on the same practice
- Eighty-four percent and 80% of kindergarten and first-grade teachers respectively rated successful classroom culture, as compared to only 67% of the teachers in third-grade on the same practice
- Seventy-seven percent of kindergarten teachers viewed their practice in analyzing student data and work as successful, as compared to only 60% of the second-grade teachers on the same practice
- It should be noted that teachers across all grades rated less success in using Message Time Plus, with only 28% and 29% first- and third-grade teachers respectively claiming success on this practice.

Not surprisingly, the frequency of one-on-one interaction with ELS coaches affected the degree of instructional success as viewed by the teachers (see Appendix 7):

- Teachers who had no opportunity for one-on-one interaction with ELS coaches mentioned no successful practices
- Teachers who had daily, weekly, or once every two weeks' interaction with coaches mentioned a high level of instructional successes
- In contrast, teachers who had monthly or infrequent interaction with coaches showed much lower levels of reported instructional successes, suggesting the need for the SDP to make sure that coaches engage in regular interaction with teachers

Finally, teachers' reported success in their instructional practices seemed to be correlated to certain strategies used by the ELS coaches (see Appendix 8):

- When coaches provided support to teachers to identify resources to support students' learning, teachers reported a higher level of success in maintaining the literary environment for the classroom, conducting reading and writing workshops, providing guided reading, and implementing whole group and small group phonics instruction
- When coaches supported teachers in creating a literacy rich environment, teachers reported greater success in implementing writing workshops, analyzing student data, and conducting whole group phonics instruction
- When coaches provided feedback from classroom observations, teachers reported greater successful in analyzing student data and work, organizing students for small group reading instruction, and implementing whole group phonics instruction.

High Degree of Administering AIMSweb Assessment

A key feature of the science of reading instruction is to conduct multiple, interim assessments on reading skills of individual students throughout the academic year. At the summer institute, teachers in the first cohort of schools received introductory training in administering AIMSweb assessment to their students at different grade levels. Literacy coaches then provided ongoing support to teachers in administering the AIMSweb assessment.

The AIMSweb assessment enables teachers to disaggregate student literacy proficiency at three levels (Tier 1= on target, Tier 2=strategic intervention, and Tier 3=intensive intervention), and in several subtests from kindergarten through 3rd grade, such as Letter Naming Fluency (LNF) in kindergarten and Reading Curriculum Based Measurement (R-CBM) (an oral reading fluency assessment) in first- through third-grades.

Student performance in the AIMSweb assessment is normed in terms of the probability of achieving proficiency on the state reading assessment. Students in Tier 1 are highly likely to meet the proficiency level on the state reading assessment. Students in Tier 2 have approximately an 80% chance of meeting proficiency on the state reading assessment. Students in Tier 3 have approximately a 50% chance of achieving reading proficiency on the state assessment. In addition to AIMSweb assessment results, this report examines the 3rd grade reading performance on the Pennsylvania System of School Assessment (PSSA) in ELS and non-ELS schools.

During 2015-16, there was a high degree of AIMSweb assessment administration by teachers in first-cohort schools in several subtests from kindergarten through third-grade:

- Letter Naming Fluency (LNF) in kindergarten: Fall, winter, and spring administration by 100% of schools
- Nonsense Word Fluency or recognition of correct word sounds (NWF) in first- grade: fall administration by 87.5%, winter administration by 80%, and spring administration by 90% of schools
- Reading Curriculum Based Measurement (R-CBM) (an oral reading fluency assessment) in first-grade: fall administration by 92.5%, winter administration by 95%, and spring administration by 97.5% of schools
- Reading Curriculum Based Measurement (R-CBM) (an oral reading fluency assessment) in second-grade: fall administration by 97.5%, winter administration by 97.5%, and spring administration by 97.5% of schools
- Reading Curriculum Based Measurement (R-CBM) (an oral reading fluency assessment) in third-grade: fall administration by 97.5%, winter administration by 97.5%, and spring administration by 97.5% of schools

With its high degree of AIMSWeb assessment administration, the District seemed ready to improve the alignment of phonics instruction and other instructional strategies to the reading needs of individual students. It remains to be seen if the phonics/assessment alignment is fully implemented across all the schools as the literacy initiative continues.

Recommendations

Since 2015-16 is the first full academic year that engaged SDP literacy support activities, it should be considered as the baseline year for measuring the effects of literacy reform. Even at this early phase, ARC found promising results. Clearly, teachers who participated in the summer institute showed an increase in early literacy knowledge. Both new and veteran teachers gained knowledge on the science of reading instruction. Further, the ELS coaches provided appropriate support for teachers in building their skills and knowledge on evidence-based literacy instruction. Administering AIMSweb assessments across a high percentage of classrooms in the first cohort schools, teachers had the opportunity to build a database to track and facilitate individualized reading intervention for students.

Based on the findings during the initial implementation phase, ARC offers several recommendations:

First, based on an analysis of several surveys, this ARC report found that the early implementation process was uneven across key elements in the science of reading instruction, as specified in the District's *Comprehensive Literacy Framework* for Pre-K to Grade 5. Clearly, the District should continue to broaden its progress in the 6 areas showing clear progress, including Vocabulary, Read Aloud, Guided Reading, Independent Reading, Organizing the Literacy Block, and the administration of the AIMSweb Assessment. The District should accelerate its support and ensure high quality training efforts in areas that showed mixed progress or lack of progress, including Phonics, Reader's Workshop, English Language Learners, Fluency, Supporting the Literacy Block, and Assessment. ARC also recommends the District to fully track areas that were not included in the 2015-16 surveys, including Phonemic Awareness, Comprehension, and Shared Reading.

Second, with its high degree of AIMSweb assessment administration, the District seemed ready to improve the alignment of phonics instruction and other instructional strategies to the reading needs of individual students. ARC recommends the District to facilitate a high degree of phonics/assessment alignment across all the schools as the literacy initiative continues.

Third, ARC found that teachers in kindergarten and first-grade showed a higher level of perceived success in their classroom practices with the support of their ELS coaches. Teachers in second-grade and higher were less confident with their instructional practices. In light of this potential instructional gap across grade levels, ARC recommends SDP to identify supportive strategies for teachers in second- and third-grades. In this regard, assistant superintendents may be in a position to play an instrumental role in setting a clear priority in promoting the literacy initiative across grades and across schools. For example, they may provide additional support for teachers using high quality tools to teach Phonics successfully. Assistant superintendents can continue to strengthen principal accountability on Anchor Goal 2 as well as ensuring that resources are strategically targeted to support the implementation of the District's *Comprehensive Literacy Framework for Pre-K to Grade 5*.

Fourth, ARC found that teachers who had daily, weekly, or bi-weekly interaction with coaches mentioned a high level of instructional successes. In contrast, teachers who had monthly or infrequent interaction with coaches showed a much lower level of reported instructional successes, suggesting the need for the SDP to make sure that coaches engage in regular interaction with teachers.

Fifth, the Office of Research and Evaluation (ORE) is playing a key role in providing evaluation findings to support the implementation of the literacy initiative. In this regard, it is important for ORE to continue to track implementation practices at the school and classroom levels. For example, this report shows uneven gains in knowledge and skills based on the pre-post surveys of the summer institute. Using the data on skills and knowledge gap, the ORE can more closely support the work of the Office of Curriculum, Instruction, and Assessment as well as the Office of Early Learning. Equally important, ORE needs to monitor the implementation progress (or lack thereof) on each of the key programmatic components that drive the theory of action, including the instructional focus on Phonics, the use of leveled libraries, and scheduled literacy block.

Finally, in light of the strong district commitment to the science of reading instruction and early implementation lessons we identified in this report, ARC recommends SDP to stay the course. ARC encourages SDP to continue to invest in ELS coaches and other strategies that build the instructional capacity of teachers to fully implement the early literacy initiative. Strong implementation fidelity will contribute to measureable improvement in early literacy performance.

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Appendix 1. Research Methodology

Summer Institute Pre- and Post-Survey

Using the matched pre- and post-institute sample, this ARC report examines the participants' gains in their knowledge on early literacy strategies. In several areas, institute participants in the matched sample showed substantial gains in their knowledge following their attendance at the summer institute.

The summer institute's survey gathered information on several domains of knowledge acquired by the participants.

Table 1.1 Domains of Knowledge Gathered by Pre- and Post-Summer Institute Survey

| Knowledge Domains and Background Information | | Survey Measure | # Of Survey Questions |
|--|------------------------------------|-------------------------|-----------------------|
| Acquired Knowledge | Foundations of Literacy | % Incorrect vs. correct | 3 |
| | Instructional Literacy | | 12 |
| | ELL Instruction | | 3 |
| | AIMSweb Assessment | | 6 |
| Participants' Background | # Of years teaching early literacy | Multiple choice | 1 |
| | Grade level teaching 2015 – 2016 | | 1 |
| | School | List | 1 |

In this ARC analysis, the number of correct responses was compiled for each question. Questions left blank and responses such as "I'm not sure" were counted as "incorrect." The pre- and post-surveys were used to calculate the knowledge gains in each question. Pearson's 2x2 Chi-square test was used to analyze the statistical significance of the gains in knowledge at the 95% confidence level ($p < 0.05$).

Early Literacy Specialist (ELS) Coaches Survey of First Semester of Coaching

This ARC report examines the ELS coaches' experience in supporting the implementation of the science of reading instruction, based on the survey data on ELS coaches. Table 1.2 shows the areas of implementation and measures included in the survey.

Table 1.2 Areas of Implementation and Measures Captured by the Survey of ELS Coaches After Their First Semester of Coaching

| Areas of Implementation | Survey Measures | # Of Survey Questions |
|---------------------------|---|-----------------------|
| Teacher Interaction | 4-Point Likert Scale: Never / Rarely / Sometimes/ Most or all the time | 4 |
| Implementation Challenges | 4-Point Likert Scale: | 10 |

| | | |
|------------------------------|---|----|
| | Not a challenge / A slight challenge / A moderate challenge / A great challenge | |
| Professional Development | 4-Point Likert Scale: Never / Rarely / Sometimes/ Most or all the time | 4 |
| Coaches' Level of Confidence | 4-Point Likert Scale: Strongly Disagree / Disagree / Agree / Strongly Agree | 13 |
| Coaches' Preparedness | | 5 |
| Perceived Impact on Teachers | | 3 |
| CPEL monitoring | | 6 |

Using the 4-point Likert Scale for each item, this analysis measured the percentage of positive responses for each item. The “score” represents the average of the response distribution and the percentage of coaches who selected 3 (as indicated by the response on Frequently / Agree / Mostly successful / Quite a bit) and 4 (as indicated by the response on Very often / Effective / Strongly agree / Extremely successful / A great deal). For questions that were negatively phrased (e.g. “The teachers I work with are resistant to my coaching”), the corresponding number for each response was inverted for the percentage of positive calculations, namely, 1 corresponds to “never” and 2 corresponds to “rarely.”

The alignment between the coding and the response chosen is highlighted in Table 1.3.

Table 1.3 Alignment Between Coding and Response for Survey of ELS Coaches After Their First Semester of Coaching

| Code | Response | Response | Response |
|---|-------------------------|----------------------|-------------------|
| 1 | Never | Not a challenge | Strongly Disagree |
| 2 | Rarely | A slight challenge | Disagree |
| Responses of 3 and 4 are included in the percentage of positive response* | | | |
| 3 | Sometimes | A moderate challenge | Agree |
| 4 | Most or all of the time | A great challenge | Strongly agree |

K-5 Literacy Teachers Survey of First Semester with Coaches

To develop a more complete understanding of the coaches' work, this ARC report draws on the teacher survey data in 2015-16. Teachers were surveyed on their experience with the ELS coaches, including the perceived impact on their instructional practices. The teacher survey focused on the first semester ELS coaches were placed in the first cohort schools.

Table 1.4 Outcomes and Measures Captured by the Survey of Teachers After Their First Semester with ELS Coaches

| Outcome | | Measure | # of Items |
|---------|------------------------|--|------------|
| ELA | Frequency | 5-point Likert Scale, including “I don't remember” | 3 |
| | ELS Coach's Activities | 5-point Likert Scale | 10 |

| | | | |
|---------------------|---|--|-----|
| | ELS Coach's Effectiveness | 1 = negative connotation 5 = positive connotation | 10 |
| | ELS Coach's Knowledge about instructional practices | | 12 |
| Practice | Confidence | | 12 |
| | Success because of work with ELA | | 13 |
| Support / Policies | CLI and District and State Policies | 3 | |
| Prior CLI Training | | Yes/No, single answer | 1-2 |
| Additional Feedback | | Open ended response | 2 |
| Demographics | | List of items | 3 |

Many items used a 5-point Likert Scale. For each item, a response distribution was calculated along with the percent of positive responses, which are reported in the tables below. The “score” represents the average of the response distribution and the percent of teachers who selected 4 = Frequently / Agree / Mostly successful / Quite a bit and 5= Very often / Effective / Strongly agree / Extremely successful / A great deal.

As the following table suggests, the three surveys provided an uneven amount of data on the key instructional elements.

Table 1.5 Summary of Data Available from the Three Surveys, 2015-16

| Key Element & Strategies | Summer Institute Survey | Coaches Survey | Teachers Survey |
|-------------------------------------|--------------------------------|---|--|
| Phonemic Awareness | <i>Data unavailable</i> | <i>Data unavailable</i> | <i>Data unavailable</i> |
| Phonics | Knowledge-based question(s) | <i>Data unavailable</i> | Teacher's Perception of Their Success |
| Vocabulary | <i>Data unavailable</i> | Coaches' Perception of Their Confidence | Teacher's Perception of Their Confidence and Success |
| Fluency | Knowledge-based question(s) | <i>Data unavailable</i> | <i>Data unavailable</i> |
| Comprehension | <i>Data unavailable</i> | <i>Data unavailable</i> | <i>Data unavailable</i> |
| Reader's Workshop | Knowledge-based question(s) | Coaches' Perception of Their Confidence | Teacher's Perception of Their Confidence and Success |
| Read Aloud | Knowledge-based question(s) | <i>Data unavailable</i> | Teacher's Perception of Their Success |

| | | | |
|-------------------------------|-----------------------------|---|--|
| Shared Reading | <i>Data unavailable</i> | <i>Data unavailable</i> | <i>Data unavailable</i> |
| Guided Reading | Knowledge-based question(s) | <i>Data unavailable</i> | Teacher's Perception of Their Confidence and Success |
| Independent Reading | Knowledge-based question(s) | Coaches' Perception of Their Confidence | <i>Data unavailable</i> |
| English Language Learners | Knowledge-based question(s) | Coaches' Perception of Their Confidence | <i>No data</i> |
| Organizing the Literacy Block | <i>Data unavailable</i> | Coaches' Perception of Their Confidence | Teacher's Perception of Their Confidence and Success |
| Supporting the Literacy Block | Knowledge-based question(s) | <i>Data unavailable</i> | <i>Data unavailable</i> |
| Assessment | Knowledge-based question(s) | Coaches' Perception of Their Confidence | Teacher's Perception of Their Success |

Based on the available data from the three surveys, the following summary table highlights the key findings on the early implementation of each of the elements in the District's *Comprehensive Literacy Framework* during 2015-16:

Table 1.6 Summary of Key Findings on Early Implementation Using Survey Data

| Key Element | Summer Institute | Coaches' Confidence | Teachers' Confidence & Perception of Success |
|---------------------|-------------------------|----------------------------|---|
| Phonemic Awareness | <i>Data unavailable</i> | <i>Data unavailable</i> | <i>Data unavailable</i> |
| Phonics | +15.09% & +35.65% | <i>Data unavailable</i> | Success – 57% & 59% |
| Vocabulary | <i>Data unavailable</i> | Confidence - 79% & 81% | Confidence – 77%, 81% |
| Fluency | +/- | <i>Data unavailable</i> | <i>Data unavailable</i> |
| Comprehension | <i>Data unavailable</i> | <i>Data unavailable</i> | <i>Data unavailable</i> |
| Reader's Workshop | +/- | Confidence - 58% | Confidence – 66% Success – 48% |
| Read Aloud | +14.72% | <i>Data unavailable</i> | Success – 58% |
| Shared Reading | <i>Data unavailable</i> | <i>Data unavailable</i> | <i>Data unavailable</i> |
| Guided Reading | +21.89% | <i>Data unavailable</i> | Confidence – 77% Success – 60% |
| Independent Reading | +34.87% | Confidence - 81% | <i>Data unavailable</i> |

| | | | |
|-------------------------------|----------------------------|-------------------------|-----------------------------------|
| English Language Learners | +32.3% & 21.89% | Confidence -50% | <i>Data unavailable</i> |
| Organizing the Literacy Block | <i>Data unavailable</i> | Confidence -75% | Confidence – 65% Success – 66% |
| Supporting the Literacy Block | +/- | <i>Data unavailable</i> | <i>Data unavailable</i> |
| Assessment | -9.06 & +/- & +/- & +/- | Confidence -81% | Success – 54% & 58% |

* “+/-“ indicates no significant change

Appendix 2. Pre- and Post-Survey Responses for Summer Institute Participants (Ranked based on the lowest to the highest pre-scores)

| Literacy Concept | Pre-Test | Post-Test | % Change |
|--|-----------------|------------------|-----------------|
| <i>Assessment:</i> Percentile score of “average” student | 7.92% | 10.94% | +3.02% |
| <i>English Language Learners:</i> Best practice | 10.19% | 13.58% | +3.40% |
| <i>Independent writing:</i> Independent writing & writer’s workshop | 11.70% | 41.13% | +29.43* |
| <i>Instructional Literacy:</i> Book introduction for early readers in guided reading | 13.58% | 14.34% | +0.75% |
| <i>Instructional Literacy:</i> Intentional read aloud | 20.00% | 34.72% | +14.72%* |
| <i>English Language Learners:</i> Years to acquiring academic language | 23.40% | 45.28 | +21.89%* |
| <i>English Language Learners:</i> Academic language proficiency for ELLs | 24.15% | 56.98% | +32.83%* |
| <i>Phonics:</i> Definition of Phonics | 26.79% | 41.89% | +15.09%* |
| <i>AIMSWeb Assessment:</i> Discontinue Rule | 28.30% | 19.25% | -9.06%* |
| <i>Phonics:</i> Syllable form of Rain and Cow | 34.34% | 38.11% | +3.77% |
| <i>Supporting the Literacy Block:</i> RTI Intervention tiers | 41.89% | 42.64% | +0.75% |
| <i>Assessment:</i> Components of the assessment | 49.81% | 56.60% | +6.79% |
| <i>Guided Reading:</i> Effective strategies during guided reading | 61.13% | 83.02% | +21.89%* |
| <i>Writer’s Workshop:</i> Authentic Writing | 64.15% | 69.06% | +4.91% |
| <i>Assessment:</i> Reading level reflection | 64.91% | 67.92% | +3.02% |
| <i>Independent Reading:</i> Definition independent reading level | 68.68% | 71.70% | +3.02% |
| <i>Writer’s Workshop:</i> Components of the writing process | 69.43% | 65.28% | -4.15% |
| <i>Reader’s Workshop:</i> Critical thinking with stories | 73.96% | 76.60% | +2.64% |
| <i>Reader’s Workshop:</i> Five Essential Components of Effective Reading | 80.38% | 85.66% | +5.28% |

| | | | |
|---|--------|--------|--------|
| <i>Assessment: Curriculum Engine – Interactive Scope and Sequence</i> | 83.02% | 84.53% | +1.51% |
| <i>Modeled Writing: Modeled Writing</i> | 90.57% | 86.42% | -4.15% |
| <i>Fluency: Definition of Fluency</i> | 96.32% | 92.45% | -3.77% |

Percentages bolded and denoted with an asterisks () indicate statistic significant*

Appendix 3. Preliminary Analysis of the Gains From the Summer Institute as Disaggregated by Teachers' Experience in Teaching K-3 Literacy

| | (blank) | 1 year | 2-3 years | 4-5 years | 6-7 years | 8-years | 10+ years | I have never taught |
|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------------|
| <i>Reader Workshop: Five essential components of effective reading</i> | 64.62%* | 1.85% | 20.08%* | -7.37% | 0.00% | 14.80% | 1.96% | 5.19% |
| <i>Phonics: Definition of "phonics"</i> | 18.46% | 35.65%* | 8.01% | -5.77% | 26.47% | 51.97%* | 8.65% | 16.88% |
| <i>Phonics: Syllable form of cow and rain</i> | -5.38% | 8.33% | -9.13% | 8.97% | 0.00% | 10.20% | 6.07% | 7.79% |
| <i>Read Aloud: Intentional read aloud</i> | 38.46% | 9.26% | 4.06% | 21.79% | 29.41%* | 4.93% | 12.30% | 27.27% |
| <i>Instructional Literacy New concepts and strategies</i> | | | | | | | | |
| <i>Reader Workshop: Critical thinking with stories</i> | 20.77% | 0.93% | 6.80% | -2.24% | 5.88% | 1.32% | 2.57% | - 22.08% |
| <i>Supporting the Literacy Block: RTI intervention tiers</i> | -16.92% | 3.70% | 2.64% | 1.28% | 20.59% | 18.42% | -7.00% | 20.78% |
| <i>Assessment: ELA report cards</i> | | | | | | | | |
| <i>Guided Reading: Book introduction for early readers in guided reading</i> | -12.31% | 8.80% | -3.35% | 19.23% | 5.88% | 9.21% | -4.40% | -5.19% |
| <i>Guided Reading: Effective strategies during guided reading</i> | -1.54% | 46.30%* | 27.89%* | 17.95% | 14.71% | 22.37% | 27.57%* | 19.48% |
| <i>Writers Workshop: Modeled Writing</i> | -5.38% | 2.31% | -4.46% | 4.17% | -2.94% | 4.28% | 1.62% | -3.90% |
| <i>Independent Writing: Independent & writer's workshop</i> | 3.08% | 38.43%* | 36.00%* | 30.13%* | 17.65% | 40.46%* | 34.29%* | 18.18% |
| <i>Writer's Workshop: Components of the writing process</i> | 10.77% | -7.41% | 0.81% | -17.95% | -11.76% | -18.42% | 6.78% | 24.68% |
| <i>Fluency: Definition of Fluency</i> | -5.38% | 0.00% | -3.45% | 8.33% | 2.94% | 4.28% | 0.87% | 0.00% |
| <i>Independent Reading: Definition independent reading level</i> | 3.08% | 6.48% | -2.13% | 6.41% | 2.94% | 34.87%* | 8.47% | 6.49% |
| <i>Writer's Workshop: Authentic Writing</i> | -24.62% | 4.17% | 5.27% | 19.55% | 23.53% | 21.38% | 8.21% | - 27.27% |

| | | | | | | | | |
|--|---------|----------------|----------------|----------------|----------------|----------------|----------------|-------------|
| practices | | | | | | | | |
| <i>English Language Learners: Academic language proficiency for ELLs</i> | -4.62% | 40.28%* | 47.87%* | 32.37%* | 50.00%* | 52.96%* | 30.76%* | 7.79% |
| <i>English Language Learners: Years to acquire academic language</i> | -8.46% | 31.02%* | 9.94% | 24.04% | 23.53% | 14.47% | 31.21%* | 16.88% |
| <i>Assessment: Components of the assessment</i> | -12.31% | -2.31% | 3.25% | 19.23% | 14.71% | 24.67% | 16.06%* | - 20.78% |
| <i>Assessment: DRA2 measure</i> | | | | | | | | |
| <i>Assessment: Reading level reflection</i> | -12.31% | 15.74% | 6.19% | -14.10% | 11.76% | 40.13% | 8.35% | -7.79% |
| <i>Assessment: Discontinue rule</i> | 0.00% | 7.41% | -9.74% | -26.28% | -2.94% | -24.34% | -3.44% | - 19.48% |
| <i>Assessment: Percentile score of “average” student</i> | 3.85% | -10.65% | 1.01% | 18.59% | 0.00% | -4.28% | 7.18% | 0.00% |
| <i>Assessment: Curriculum Engine – Interactive Scope and Sequence</i> | -20.77% | 9.72% | 7.30% | 4.17% | 2.94% | -0.99% | 12.79%* | - 12.99% |

Percentages bolded and denoted with an asterisks () indicate statistic significant*

Appendix 4. Coaches' Survey Summary Results Based on Positive Responses

| | | |
|--|------------|---|
| Interactions with Teachers | 79% | Confidence |
| The teachers I work with are resistant to my coaching | 50% | Message Time Plus |
| The teachers I work with are open to my coaching | 81% | Meeting the needs of ELL students |
| I have the capacity to meet the needs of all of the teacher I coach (i.e. time, resources, support etc.) | 88% | Meeting the needs of students with IEPs |
| I feel confident in my ability to meet the needs of all of the teachers I coach | 87% | Writing workshop |
| I have a clear understanding of the needs of all of the teachers I coach | 88% | Reading workshop |
| Challenges | 25% | Developing a positive classroom culture |
| Unclear expectations for my role as a coach | 6% | Supporting student independence |
| Lack of capacity to meet the needs of ELL students | 13% | Vocabulary development |
| Too many classrooms/teachers to support | 17% | Creating student groups for small group work |
| Lack of useful PD from CLI for coaches | 13% | Using assessments to inform instruction |
| Wide range of teacher needs | 23% | Independent reading |
| Lack of materials and resources | 25% | Word wall |
| Lack of support from the school administration | 27% | Guided reading |
| Unclear or conflicting District policies and guidelines (e.g. curriculum, assessments, interventions etc.) | 35% | Preparedness |
| Teacher absences | 35% | The ELS training I have received has prepared me well for my work as an ELS |
| Teacher availability | 54% | I have had the opportunity to collaborate with other ELSs |
| Professional Developments | 71% | The content of the ELS trainings has been relevant to my work as an ELS |
| Were based on topics and themes determined centrally by the District | 60% | I felt prepared to lead/turnaround PDs at my school |
| Were scheduled at a time when all teachers could attend | 75% | I would like more opportunity to collaborate with other ELSs |
| Were based on topics and themes designed to meet the needs of my teachers | 75% | CPEL |
| Were well attended | 75% | Items/descriptors on the CPEL |

| | | | |
|--|------------|--|-----|
| | | are clear | |
| Impact on Teachers | 79% | The teachers are comfortable with the data I collect in the CPEL | 15% |
| The teachers I work with have made progress in their professional development since I started working with them | 79% | The CPEL is useful for tracking teacher progress | 35% |
| The teachers I work with will make progress in their professional development in the future as a result of my work with them | 79% | Items/descriptors on the CPEL are relevant | 31% |
| The teachers I work with know more about literacy instruction now than they did when I started working with them | 79% | The CPEL is easy to use | 35% |
| | | Completing the CPEL for 1 teacher is overly time consuming | 52% |

Appendix 5. Teachers' Survey Summary Results Based on Positive Responses

| | | | |
|--|------------|--|------------|
| ELS Coach's Activities | 46% | Confidence | 70% |
| Help me write lesson plans | 24% | Message Time Plus | 39% |
| Co-teach lessons | 25% | Meeting the needs of ELL students | 57% |
| Help me analyze and grade student work | 26% | Meeting the needs of students with IEPs | 65% |
| Model lessons | 35% | Reading workshop | 66% |
| Help me use student assessment data to direct instruction | 38% | Writing workshop | 67% |
| Help me plan for differentiated instruction | 45% | Intentional reading | 69% |
| Help me identify resources and materials to support MY learning | 66% | Vocabulary development | 77% |
| Provide feedback from classroom observations | 66% | Guided reading | 77% |
| Help me create a literacy rich classroom environment | 67% | Using assessments to inform instruction | 77% |
| Help me identify resources and materials to support MY STUDENTS' learning | 69% | Word wall | 81% |
| ELS Coach's Effectiveness | 60% | Supporting student independence | 83% |
| Helping me write lesson plans | 43% | Developing a positive classroom culture | 85% |
| Helping me analyze and grade student work | 44% | Success | 56% |
| Co-teaching lessons | 47% | Message Time Plus | 30% |
| Helping me use student assessment data to direct instruction | 55% | Reading workshop | 48% |
| Helping me plan for differentiated instruction | 58% | Writing workshop | 48% |
| Modeling lessons | 61% | Taking a running record of student assessments | 54% |
| Providing feedback from classroom observations | 72% | Independent work time | 56% |
| Helping me create a literacy rich classroom environment | 73% | Analyzing student data and work | 58% |
| Helping me identify resources and materials to support my learning | 74% | Small group phonics instruction | 57% |
| Helping me identify resources and materials to support my students' learning | 76% | Whole group phonics instruction | 59% |
| ELS Coach's Knowledge | 63% | Intentional read aloud | 58% |
| Message Time Plus | 38% | Guided reading | 60% |
| Meeting the needs of ELL students | 41% | Classroom culture (planning, procedures, teacher and student language, and teacher responsibility) | 65% |

| | | | |
|---|-----|--|------------|
| Meeting the needs of students with IEPs | 50% | Literacy environment (the physical space of my classroom) | 65% |
| Using assessments to inform instruction | 60% | Grouping students for small Group reading instruction | 66% |
| Writing workshop | 62% | Support and Policies | 66% |
| Intentional reading | 64% | Your students are prepared to meet Common Core State Standards | 57% |
| Vocabulary development | 65% | Your principal supports you around the implementation of CLI practices | 67% |
| Reading workshop | 68% | CLI practices are aligned with the District's literacy framework | 73% |
| Supporting student independence | 73% | | |
| Word wall | 76% | | |
| Developing a positive classroom culture | 76% | | |
| Guided reading | 80% | | |

Appendix 6. Teachers' Perception of Success by Grade Level Based on Positive Responses

| Score | K | 1 st | 2 nd | 3rd |
|---|-----|-----------------|-----------------|-----|
| Literacy environment | 81% | 80% | 76% | 73% |
| Classroom culture | 84% | 80% | 74% | 67% |
| Intentional read aloud | 68% | 75% | 65% | 67% |
| Message Time Plus | 44% | 28% | 34% | 29% |
| Reading workshop | 56% | 57% | 52% | 63% |
| Writing workshop | 58% | 50% | 56% | 63% |
| Guided reading | 75% | 70% | 68% | 73% |
| Independent work time | 68% | 65% | 61% | 69% |
| Record of student assessments | 67% | 63% | 56% | 67% |
| Analyzing student data and work | 77% | 65% | 60% | 69% |
| Grouping students for small Group reading instruction | 82% | 78% | 73% | 76% |
| Whole group phonics instruction | 86% | 67% | 61% | 63% |
| Small group phonics instruction | 79% | 72% | 58% | 61% |

Appendix 7. Teachers' Perception of Success (Based on Positive Responses) by Frequency of One-on-One Work with ELS Coaches

| | Daily | Weekly | Once every 2 weeks | Monthly | Once or Twice | Never |
|---------------------------------|--------------|---------------|---------------------------|----------------|----------------------|--------------|
| Literacy environment | 89% | 89% | 89% | 41% | 14% | 0% |
| Classroom culture | 86% | 86% | 86% | 52% | 27% | 0% |
| Intentional read aloud | 86% | 86% | 86% | 48% | 23% | 0% |
| Message Time | 50% | 50% | 50% | 22% | 5% | 0% |
| Reading workshop | 70% | 70% | 70% | 48% | 9% | 0% |
| Writing workshop | 77% | 77% | 77% | 52% | 9% | 0% |
| Guided reading | 86% | 86% | 86% | 59% | 23% | 0% |
| Independent work time | 80% | 80% | 80% | 44% | 18% | 0% |
| Record of student assessments | 70% | 70% | 70% | 44% | 23% | 0% |
| Analyzing student data | 82% | 82% | 82% | 44% | 27% | 0% |
| Small group reading | 89% | 89% | 89% | 59% | 41% | 0% |
| Whole group phonics instruction | 80% | 80% | 80% | 59% | 23% | 0% |
| Small group phonics instruction | 77% | 77% | 77% | 56% | 23% | 0% |

Appendix 8. Correlation between ELS Coaches' Reported Effectiveness and Teachers' Perception of Success

| | Helping me identify resources and materials to support my learning | Helping me identify resources and materials to support my students' learning | Helping me create a literacy rich classroom environment | Helping me analyze and grade student work | Modeling lessons | Co-teaching lessons | Providing feedback from classroom observations | Helping me write lesson plans | Helping me use student assessment data to direct instruction | Helping me plan for differentiated instruction |
|---|--|--|---|---|------------------|---------------------|--|-------------------------------|--|--|
| Literacy environment | 0.66 | 0.68 | 0.68 | 0.51 | 0.53 | 0.44 | 0.63 | 0.54 | 0.61 | 0.64 |
| Classroom culture | 0.66 | 0.68 | 0.67 | 0.53 | 0.52 | 0.44 | 0.64 | 0.52 | 0.60 | 0.62 |
| Intentional read aloud | 0.63 | 0.63 | 0.64 | 0.51 | 0.53 | 0.47 | 0.61 | 0.57 | 0.64 | 0.63 |
| Message Time Plus | 0.42 | 0.40 | 0.43 | 0.43 | 0.40 | 0.39 | 0.40 | 0.40 | 0.47 | 0.46 |
| Reading workshop | 0.57 | 0.59 | 0.60 | 0.48 | 0.47 | 0.45 | 0.56 | 0.50 | 0.60 | 0.60 |
| Writing workshop | 0.62 | 0.62 | 0.64 | 0.51 | 0.51 | 0.47 | 0.59 | 0.52 | 0.64 | 0.64 |
| Guided reading | 0.62 | 0.64 | 0.63 | 0.47 | 0.47 | 0.44 | 0.60 | 0.45 | 0.56 | 0.58 |
| Independent work time | 0.62 | 0.62 | 0.62 | 0.50 | 0.49 | 0.46 | 0.58 | 0.49 | 0.58 | 0.61 |
| Taking a running record of student assessments | 0.63 | 0.63 | 0.61 | 0.51 | 0.49 | 0.43 | 0.59 | 0.53 | 0.60 | 0.62 |
| Analyzing student data and work | 0.64 | 0.64 | 0.63 | 0.56 | 0.50 | 0.48 | 0.60 | 0.56 | 0.67 | 0.67 |
| Grouping students for small Group reading instruction | 0.66 | 0.67 | 0.66 | 0.50 | 0.48 | 0.44 | 0.62 | 0.51 | 0.63 | 0.63 |
| Whole group phonics instruction | 0.65 | 0.66 | 0.65 | 0.54 | 0.52 | 0.48 | 0.63 | 0.53 | 0.66 | 0.67 |
| Small group phonics instruction | 0.64 | 0.65 | 0.64 | 0.53 | 0.51 | 0.44 | 0.61 | 0.53 | 0.63 | 0.64 |

0.31-0.50 = weak positive relationship, 0.51-0.70 = moderate positive relationship, 0.71 – 1.00 = strong positive relationship

Bolded numbers are above 0.50