

Early Literacy

A review and analysis conducted for Generation Next

APRIL 2013

Prepared by: Edith Gozali-Lee and Dan Mueller

Contents

Summary	1
Baseline results	1
Factors contributing to low-literacy achievement	2
Effective approaches in fostering early literacy	2
Perspectives of local literacy experts on strengths and gaps in local early literacy efforts	4
Local initiatives	6
Introduction	7
Student literacy baseline results	8
Goal 1: Every child is ready for kindergarten	8
Goal 2: Every child meets key benchmarks for third grade reading success	10
Factors contributing to low-literacy outcomes	14
Effective approaches to fostering student literacy development	17
Important literacy components and instruction	17
Preschool programs	21
Tutoring programs	22
Parent involvement practices and programs	23
Prekindergarten to third grade programs	25
Perspectives of early literacy experts on strengths and gaps in local literacy initiative	s . 27
Local early literacy initiatives	34
References	35
Appendix	39
Third-grade reading	40
Early literacy initiatives in Minneapolis and Saint Paul	42
Key informant interviews: List of interviewees	52
Key informant interview protocol: Early literacy	53

Figures

1.	Beginning Kindergarten Assessment (BKA) Total Literacy: Fall 2012 Minneapolis Public Schools	8
2.	Mondo Bookshop Assessment: Fall 2012 Saint Paul Public Schools	9
3.	3rd grade MCA reading achievement tests: 2012 Minneapolis	. 11
4.	3rd grade MCA reading achievement tests: 2012 Saint Paul	. 12
5.	Trend in MCA reading for third-grade students in Minneapolis and Saint Paul	. 13

Acknowledgments

A number of Wilder Research staff contributed to this report. Amanda Peterson conducted interviews with key informants and assisted with the analysis of local early literacy programs. Heather Johnson conducted literature searches, helped in the identification of local early literacy programs, and copyedited the report. Megan Chmielewski assisted with compiling the student data. Jennifer Bohlke formatted the report.

We appreciated the help of Eric Vanden Berk, Minneapolis Public Schools and Lisa Gruenewald, Saint Paul Public Schools, in compiling the student academic data. Finally, we wish to thank those who participated in the key informant interviews. Their names, titles, and organizational affiliations are listed in the Appendix

Summary

This report was prepared for the Generation Next Early Literacy Network for their use in developing plans to improve early literacy. Generation Next is an initiative committed to closing the achievement gap among Twin Cities low-income students and students of color. It is an unprecedented partnership of key education, community, government, and business organizations dedicated to accelerating educational achievement for all our children – from early childhood to early career. The Generation Next model includes a shared community vision, evidence-based decision making, collaborative action, and investment and sustainability.

This report provides baseline results for the first two goals of Generation Next: Every child is ready for kindergarten (Goal 1) and every child meets key benchmarks for 3rd grade reading success (Goal 2). These goals address children age 3 to grade 3. The report also provides information about factors that contribute to student low-literacy achievement, broadly defined as students lacking school readiness and not proficient in reading by third grade or, in general, underperforming in school. Effective strategies for early literacy intervention are summarized. The information was gathered from the Minnesota Department of Education and school districts (baseline results), a synthesis of literature reviews, and interviews with local literacy experts.

Baseline results

Goal 1: Every child is ready for kindergarten

Measure: Percent of students meeting benchmarks for Beginning Kindergarten Assessments (BKA) in MPS and Mondo Bookshop Assessment in SPPS. Data available for district schools only (2012).

- 72 percent of MPS students beginning kindergarten met or exceeded the BKA total literacy benchmark, including 91 percent of white students but only 41 percent of Hispanic students.
- 70 percent of SPPS students beginning kindergarten met or exceeded the Mondo oral language benchmark, and 48 percent did so for the letter-sound correspondence benchmark. The percentage of students of color meeting or exceeding the letter-sound correspondence benchmark was low (26-42%). Asian and Hispanic students were least likely to meet benchmarks for the two scales.
- These assessments are conducted in English. Results suggest that students from non-English speaking homes may be least likely to meet the benchmarks.

Goal 2: Every child meets key benchmarks for 3rd grade reading success

Measure: Percent of students proficient on the Minnesota Comprehensive Assessments (MCA) 3rd grade reading achievement test. Data available for district and charter schools (2012).

- 63 percent of both Minneapolis and Saint Paul 3rd graders were proficient on the MCA reading test.
- Across the two cities, 86-90 percent of white 3rd graders were proficient in reading compared to 45-59 percent of 3rd graders from other racial/ethnic groups.
- Similarly, 89-91 percent of higher-income (i.e., not eligible for free or reduced-price lunch) 3rd graders were proficient in reading compared to 50-53 percent of lower-income 3rd graders.
- About half of limited English proficient 3rd graders were proficient in reading.

Factors contributing to low-literacy achievement

Research studies found that children from low-income families are more likely to enter school with lower levels of academic and language skills than their peers from higher income families. They are less likely to attend high-quality preschool programs and come from home environments that foster linguistic development. Low-income children tend to have parents with lower levels of educational attainment, have poor nutrition and health problems, attend low-performing schools, to be chronically absent, and move frequently. These factors contribute to children's lack of school readiness and the achievement gap between children from lower- and higher-income families.

Effective approaches in fostering early literacy

Synthesis of research literatures in early literacy provides insights to interventions that are effective in fostering student literacy development. Some of the interventions or components in interventions are stronger than others and can predict later literacy development or school success.

■ Five essential components of reading instruction should be included in reading instruction programs: phonemic awareness, phonics, vocabulary, fluency, and comprehension. These elements are also reflected in the Foundational Skills section of "Common Core State Standards for English Language Arts and Literacy in History/Social Studies and Science, released in March 2010. During preschool, alphabet knowledge, phonological awareness, phonological memory, rapid automatized naming, and letter writing are important foundations for later literacy skills.

- **Participation in high-quality preschool programs** can significantly narrow early learning disparities. There are two important categories of standards for achieving quality prekindergarten programs: student outcome standards and program standards. Student outcome standards define the knowledge and skills children are expected to demonstrate by the end of their preschool year. Student outcome standards should include all domains of learning; be flexible enough to accommodate individual students' learning styles and experiences; create a continuum of learning that does not rely on simplified versions of standards for older (K-12) children; and be tightly aligned to both curriculum and assessment. *Program standards* define how prekindergarten services should be provided. The program standards that ensure the effectiveness of preschool programs include using comprehensive early learning standards; hiring highly trained teachers with expertise in early childhood education (teachers have a bachelor's degree and assistant teachers have a Child Development Associate credential or equivalent); providing teachers with high levels of initial training, followed by high-quality professional development experiences (at least 15 hours of professional development each year); reducing class sizes to 20 students or less; and maintaining teacher-student ratios of 1:10 or better. All programs should screen students for health problems and, if needed, refer families to appropriate service agencies. In addition, children should be offered at least one nutritious meal each day.
- Receiving effective tutoring programs can prevent reading failure and improve students' reading skills. Tutoring programs typically target early elementary grades (first through third grade). Effective tutoring programs provide extensive training to their tutors; have comprehensive reading components; adhere to intervention fidelity; and have a qualified supervisor to design lesson plans, coordinate tutoring dyads, and provide ongoing feedback to tutors.
- Participation in extended early childhood programs which encompasses prekindergarten through third grade can sustain and maximize the positive effect of early childhood education. Although there are limited extended early childhood programs nationwide, available research findings show that compared to those receiving only preschool and kindergarten services, children participating in these programs from preschool to second or third grade have higher levels of achievement and lower rates of remedial education. Examining the Early Childhood Longitudinal Study-Kindergarten Cohort (ECLS-K) national sample data, researchers found that children who received several of the key Pre-K to grade 3 elements had significantly higher levels of reading and math achievement in third grade than children who did not receive these program elements. The largest effects were found for low-income children who received all five of the following elements: preschool, full-day kindergarten, school stability from kindergarten through third grade, high instructional focus, and teacher certification.

Researchers also reviewed evidence on the effects of PreK-3 program components, including preschool, full-day kindergarten, reduced class sizes, teacher and classroom experiences, parent involvement, and school mobility/stability. All except full-day kindergarten consistently demonstrate enduring and sizable links to school achievement. They also found evidence that teacher background and training, the quality of the teacher-child relationship, and a significant focus on child-centered instruction are linked to better school performance. The evidence on effects of preschool participation is stronger than that for the other PK-3 elements.

■ Parents have strong effects on children's language and literacy development and many of the early intervention and education programs that are known for having produced large impacts on literacy and reading had significant parent involvement components. However, rigorous research studies failed to show the effectiveness of parenting programs in improving children's education. Other researchers argue that the impacts of parent involvement on students' academic achievement are lacking because most parent involvement programs cover broad types of involvement and including a range of grade levels and general academic achievement. Researchers who reviewed studies that tested whether parent-child reading activities would enhance children's reading acquisition found that *children tutored by their parents using specific literacy activities* showed more improvement in their reading skills than did children participating in other parent-child reading activities. However, further research is needed to better understand the aspects of the intervention that are responsible for positive effects on children's reading skills.

Perspectives of local literacy experts on strengths and gaps in local early literacy efforts

Fifteen local literacy experts were interviewed in March and April 2013 to gain their perspectives on strengths and gaps of early literacy efforts in the Twin Cities area. In terms of the strengths of the local efforts, many experts felt that there is growing attention and initial work to align prekindergarten and early elementary grades (preschool to grade 3) including in curriculum, teacher training, accountability, and using data for differentiation of instruction and program improvement. A few respondents also mentioned the importance and strengths of collaboration among organizations, such as Head Start and Minneapolis Public Schools, partnerships in the Northside Achievement Zone (NAZ) project, University of Minnesota Path to Reading Excellence in School Site (PRESS) project in Minneapolis Public Schools, collaboration with community child care in Saint Paul Public Schools' Pre-Kindergarten Program; and family engagement efforts in general.

Several successful strategies were mentioned by the experts, including the Response to Intervention (RtI) model in both Minneapolis and Saint Paul, the Minnesota Reading

Corps tutoring programs in both Minneapolis and Saint Paul, Project Early K (now Pre-Kindergarten program) in Saint Paul Public Schools, Strong Beginnings in Hennepin County, and the High Five programs in Minneapolis Public Schools. A few responses mentioned the positive aspects of the Parent Aware rating system as a tool for selecting high quality childcare. However, their responses also suggested that further research is still needed on the academic achievement impacts in early elementary school for students participating in programs rated high on the Parent Aware rating system.

When asked what populations were not being reached by current efforts, the experts' most common responses were African American boys and English Language Learners (ELL). Other underserved groups were highly mobile populations, low-income, and Native American students. Other less common responses were struggling students who are not categorized as having the risk factors and those who attend charter schools.

Areas identified by respondents as particularly in need of attention included lack of alignment between Pre-K and K-3 programs, including having common assessments; lack of access to high-quality early learning for all children; and parent education regarding literacy.

In terms of recommendations to improve student literacy achievement, many respondents stressed that the early literacy issue is complex and that "there is no silver bullet" to solve these issues; rather, a "multi-pronged solution" is needed. As a result, many of the answers respondents gave intertwined with one another. Some respondents recommend creation and alignment of standards, curricula, and assessments between Pre-K and K-3 schools at a systems-level. Some respondents highlighted professional development for educators to show them examples of what is working and ways they can improve their instruction technique. A few other respondents emphasized family and community engagement as a way to bolster early literacy. Respondents also recommend increased access and funding to quality Pre-K programs to serve more children and help programs to plan for the long-term. Early screening and improvement in screening tools that are language specific were mentioned by a few respondents.

Regarding recommendations for Generation Next, many respondents emphasized the need for a broad selection of stakeholders to be involved in the Generation Next early literacy network. Respondents desire a diverse make-up of stakeholders who will serve on network committees (i.e., in their tasks, skill sets, and outside roles). In addition, a few respondents believed accountability standards, data collection, and shedding light on the complexity of early literacy are important components for the Generation Next network to pursue.

Local initiatives

There are many initiatives in the Twin Cities that focusing on student literacy (see the list in the Appendix). Of the 53 initiatives offered by nonprofit organizations, school districts, government agencies, higher education institutions, foundations and other funders, we identified key strategies of tutoring (25 initiatives) and quality early childhood programs (7 initiatives). A few initiatives also solely offer professional development, parent education or family engagement, and funding/advocacy. Some initiatives, such as the Northside Achievement Zone and Saint Paul Promise Neighborhood focus on serving students from cradle-to-career. Some of the initiatives have multiple key strategies. Evidence of impacts in improving student reading skills are limited overall; we were able to gather positive evidence on eight initiatives.

Introduction

Generation Next is an initiative committed to closing the achievement gap among Twin Cities low-income students and students of color. It is an unprecedented partnership of key education, community, government, and business organizations dedicated to accelerating educational achievement for all our children – from early childhood to early career. The Generation Next model includes a shared community vision, evidence-based decision making, collaborative action, and investment and sustainability.

This report was prepared for the Generation Next network focusing on early literacy. Literacy is the major foundational skill for school-based learning, and reading ability is strongly related to academic and vocational success. In Minnesota, and the United States in general, we are faced with the challenge to better prepare students for twenty-first century literacy demands as well as to close the disparities in literacy outcomes between children from low-income and ethnic minorities and higher-income backgrounds.

This report provides an overview of student demographics and literacy or reading achievement results for Minneapolis and Saint Paul schools. Results are presented for children entering kindergarten and students completing third grade. The data were gathered through publically available sources, such as the Minnesota Department of Education website and district websites. In addition, information on factors contributing to student low-literacy achievement and strategies to foster student literacy development are summarized. This information was gathered through literature reviews and meta-analyses that synthesized the major findings from early literature research and through interviews with local early literacy experts.

The report is organized into the following sections:

- Student literacy baseline results
 - Goal 1: Every child is ready for kindergarten
 - Goal 2: Every child meets key benchmarks for third grade reading success
- Factors contributing to student low-literacy achievement
- Effective strategies for fostering student literacy development
- Perspectives of local literacy experts on strengths and gaps in local literacy efforts

In addition, a list of literacy initiatives in Minneapolis and Saint Paul are included in the Appendix.

Student literacy baseline results

Goal 1: Every child is ready for kindergarten

Student early literacy skills are used to measure kindergarten readiness. Data are presented for the Minneapolis Public Schools and Saint Paul Public Schools. The Minneapolis Public Schools uses the Beginning Kindergarten Assessments (BKA) and the Saint Paul Public Schools uses the Mondo Bookshop Assessment to measure student literacy skills. Charter school data are not available.

Minneapolis

Literacy scores for students entering kindergarten in Minneapolis Public Schools in fall 2012 are presented. Figure 1 shows the percentage of students meeting or exceeding the Total Literacy benchmark in Minneapolis Public Schools for all students and by racial/ethnic group. The BKA Total Literacy consists of concepts of print, alphabetic principles, vocabulary, and rhyming. The BKA are administered to all students in English.

Results for Minneapolis students show that 72 percent of the students met or exceeded the Total Literacy benchmark in fall 2012, meaning they are considered ready for kindergarten. The results also show that there is a 50 percentage-point difference between white students (the highest percentage, with 91% meeting or exceeding the benchmark) and Hispanic students (the lowest percentage, with 41% meeting or exceeding the benchmark).

 Beginning Kindergarten Assessment (BKA) Total Literacy: Fall 2012 Minneapolis Public Schools

Percent meeting or exceeding literacy

	benchmark	Total N
All	72%	3,343
American Indian	57%	124
Asian	68%	250
Hispanic	41%	659
Black	70%	1,084
White	91%	1,225

Source: Minneapolis Public Schools.

Saint Paul

A kindergarten readiness gap was also found in Saint Paul Public Schools. The results are presented for two scales of the Mondo Bookshop Assessment: oral language and letter-sound correspondence. Overall, 70 percent of students met or exceeded the benchmark in oral language at the beginning of their kindergarten year. Almost all white students (93%) and most black (81%) and American Indian (76%) students met or exceeded the oral language benchmark. In comparison, 41 percent of Asian students and 58 percent of Hispanic students met or exceeded the benchmark. In terms of letter-sound correspondence, fewer than half of the students (48%) met or exceeded the benchmark. Seventy percent of white students met or exceeded the letter-sound correspondence benchmark, while 26-42 percent of the students from other racial/ethnic groups met or exceeded the benchmark. The students who did not meet the benchmark would need explicit instruction during the small group sessions in the *Mondo Bookshop Phonics* program, as well as opportunities offered during small group shared-reading and oral language sessions. The Mondo assessments are administered to all students in English.

2. Mondo Bookshop Assessment: Fall 2012 Saint Paul Public Schools

Percent meeting or exceeding benchmark

	Oral language	Total N	Letter-sound correspondence	Total N
All	70%	2,922	48%	2,918
American Indian	76%	51	39%	48
Asian	41%	825	36%	825
Hispanic	58%	327	26%	328
Black	81%	1,005	42%	1,004
White	93%	712	70%	710

Source: Saint Paul Public Schools.

Goal 2: Every child meets key benchmarks for third grade reading success

Reading by the end of third grade is considered an important benchmark. The National Research Council stated that "academic success, as defined by high school graduation, can be predicted with reasonable accuracy by knowing someone's reading skill at the end of third grade. A person who is not at least a modestly skilled reader by that time is unlikely to graduate from high school" (Snow, Burns, & Griffin, 1998). A longitudinal study of Chicago Public School students also found that students who are above grade level for reading in third grade graduate and enroll in college at higher rates than students who are at or below grade level (Lesnick et al., 2010).

This section presents information on third-grade student reading achievement, based on the Minnesota Comprehensive Assessments (MCA-II). Percentages of students who are proficient, defined as meeting or exceeding the MCA standards, are reported. Results are presented for spring 2012 and six-year trend.

Minneapolis

Figure 3 shows the results for Minneapolis Public Schools, charter schools, and all schools in Minneapolis in spring 2012. Result show that 63 percent of third-grade students in Minneapolis were proficient in reading. The achievement gap between white and other racial/ethnic groups was quite large. Most of the white students (90%) were proficient in reading, compared to 59 percent of Asian students, 49 percent of Hispanic and black students, and 45 percent of American Indian students. Similarly, almost all children (91%) from higher-income families (meaning not eligible for free or reduced-price lunch) were proficient, compared to half of the children (50%) from low-income families.

Third-grade reading results for charter schools in Minneapolis are similar to results for Minneapolis Public Schools, although the gaps between white and other racial/ethnic groups and between income levels (i.e., eligibility for free or reduced-price lunch vs. not eligible for free or reduced-price lunch) were somewhat smaller in charter schools than in Minneapolis Public Schools. Also, a higher proportion of English Language Learners (ELL) students in charter schools were proficient in reading (54%) compared to ELL students in Minneapolis Public Schools (43%). The number of students in each of the demographic categories is reported in Figure A1 in the Appendix.

3. 3rd grade MCA reading achievement tests: 2012 Minneapolis

Percent proficient ^a

	Minneapolis Public Schools (n=2,604)	Charter schools in Minneapolis (n=853)	All schools in Minneapolis (n=3,457)
All students	64%	60%	63%
Race/ethnicity			
American Indian	45%	Too few to report	45%
Asian	56%	64%	59%
Hispanic	48%	55%	49%
Black	47%	53%	49%
White	91%	83%	90%
Eligibility for free or reduced price meals			
Eligible	47%	56%	50%
Not eligible	93%	78%	91%
Limited English proficiency	43%	54%	46%

Source: Minnesota Department of Education.

Note. Race/ethnicity, Free or reduced-price meals, and LEP status were not reported for all students (many charter schools have missing data or could not report on the data due to small numbers of students in the category).

^a MCA-II scores are categorized as "does not meet the standards," "partially meets the standards," "meets the standards," and "exceeds the standards." Proficiency is defined as meeting or exceeding the standards.

Saint Paul

Overall, 63 percent of Saint Paul students were proficient in reading at the end of their third-grade year in 2012, the same as the proficiency rate for Minneapolis students overall. Results also show a large gap between white and other racial/ethnic groups, with 86 percent of white students meeting or exceeding the reading standards, compared to 48 to 58 percent of students from other racial/ethnic groups. Half of the students from low-income families (53%) and ELL students (51%) were proficient. In comparison, almost 90 percent of students from higher-income families were proficient in reading.

Similar achievement gaps in reading results were found in charter schools in Saint Paul, although unlike in Minneapolis, the gaps between white and other racial/ethnic groups and family income levels were somewhat smaller in Saint Paul Public Schools than in charter schools. A slightly higher percentage of ELL students in Saint Paul Public Schools than in charter schools were proficient (53% vs. 42%). The number of students in each of the demographic categories is reported in Figure A2 in the Appendix.

4. 3rd grade MCA reading achievement tests: 2012 Saint Paul

		Percent proficient a	
	Saint Paul Public Schools (n=2,826)	Charter schools in Saint Paul (n=549)	All schools in Saint Paul (n=3,375)
All students	63%	62%	63%
Race/ethnicity			
American Indian	48%	Too few to report	48%
Asian	54%	41%	52%
Hispanic	60%	47%	58%
Black	53%	61%	54%
White	85%	93%	86%
Eligibility for free or reduced price meals			
Eligible	53%	54%	53%
Not eligible	88%	93%	89%
Limited English proficiency	53%	42%	51%

Source: Minnesota Department of Education.

Note. Race/ethnicity, Free or reduced-price meals, and LEP status were not reported for all students (many charter schools have missing data or could not report on the data due to small numbers of students in the category).

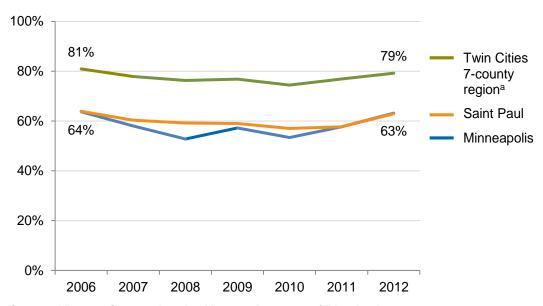
a MCA-II scores are categorized as "does not meet the standards," "partially meets the standards," "meets the standards," and

[&]quot;exceeds the standards." Proficiency is defined as meeting or exceeding the standards.

Six-year trend for third grade reading

Figure 5 indicates the percentage of third-grade students proficient in reading in Saint Paul and Minneapolis schools from 2006 to 2012. Proficiency rates changed somewhat during the period in each city but were about the same in 2012 as they were in 2006.

5. Trend in MCA reading for third-grade students in Minneapolis and Saint Paul



Source: Minnesota Compass, based on Minnesota Department of Education data.

Note: On this graph, "Minneapolis" represents all public schools (including charters) located in the city of Minneapolis, not just the Minneapolis Public School district. Similarly, "Saint Paul" represents all public schools (including charters) located in the city of Saint Paul.

^a Includes Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington counties.

Factors contributing to low-literacy outcomes

As summarized in the previous section, Minneapolis and Saint Paul children from minority backgrounds entered kindergarten less prepared than white children, as measured by literacy proficiency rates. The gaps in literacy outcomes between children from white and other racial/ethnicity and between children from low- and high-income families are also found at the end of third grade. This section provides a brief description of factors linked to student low-literacy outcomes, broadly defined here by students lacking school readiness and underperforming in school.

Studies indicated that disadvantaged children are more likely to enter school with lower levels of academic and language skills, greater social and emotional difficulties that interfere with learning, and more health problems (Education Week, 2011; Le et al., 2006; Ackerman & Barnett, 2005). The factor that has been found to correlate most highly with preschool learning disparities is family income level. Children's home learning environment, parents' level of educational attainment, and parental beliefs and behaviors are also related to school readiness and school performance outcomes. However, since most of these factors are strongly tied to socioeconomic status, researchers have concluded that income level is the most powerful predictor of children's educational success (Isaacs, 2012; Rodriguez & Tamis-LeMonda, 2011; Daily et al., 2010).

Following is a brief description of factors that contribute to gaps in children's school readiness.

- Low participation in high quality preschool programs. Higher-income families are much more likely to enroll their children in preschool programs. The National Institute for Early Education Research reported that at age 4, enrollment in state-funded pre-K is about 65 percent for the lowest income families and 90 percent for the highest income families. At age 3, when state-funded prekindergarten is rarely provided, enrollment is only about 40 percent for low-income and moderate-income families, while it is 80 percent for high-income families (Barnett et al., 2011).
- Lack early interactions that foster linguistic development. Parents play a primary role in their children's school readiness. Many studies have found that the availability of educational resources and the frequency of learning activities that occur in children's home environments are linked to children's school readiness outcomes. Children who do not have access to strong home learning environments have been found to be more likely to have delays in language and literacy skills than children who are exposed to more learning experiences in the home. The home learning environment consists of

resources and activities that include the availability of children's books and other educational materials, time spent reading to children, exposure to frequent and varied adult speech, visits to the library, and the amount of television that is permitted (Education Week, 2011; Rodriguez & Tamis-LeMonda, 2011; Finlayson, 2004; Lara-Cinisomo et al., 2004).

Researchers also found that preschoolers whose parents (especially mothers) read to them, tell stories, or sing songs tend to develop larger vocabularies, become better readers, and perform better in school, while children who lack this stimulation during early childhood tend to arrive at school with lower levels of language skills (National Institute of Child Health and Human Development, Early Child Care Research Network, 2000). By age 3, children from high-income families have heard 30 million more words than children from low-income families (Hart & Risley, 2003). Vocabulary knowledge is one of the strongest predictors of academic achievement beginning as early as the third grade (Storch & Whitehurst, 2002).

■ Parents' low level of educational attainment. Some studies have found that gaps in prekindergarten readiness are related to parents' level of educational attainment. RAND Corporation's study of children from 65 Los Angeles neighborhoods found that children whose mothers had not completed high school had less access to books at home, were less likely to be read stories, and were less likely to visit the library regularly. The researchers concluded that children of poorly educated mothers were at a disadvantage and thus an important target group for participation in preschool programs (Lara-Cinisomo et al., 2004).

Finlayson (2004) found a strong relationship between parents' levels of educational attainment and their ratings of their children's school readiness. She suggested that parents with higher levels of educational attainment have a better understanding of what is expected of their children when they enter school and also have the resources available to promote their children's school readiness.

■ Health problems. The available research indicates that health is an important determinant of children's success in school. The absence of basic health care places many children at risk for academic failure at an early age. Poor children are less likely than higher-income children to have access to health care and suffer from a wide array of chronic health problems that affect school readiness, including ear infections, digestive disorders, asthma, tooth decay, and allergies. Low-income children are also more likely to have been low birth weight infants and suffer from poor nutrition. Researchers have therefore concluded that health services offered as part of preschool programs play an important role in improving the performance of disadvantaged children. In addition, programs that offer children at least one healthy meal each day reduce the

number of undernourished preschool children (Barnett et al., 2011; KIDS COUNT, 2010).

The readiness gap becomes an achievement gap when children enter school. Following are additional factors that contribute to student low literacy levels and the achievement gap between children from low- and high-income families.

- Attend low performing schools. In their report, KIDS COUNT researchers assert that low-income children are more likely to attend schools that are not "ready" to teach to high standards. These schools are often under-resourced; have many teachers who lack the training, experiences, or knowledge needed to teach reading effectively; and do not have curriculum and instruction that is content-rich, challenging, developmentally appropriate, aligned with standards and assessments, culturally responsive, and built around a coherent scope and sequence for student learning growth (KIDS COUNT, 2010).
- Miss too much instructional time due to chronic absences. Chronic absence matters because succeeding in school requires students to be present in school. For low-income children, chronic early absence predicts the lowest levels of educational achievement at the end of fifth grade. By ninth grade, missing 20 percent of school can predict dropping out better than eighth-grade test scores (Chang & Romero, 2008; KIDS COUNT, 2010). Chronic absence can be a sign of school problems or that parents are not aware that regular attendance is important. It also may be caused by major family stressors associated with poverty.
- Lose ground during the summer months. Research shows that low-income children fall behind during the summer by as much as two months of reading achievement, while their middle-class peers make slight gains (Cooper et al., 2000). Summer learning programs help some children gain reading skills (as well as social skills). However, the 1999 National Survey of America's Families found that 29 percent of children from middle income households and only 18 percent of children from low-income households participate in summer learning programs (Terzian & Moore, 2009).
- Family mobility. Low-income families also are more likely than middle-income families to move frequently, causing their children to change schools mid-year. Students who have changed schools two or more times in the previous year are half as likely as their stable peers to read well, and third-graders who changed schools frequently are two and a half times more likely to repeat a grade (KIDS COUNT, 2010).

Effective approaches to fostering student literacy development

This section provides a preliminary summary of effective approaches to early literacy interventions based on literature reviews and meta-analysis studies that compare program components and impacts on literacy. Important literacy components and approaches to teaching reading to children are also described. It should be noted that these strategies specifically focus on literacy for children age 3 to grade 3. Comprehensive interventions for children (for example, after school programs, child mental health and health services, and other family support services) are not included in this brief summary.

Important literacy components and instruction

Preschool

The National Early Literacy Panel was convened in 2002 to conduct a synthesis of the most rigorous scientific research available on the development of early literacy skills in children from birth to age 5 (National Institute for Literacy, 2009). Early literacy skills are skills that begin to develop in the preschool years. They are sometimes called "emergent," "precursor," "foundational," or "predictive" literacy skills to distinguish them from more conventional literacy skills.

The Panel found that some early literacy skills are more important than others in predicting later literacy development. The following are skills that are strong predictors to later literacy achievements:

- Alphabet knowledge: Knowing the names and sounds associated with printed letters
- Phonological awareness: Being able to manipulate the sounds of spoken language —
 breaking words apart into smaller sound units such as syllables or phonemes, adding
 or deleting sound units
- Phonological memory: Being able to remember the content of spoken language for a short time
- Rapid automatized naming: Being able to rapidly name a sequence of letters, numbers, objects, or colors
- Letter writing: Being able to write one's own name or even isolated letters

The Panel also found skills that moderately correlated with at least one measure of later literacy achievement. These additional potentially important skills include:

- Concepts about print: Knowing some of the conventions of English print, including how to use a book or other printed materials (e.g., left-right, front-back)
- Environmental print: Being able to recognize and identify common signs and logos for products and stores
- Oral language: Knowing how to put concepts, thoughts, and ideas into spoken language, and understanding other people when they talk
- Visual processing: Being able to see similarities and differences between visual symbols

These skills are important in young children and are usually more predictive of literacy achievement at the end of kindergarten or beginning of first grade than of later literacy growth.

The Panel identified a wide variety of interventions that improved children's early literacy skills. Interestingly, different interventions produced qualitatively different outcomes. For example, code-oriented intervention improved children's knowledge of phonology and print conventions; shared-book interventions enhanced children's language development; and home and parent programs improved children's oral language skills and general cognitive abilities. It is possible that some of these interventions would actually have a wider impact than what was determined by the Panel, but that would require additional studies that look at a wider range of outcome measures.

Finally, the Panel found few demographic differences in children's learning patterns, and even those that were found were confounded. Future studies of early literacy skills should consider the possibly varied impact of early interventions, particularly on large and growing groups of children who struggle with literacy (such as English Language Learners). However, even if research studies are not designed to specifically answer such questions, it would be helpful if they would report their data separately for children from different demographic categories, as this would make it possible for future meta-analyses to make sense of any patterns that may exist (National Institute for Literacy, 2009).

Elementary and beyond

Prior to identifying components essential to teach early literacy, the National Institute for Literacy Panel was convened to review extensive research, including more than 100,000 research studies completed since 1966, and to consult with leading education organizations to gather knowledge on effective approaches to teaching children to read. In 2000, the Panel issued five essential components of reading instruction which are included in the

best reading instruction programs today (KIDS COUNT, 2010; National Reading Panel, 2000):

- Phonemic awareness: Ability to manipulate the sounds that make up spoken language
- Phonics: Knowledge of relationships between letters and sounds
- Vocabulary: Understanding the meaning of words in reading and in written and spoken language
- Fluency: Ability to read rapidly with accuracy and expression
- Comprehension: Ability to gain meaning while reading

The Panel found that many difficulties learning to read were caused by inadequate phonemic awareness and that systematic and explicit instruction in phonemic awareness directly caused improvements in children's reading and spelling skills.

Based on strong evidence, the Panel concluded that systematic and *explicit instruction in phonemic awareness* should be an important component of classroom reading instruction for children in preschool and beyond who have not been taught phoneme concepts or who have difficulties understanding that the words in oral language are composed of smaller speech sounds – sounds that will be linked to the letters of the alphabet. The Panel found that even preschool children responded well to instruction in phonemic awareness when the instruction was presented in an age-appropriate manner.

The Panel also concluded that the research literature provides solid evidence that phonics instruction produces significant benefits for children from kindergarten through sixth grade and for children having difficulty learning to read. The greatest improvements were seen from systematic phonics instruction. This type of phonics instruction consists of teaching a planned sequence of phonics elements, rather than highlighting elements as they happen to appear in a text.

Same with phonemic awareness, the evidence was so strong that the Panel concluded that *systematic phonics instruction* is appropriate for routine classroom instruction. The Panel noted that, because children vary in reading ability and vary in the skills they bring to the classroom, no single approach to teaching phonics could be used in all cases. For this reason, it is important to train teachers in the different kinds of approaches to teaching phonics and in how to tailor these approaches to particular groups of students.

The Panel also concluded that *guided oral reading* has been clearly documented by research to be important for developing reading fluency - the ability to read with efficiency and ease. In guided oral reading, students read out loud to a parent, teacher, or other student who corrects their mistakes and provides them with feedback. Specifically,

guided oral reading helped students across a wide range of grade levels recognize new words, read accurately and easily, and comprehend what they read.

To determine how children best learn to comprehend what they read, the Panel reviewed studies of three areas regarded as essential to developing reading comprehension: vocabulary development, text comprehension instruction, and teacher preparation and comprehension strategies instruction.

Although the best method or combination of methods for teaching *vocabulary* has not yet been identified, the Panel review uncovered several important implications for teaching reading. First, vocabulary should be taught both directly - apart from a larger narrative or text - and indirectly - as words are encountered in a larger text. Repetition and frequent exposure to vocabulary words will also assist vocabulary development, as will the use of computer technology. The Panel emphasized that instructors should not rely on single methods for teaching vocabulary, but on a combination of methods.

Likewise, the Panel also found that *reading comprehension of text* is best facilitated by teaching students a variety of techniques and systematic strategies to assist in recall of information, question generation, and summarizing of information. The Panel also found that teachers must be provided with appropriate and intensive training to ensure that they know when and how to teach specific strategies.

With respect to the overall *preparation of teachers*, the Panel noted that existing studies showed that training both new and established teachers generally produced higher student achievement, but the research in this area is inadequate to draw clear conclusions about what makes training most effective. More quality research on teacher training is one of the major research needs identified by the Panel.

Finally, the Panel examined the use of *computer technology* to teach reading. The Panel noted that there are too few definitive studies to draw firm conclusions, but that the available information suggests that it is possible to use computer technology to improve reading instruction. For example, the use of computers as word processors may help students learn to read, as reading instruction is most effective when combined with writing instruction.

The reading components are reflected in the Foundation Skills section of *Common Core State Standards for English Language Arts and Literacy in History/Social Studies Science and Technical Subjects*. The 2010 *Minnesota K-12 Academic Standards in English Language Arts* use the standards as a base, with additional standards added to address state statutory requirements and best practices. School districts are required to implement the 2010 standards no later than the 2012-2013 school year (Minnesota Department of Education website).

Preschool programs

Research has found that participation in high-quality preschool programs can significantly narrow early learning disparities by diminishing the negative effects of family and environmental risk factors (Ackerman & Barnett, 2005; Lara-Cinisomo et al., 2004; Magnuson et al., 2004) and boost children's academic skills at school entry. Gormley and colleagues' (2008) study of Tulsa, Oklahoma preschool programs found that participation in a prekindergarten program was a more powerful predictor of pre-reading and pre-writing test scores than gender, ethnicity, income level, mother's level of education, or whether the biological father lived at home. The positive impact of prekindergarten programs has been found to be even more pronounced for disadvantaged children (Ackerman & Barnett, 2005; Lara-Cinisomo et al., 2004). Magnuson and colleagues (2004) reported that preschool programs had the greatest impact on disadvantaged children, defined as those who were living in poverty and had mothers who did not graduate from high school, speak English, or were single parents.

Currently, children who attend preschool programs have widely varying experiences. Even public programs vary considerably in their operating schedules, teaching qualifications, class size and ratio, auxiliary services (e.g., health and social services or parenting education), monitoring and accountability, and teaching practices. With programs varying so greatly, widely varied effects on children's language and literacy development are to be expected as well (Barnett & Frede, 2010).

To that end, the National Institute for Early Education Research (NIEER) and the National Association for the Education of Young Children (NAEYC) provided research-based recommendations for prekindergarten standards. There are two categories of prekindergarten standards: student outcome standards and program standards. Student outcome standards define the knowledge and skills children are expected to demonstrate by the end of their preschool year. Student outcome standards should include all domains of learning; be flexible enough to accommodate individual students' learning styles and experiences; create a continuum of learning that does not rely on simplified versions of standards for older (K-12) children; and be tightly aligned to both curriculum and assessment (Bodrova et.a., 2004). Multiple stakeholders should be included in the development of researchbased student outcome standards and ongoing support should be provided to staff and families in order to help children develop the skills outlined in the standards (Miami-Dade County Public Schools. (2012). Consistent with this recommendation, Minnesota has developed the Early Learning Standards: Early Childhood Indicators of Progress, a framework for developmentally appropriate expectations for children that can be used by educators to plan for curriculum content, teaching strategies, and assessments for preschool children age three to five. Multiple domains of learning (including language and literacy development, physical and motor development, cognitive development,

creativity and the arts, and approaches to learning) are included in the standards. It is expected that most children will accomplish the majority of the indicators by the end of the prekindergarten year (Minnesota Department of Education, 2005).

Program standards define how prekindergarten services will be provided. The program standards that ensure the effectiveness of preschool programs include using comprehensive early learning standards; hiring highly trained teachers with expertise in early childhood education (teachers have a bachelor's degree and assistant teachers have a Child Development Associate credential or equivalent); providing teachers with high levels of initial training, followed by high-quality professional development experiences (at least 15 hours of professional development each year); reducing class sizes to 20 students or less; and maintaining teacher-student ratios of 1:10 or better. All programs should screen students for health problems and, if needed, refer families to appropriate supportive service agencies. In addition, children should be offered at least one nutritious meal each day (Barnett et.al., 2011).

Tutoring programs

Research has consistently shown that tutoring programs can effectively improve students' reading skills. Effective tutoring also appears to prevent reading failure, as demonstrated through reductions in grade retentions and special education referrals (Wasik & Slavin, 1993).

From synthesis of literature reviews, Schultz and Mueller (2007) identified characteristics of effective tutoring programs. They found that programs which produce the largest impacts tend to be those in which tutors received more extensive training. Extensive training includes more time spent on training prior to tutoring, as well as ongoing training and feedback during the course of tutoring. Research also shows that less training can produce a positive impact when the programs are highly structured, use "tutor-proof" materials, and emphasize basic skills.

Tutoring programs typically target early elementary grades; research indicates that students in early elementary grades (first through third grade) tend to benefit more from tutoring than do students in later elementary grades (fourth through sixth grade).

With regards to reading components, researchers (Wasik & Slavin, 1993) found that programs that produced the largest effects tended to be those that were based on more comprehensive reading components (i.e., including print knowledge, decoding, oral language proficiency, prior knowledge, text comprehension, and other reading components) and consequently had more complete instructional interventions. Other researchers (Elbaum et al., 2000) found that programs that focused on reading comprehension

produced the largest effects, followed by programs that had a mixed or balanced focus and programs that focused on phonemic awareness, respectively. Programs that focused on visual-perceptual skills and programs which did not adequately describe their focus produced, on average, close to no impact.

Although the integration with classroom instruction is a feature that is commonly cited as essential in the literature, there does not appear to be enough research evidence to support this claim, and the issue needs further exploring (Wasik & Slavin, 1993).

The relationship between the amount of tutoring and program effects appeared to be inconsistent among the tutoring programs (Schultz & Mueller, 2007). While some researchers found more time spent in tutoring was associated with larger gains in reading, other researchers concluded that intensity of the intervention (same amount of instructional time delivered over a shorter period) tended to have more powerful effects.

Several sources also cite the importance of having a qualified supervisor to design lesson plans, coordinate tutoring dyads, and provide tutors with feedback and advice. Intervention fidelity, or adherence to the intervention protocol or model, is another factor that can distinguish successful and unsuccessful tutors. Small groups may be preferable given that they have comparable results with one-on-one tutoring and appear to be more cost-effective, and this possibility deserves further attention (Schultz & Mueller, 2007).

Finally, evaluations tend to measure outcomes that are directly related to the specific skills taught in tutoring. Depending on the measures used, tutored students sometimes perform better than non-tutored students because the tutored students are more familiar with the assessment measures used. Results tend to be less promising when evaluations assess reading skills using measures that are not directly addressed in tutoring (Wasik & Slavin, 1993; Elbaum et al., 2000; Schultz & Mueller, 2007).

For more comprehensive information on tutoring, see the Saint Paul Public Schools Foundations' *Best practices for tutoring programs: a guide to quality* (Bixby, et. al., 2011). This book provides a tool for practitioners and educators for implementing effective tutoring programs.

Parent involvement practices and programs

Parenting practices

There is extensive evidence that mother's sensitivity and responsiveness, cognitive stimulation, book reading, and quality of language interactions play an important role in young children's acquisition of early literacy skills. Little to no evidence suggests that

these factors operate differently for low-income and middle-income families or for families from diverse ethnic backgrounds (Burchinal & Forestieri, 2010).

Several large research studies also suggest that among the various parenting practices, young children reared in homes with more stimulating, age-appropriate books and toys show faster acquisition of language skills. Such opportunities for learning provided the best prediction of language skills in the first two years and during preschool according to data from the National Institute of Child Health and Human Development (NICHD) Study of Early Child Care and Youth Development (SECCYD) (Burchinal and Forestieri, 2010). Bradley et al. (1989) also found that this parenting practice is a moderate predictor of language and reading skills from age 2-13 years, and that these associations did not vary as a function of income and ethnic background.

Parent involvement programs

Parents have strong effects on children's language and literacy developments and many of the early intervention and education programs that are known for having produced large impacts on literacy and reading had significant parent involvement components. However, randomized trials of parenting programs, the Even Start Family Literacy multigenerational approach, and the addition of home visits and other parent involvement activities to center-based programs have failed to find evidence of the educational effectiveness of efforts to enhance parent involvement (Barnett & Frede, 2010). Rigorous studies are still needed to identify effective parent involvement programs.

Parent-child reading activities

Other researchers argue that the impacts of parent involvement on students' academic achievement are lacking because most parent involvement programs cover broad types of involvement and include a range of grade levels and general academic achievement. Researchers reviewed studies that tested whether parent-child reading activities would enhance children's reading acquisition (Sénéchal & Young, 2008). The results show that parent involvement in literacy activities has a positive effect on children's reading skills. The review focuses on interventions for kindergarten through third-grade children and examined three types of parent involvement: parents read books to child; parents listen to child read books; and parents tutor specific literacy skills with activities. Meta-analyses revealed that interventions in which parents tutored their children using specific literacy activities produced larger effects than those in which parents listened to their children read books. The studies in which parents read to their children did not result in significant reading gains. It is possible that training parents to read to their children enhances children's oral language, which, in time, may result in better reading comprehension. Researchers felt that solid rigorous research for this intervention is still needed. Also, further research

is needed to better understand the aspects of the interventions that are responsible for positive effects in children's reading skills. For example, what is the optimal timing for parent tutoring: before, during, or after specific skills are taught in school? What are the types of children's books that are most helpful? Finally, more research is needed for parent-child reading activities for non-English speaking families and for parents who are struggling readers themselves.

Prekindergarten to third grade programs

Research indicates that while there are positive outcomes for children participating in early childhood intervention programs, just participating in one year of early educational programming may not be sufficient to maintain the positive outcomes they gained. Therefore, creating an intentionally aligned educational system for children age 3 to grade 3 based on their developmental abilities could be a major factor in sustaining and maximizing the positive effects of the early childhood programs (Bogard & Takanishi, 2005).

Reynolds, Magnuson, and Ou (2006) review evidence from four studies of high-quality "extended early childhood programs." These include the Carolina Abecedarian Project, Head Start/Follow Through, the Chicago Child-Parent and Expansion Program, and the National Head Start/Public School Early Childhood Transition Demonstration Project. Each of the extended early childhood programs showed evidence of positive effects on children's schooling and development. The strongest evidence is from the Chicago Child-Parent Centers and indicates that compared to those receiving only preschool and kindergarten services, children participating in the program from preschool to second or third grade had higher levels of achievement and lower rates of remedial education.

They also examined the Early Childhood Longitudinal Study- Kindergarten Cohort (ECLS-K) national sample data and found that children who received several of the key PreK-3 elements had significantly higher levels of reading and math achievement in third grade than children who did not receive these program elements. The largest effects were found for low-income children who received all five of the following elements: preschool, full-day kindergarten, school stability from kindergarten through third grade, high instructional focus, and teacher certification.

Reynolds, Magnuson, and Ou (2006) also reviewed evidence on the effects of PreK-3 program components, including preschool, full-day kindergarten, reduced class sizes, teacher and classroom experiences, parent involvement, and school mobility/stability. All except full-day kindergarten consistently demonstrate enduring and sizable links to school achievement. The authors also find evidence that teacher background and training, the quality of the teacher-child relationship, and a significant focus on child-centered

instruction is linked to better school performance. The evidence on effects of preschool participation is stronger than that for the other PK-3 elements.

Finally, the economic analysis of PK-3 programs shows that the economic benefits of PK-3 exceed its costs. The highest economic returns observed are from preschool programs, which range from \$4 to \$10 per dollar invested. The CPC results show that an established public-school program can generate substantial returns, which has significant implications for larger scale implementation. Although the costs of the programs are significantly different from each other, the economic returns of each program far exceeded the initial investments. The total economic benefits per participant, both measured and projected over the life course, ranged from about \$60,000 to \$140,000 (Reynolds, Magnuson, & Ou, 2006).

Perspectives of early literacy experts on strengths and gaps in local literacy initiatives

Fifteen local experts were interviewed in March and April 2013 regarding early literacy efforts in Minneapolis and Saint Paul. These experts are from institutions of higher education, Minneapolis and Saint Paul Public School Districts, local nonprofit organizations, funding organizations, and the Minnesota Department of Education. The purpose of these interviews is to get experts' perspectives on the strengths, weaknesses, and gaps in the early literacy efforts in Minneapolis and Saint Paul. The following is a summary of the key informant interviews.

Strengths of the current local early literacy initiatives

Many participants reported that Minneapolis and Saint Paul are doing well in beginning to align standards between Pre-K and K-3 programs. Participants highlighted the formation of standards and increased attention to the issue of alignment in both school districts.

In Minneapolis, there has been increasing attention to alignment and outcomes on early literacy indicators. That drives curriculum, teacher training, development, accountability, and the overall program.

Saint Paul Public Schools has a dedicated person for Pre-K and the person is part of our advisory group, informing our work. They have done a good job in aligning Pre-K and K, in Pre-K assessments, and early childhood education instruction.

In Saint Paul Public Schools, we have started working on aligning Pre-K to grade 3. We are putting together an Early Learning Network with community organizations, but the alignment of efforts is not as strong as it should be.

The fact early learning and elementary education are starting to come together and the importance of that connection. There is positive movement in the metro area (particularly in Minneapolis).

In addition to the beginning stages of Pre-K/K-3 alignment, respondents highlighted the use of data for differentiated instruction, student tracking, and program improvement.

Saint Paul Public Schools uses data every single day for interventions we provide for students, which activity students are assigned to. Also, we are progress monitoring our atrisk students very closely on a lot of different measures but we also have a very intentional focus on oral language development throughout the entire day in pre-K.

Minnesota Reading Corps has data that measures child early literacy predictors for oral language and vocabulary, letter name fluency, letter sound fluency and phonological skills of rhyming. Over time, programs are getting much stronger at all 5 early literacy predictors (rhyming, naming, alliteration, letter naming fluency, letter sound fluency) and gateway skills in Kindergarten. All of the organizations that work with Minnesota Reading Corps—more than 50% are on target with benchmark targets set by the University of Minnesota.

A few respondents also emphasized the importance of community and family engagement and collaboration with partners.

The relationship between Head Start and the Minneapolis School district is strong. The school district has a focus on increasing access and quality at the same time and that relationship has been a particular strength.

Minneapolis has strong community collaborations with PRESS – [Path to Reading Excellence in School Site project] and partnerships with NAZ [Northside Achievement Zone project].

Saint Paul Public Schools works with community child care partners in Project Early K, which they use to improve instruction and access to better curriculum, quality ratings in Parent Aware, access to quality preschool and early childhood education.

That idea of taking literacy into the home and parent education is really important. It's not something schools are very good at, unless you help parents understand how they have to be and can be involved and that they can advocate for child and themselves in that setting, by the time you hit Kindergarten, the boat is gone.

Home visiting and relationship building and engage parents/teachers/community partners with a focus on parent as primary driver.

Specific strategies that were most often mentioned as successful were the Response to Intervention (RtI) model in both Minneapolis and Saint Paul, the Minnesota Reading Corps tutoring programs in both Minneapolis and Saint Paul, Project Early K (now Pre-Kindergarten program) in Saint Paul Public Schools, Strong Beginnings in Hennepin county, and High Five programs in Minneapolis Public Schools.

The presence of the Minnesota Reading Corps is key—they have a small but growing emphasis on differentiated interventions.

MN Reading Corps in high need schools in MPS and throughout state. They have a standardized intervention, and the results are home runs. It's a terrific resource for kids in Minnesota.

Implementation of the Rtl Model—looks at/measures student progress from the beginning to see if they are on track.

We feel strongly that we've seen improvement in definition for quality early learning and the implications of Rtl in early learning.

Response to Intervention (Rtl: Multi-tiered systems of support): providing support to kids who have a delay or deficit.

Project Early K in Saint Paul really emphasized student language production and I definitely think that's one of the strengths of the program.

Saint Paul Public Schools Pre-Kindergarten Program because we have the research [evidence] showing that children who attended the program did better academically than their comparison group when they entered kindergarten. The program also targets children from low-income background, ELL, and needing special education [services].

In the Pre-K world, Strong Beginnings and the High Five programs in Minneapolis Public Schools. Professional development and teacher-selected curricula (Seeds to Early Literacy) are doing good things for kids.

State of Minnesota

Respondents had a variety of opinions when asked how well the state of Minnesota is doing aligning standards, curricula, and assessments for the age three to grade three education continuum. Many respondents highlighted the lack of expectations and outcomes from the Minnesota Department of Education (MDE). Similarly, a few respondents emphasized that there was no "top-down" approach for the alignment of standards, curricula, and assessments for the age three to grade three education continuum and rather these definitions were coming from districts. A few others noted that there is a lack of alignment overall.

Generously—if I were going to give the state a grade, I would give the state a C-. The conversation between the Pre-K service delivery system (including Race to the Top Initiatives) and K-6 education system is way too weak. We're avoiding using common measures and not looking at Early Childhood Indicators of Progress (ECIP) and seeing if there are outcomes we can use.

We are using a general level of analysis for looking at Parent Aware—but, it's way too weak to be able to have a strong degree of confidence to support learning at the elementary school level.

If you talk to MDE, they say "districts have their own [methods for alignment]" and "the legislature has to make these decisions." We can do more.

Not well at all. I would say that I think our districts are trying to take a lot of leadership in that work. I do not feel that the leadership is coming from the state department at all. I will say the fact that we now have to have a local literacy plan is certainly a step in the right direction. The state is requiring that of us and I think that's a good step in the right direction that they are trying to make sure that schools have those plans that include progress monitoring and things like that. But the state is not really taking leadership in terms of providing that leadership in the professional development for that to happen. I would say the district level we are moving further ahead than the state is.

Some respondents noted that there is interest at MDE to align standards, however, progress is very limited to date.

It would be a tremendous amount of work to align standards. I know there is an interest/appetite at MDE and in the education community to align standards, but it's going to take a bit of work.

The Department of Education is working on this issue of alignment. I'd give them an A for intent.

I think they're working on aligning standards, but the Race to Top efforts didn't reflect one thing for K-3 programs. If they're going to create a new system of early childhood education, there needs to be prevention of preschool fade-out effects. Once children are ready for school, then they go to Kindergarten, preschool fades out. We need to build a stronger relationship between the two. Race to the Top missed an opportunity to talk about that.

Very few respondents felt that MDE is on track with alignment and standards for the age three to grade three continuum. These respondents are encouraged by movement around the *Common Core State Standards for English Language Arts and Literacy in History/Social Studies Science and Technical Subjects* and funding from the Race to the Top grant which requires alignment of standards and assessments, especially in kindergarten to third grade.

Their comments follow below:

We feel encouraged by the momentum for Common Core standards and connection to progress and how those align and connect to K-3 standards. In addition the ECIP [Early Childhood Indicators of Progress] and the K-3 MN Standards that are based on the Common Core standards are encouraging.

Projects that are funded by Race to the Top grant have early childhood standards that are to be intentionally aligned to K-3. Race to the Top makes it possible for Minneapolis and Saint Paul [school districts] to do that. For example, Assessment for K-3 is part of Race to the Top. The implementation is just started; it works in multiple phases from now until the end of 2015.

Underserved populations

When asked what populations were not being reached by current efforts, common groups that were mentioned included African American boys and English Language Learners (ELL). Below are some respondent answers.

[When I observe classrooms] There's always the timeout chair somewhere in the classroom and usually there's a black boy sitting in that timeout chair. And what that tells me is that the instructional strategies we are using are not reaching the needs of those students.

The two groups that we still need to learn more about are dual-language learners and African American boys. I think they're being touched, but I don't think we're reaching them to the degree we need to. I also think that the data statewide is showing that we are not serving African American boys well in particular.

I don't think that students who are ELL are being identified and supported as early on as they should be. They could be better served. I think we focus on how to support language learners.

Other underserved groups that were mentioned included highly mobile populations, low-income, and Native American students. Other less common responses were struggling students who are not categorized as having risk factors and those who attend charter schools.

I would think that we have very low numbers for Native American children. I don't think we're serving them as well as we could be.

We have a highly-mobile population that falls off of the radar in terms of tracking—use/engagement of organizations/data. This is another challenge that we have.

The specific group of kids that is hardest to find are those that don't have those three big risk factors (disabilities, poverty, and ESL) that are still struggling. The middle class kid in Eden Prairie who is struggling with reading—the odds we will find her before she can receive early intervention services are zero. We find a lot of kids on poverty, disability, and ESL, but we are missing the kids that don't have those risk factors, but who aren't achieving what we want them to achieve.

Gaps and weaknesses in the current early literacy landscape

Respondents were asked to identify the most pressing issues facing early literacy efforts in Minneapolis and Saint Paul. Many respondents pointed out the complex, interconnected nature of the gaps and weaknesses surrounding early literacy. Respondents identified lack of alignment between Pre-K and K-3 programs, including common assessments; lack of access to high-quality early learning for all children; and parent education regarding literacy as areas that are in particular need of attention. Below are some of the respondent comments:

Basically in age three to grade three, there is not an aligned continuum that bridges those things. We've got pre-school things then we have elementary things. There is a lack of continuity between K and Pre-K. It's hard to coordinate efforts without a seamless continuum. That's the number one issue.

We don't have common assessments in Pre-K and K entry across the state. Because of that, we really don't know how we are doing across the board. We need common assessments.

We have a pervasive achievement gap—white and affluent have better access to early childhood opportunities than others do and that makes a difference—about that access and parent understanding.

If we had a concerted community communication effort to target to parents, and a public aware campaign of the tremendous importance of exposing kids to language, reading stories to them, talking to them (especially for at-risk parents) that hammered home how important it is and what they can do. There are simple things that anyone can do with a child to help develop their language skills before they enter Kindergarten, and that would be one of the most impactful initiatives that would occur.

Overall recommendations

Respondents offered a variety of recommendations regarding the current issues facing the early literacy landscape in Minneapolis and Saint Paul. Many respondents stressed that the early literacy issue is complex and that "there is no silver bullet" to solve these issues; rather, a "multi-pronged solution" is needed. As a result, many of the answers respondents gave intertwined with one another. Some respondents recommend creation and alignment of standards between Pre-K and K-3 schools at a systems-level. Some respondents highlighted professional development for staff to show them examples of what is working and ways they can improve their instruction technique. A few other respondents emphasized family and community engagement as a way to bolster early literacy.

Being really intentional in building school- and community-based programming, partnerships, having strong knowledge-base in early childhood education, working with principals to align pre-K to third grade [standards].

Improve interagency to mental health services, school readiness, parent engagement programs, and Pre-K.

I believe the place to start would be creating a standard across early childhood and some measures that are tied into a common understanding understood across school districts.

I'd like to see the age 3-grade 3 literacy continuum fleshed out.

We have a limited attitude or perspective of what it means to involve parents of young children. We tend to think of this engagement as telling them to read books with kids from the school and the university is telling parents what to do. [We should] turn that principle on its head and ask the parents what they can tell us about their children and how can we encourage things that parents are already doing but not thought of as literacy, but they really are (for example: talking/storytelling).

Focusing on community and family connections; being able to connect the [efforts offered in] multiple settings that children and families are participating in.

I would think we've got to do more professional development with teachers -lots more professional development. We need to give them examples of where it is working. We need to find those classrooms.

When teachers understand how children acquire vocabulary or practice strategies of repeated read-aloud and thinking skills, we see amazing outcomes. We see children from not being able to pass a basic picture naming to being fluent by the end of the program.

Respondents also recommend increased access and funding to quality Pre-K programs to serve more children and help programs to plan for the long-term.

Access—early childhood and childcare is very expensive. Minnesota has some of the highest costs in nation because we believe in quality.

We need more funding for families to have access to early learning in addition to access to quality centers especially in our target neighborhoods. In our target neighborhoods there isn't local access to those high quality centers.

I like [the focus on] increasing access. But with access, you also need to look at quality. So ensuring access to high quality programs. This means professional development and coaching for providers and not just the checklists. They need ongoing supports by professionals so that they can increase the quality of instruction and care.

Other recommendations included improving early screening and screening tools, including language-specific tools.

The focus on screening and early intervention and increasing access to parents and children to high-quality learning experiences is just pivotal.

We need a multi-linguistic, multi-cultural screening tool.

We have a universal screening and access problem.

Recommendations for Generation Next

Regarding the impact Generation Next could have to improve early literacy in Minneapolis and Saint Paul, many respondents emphasized the need for a broad selection of stakeholders involved in the Generation Next networks. Respondents desire a diverse make-up of stakeholders who will serve on network committees (i.e., in their tasks, skill sets, and outside roles). A few respondent remarks follow:

We could have a city plan and convene a group to provide leadership and pulling together while ensuring a good representation on their committees [networks].

I like Generation Next's idea of partnerships and mobilization of education, community, business, and nonprofits. It [early literacy] is a complex issue - there is no silver bullet. We have to engage different stakeholders.

Generation Next should build effective teams around each identified metric, combining people who have research and political skills that are willing to make these changes. There needs to be an element of trust building around key players around each metric. If team can work together over time with a clearly identified goal of engaging in process and changing the numbers, that would be ideal.

Key policymakers that can change policy and allocate resources—you have policy person who can reinforce those strategies—they should be included in the initiative.

In addition, a few respondents believed accountability standards, data collection, and shedding light on the complexity of early literacy are important components for the Generation Next networks to pursue. Respondent remarks follow:

Bring discussions together and bring it together based on data (kids that are on target and kids that are not) and really professionally make decisions based on that.

It's not about buying a program or product. I think we have to get away from that idea. And it's really just about good professional development, coaching in the classrooms, and data collection so that teachers can see what they're actually doing every hour of the day in the classroom and how students are responding to it.

Someone has to raise level of who has to take responsibility for this problem. Generation Next should shed light on complexity and strategy that would be helpful.

Cutting through the smoke and mirrors and really focusing on where are the outcomes occurring, what are promising practices.

Generation Next needs to tell us in simple terms: how are we doing at 3rd grade reading? How are we doing at getting better? Call out places that are doing a wonderful job and how they're doing a wonderful job. Call out places that are doing a bad job and why they're doing a bad job. Generation Next could show what happens (when you/your school succeeds) and how you can get there.

Local early literacy initiatives

There are many initiatives in the Twin Cities that focus on student literacy (see the list in the Appendix). Of the 53 initiatives offered by nonprofit organizations, school districts, government agencies, higher education institutions, foundations, and funders, we identified key strategies of tutoring (25 initiatives) and quality early childhood programs (7 initiatives). A few initiatives also solely offer professional development, parent education, or family engagement and funding or working to change education policy. Some initiatives, such as the Northside Achievement Zone and Saint Paul Promise Neighborhood focus on serving students all along the cradle-to-career continuum and provide comprehensive support services to families. Some of the initiatives have multiple key strategies. Evidence of impacts in improving student reading skills are limited overall; we are able to gather positive evidence on eight initiatives.

References

- Ackerman, D. J., & Barnett, W. S. (2005). *Prepared for kindergarten: What does* "readiness" mean? Retrieved from National Institute for Early Education Research website: http://nieer.org/resources/policyreports/report5.pdf
- Barnett, W. S., Carolan, M. E., Fitzgerald, J., & Squires, J. H. (2011). *The state of preschool 2011*. Retrieved from National Institute for Early Education Research website: http://nieer.org/yearbook
- Barnett, W. S., & Frede, E. C. (2010). Preschool education's effects on language and literacy. In S. B. Neuman & D. K. Dickinson (Eds.), *Handbook of early literacy research*, *Vol. 3* (pp. 435-449). New York, NY: Guilford Press.
- Bixby, K. E., Gordon, E. E., Gozali-Lee, E., Akyea, S. G., & Nippolt, P. L. (Eds.). (2011). *Best practices for tutoring programs: A guide to quality*. Saint Paul, MN: Saint Paul Public Schools Foundation.
- Bodrova, E., Leong, D., & Shore, R. (2004, March). *Child outcome standards in pre-k programs: What are standards; What is needed to make them work?* (Preschool Policy Matters Issue 5). Retrieved from National Institute for Early Education website: http://nieer.org/resources/policybriefs/5.pdf
- Bogard, K., & Takanishi, R. (2005). PK-3: An aligned and coordinated approach to education for children 3 to 8 years old. *Society for Research in Child Development Social Policy Report*, 19 (3), 3-23.
- Bradley, R.H., Caldwell, B. M., Rock, S. L., Barnard, K., Gray, C., & Hammond, M., (1989). Home environment and cognitive development in the first three years of life: A collaborative study involving six sites and three cultural groups in North America, *Developmental Psychology*, 25, 217-235.
- Burchinal, M., & Forestieri, N. (2010). Development of early literacy: Evidence from major U.S. longitudinal studies. In S. B. Neuman & D. K. Dickinson (Eds.), *Handbook of early literacy research, Vol. 3* (pp. 85-96). New York, NY: Guilford Press.
- Chang, H., & Romero, M. (2008). *Present, engaged, and accounted for: The critical importance of addressing chronic absence in the early grades*. Retrieved from National Center for Children in Poverty website: http://www.nccp.org/publications/pub_837.html

- Cooper, H., Charlton, K., Valentine, J. C., & Muhlenbruck, L. (2000). Making the most of summer school: A meta-analytic and narrative review. *Monographs of the Society for Research in Child Development*, 65(1), 1-127.
- Daily, S., Burkhauser, M., & Halle, T. (2010). A review of school readiness practices in the states: Early learning guidelines and assessments. *Early Childhood Highlights*, *1*(3). Retrieved from http://www.childtrends.org/Files/Child_Trends-2010_06_18_ECH_SchoolReadiness.pdf
- Education Week. (2011, July 7). *Achievement gap*. Retrieved from http://www.edweek.org/ew/issues/achievement-gap/
- Elbaum, B., Vaughn, S., Hughes, M. T., & Moody, S.W. (2000). How effective are one-to-one tutoring programs in reading for elementary students at risk for reading failure? A meta-analysis of the intervention research. *Journal of Educational Psychology*, 92(4), 605-619.
- Finlayson, N. N. (2004). Predicting low income children's kindergarten readiness: An investigation of parents' perceptions of their children's development and connections to the educational system (Master's thesis). Retrieved from http://scholarcommons.usf.edu/etd/1034
- Gormley, W. T., Phillips, D., & Gayer, T. (2008). Preschool programs can boost school readiness. *Science*, 320(27), 1723-1724.
- Hart, B., & Risley, T. R. (2003). The early catastrophe: The 30 million word gap. *American Educator*, 27(1), 4-9.
- Issacs, J. B. (2012). Starting school at a disadvantage: The school readiness of poor children. Retrieved from The Brookings Institution website:

 http://www.brookings.edu/~/media/research/files/papers/2012/3/19%20school%2
 http://www.brookings.edu/~/media/research/files/papers/2012/3/19%20school%2
- KIDS COUNT. (2010). Learning to read. Early warning! Why reading by the end of third grade matters. Retrieved from http://ccf.ny.gov/KidsCount/kcResources/AECFReporReadingGrade3.pdf
- Lara-Cinisomo, S., Pebley, A. R., Vaiana, M. E., Maggio, E., Berends, M., & Lucas, S. R. (2004). A matter of class: Educational achievement reflects family background more than ethnicity or immigration. *RAND Review*, 28(3). Retrieved from http://www.rand.org/publications/randreview/issues/fall2004/class.html

- Le, V-N., Kirby, S. N., Barney, H., Setodji, C. M., & Gershwin, D. (2006). *School readiness, full-day kindergarten, and student achievement: An empirical investigation*. Retrieved from RAND Corporation website: http://www.rand.org/pubs/monographs/MG558.html
- Lesnick, J., Goerge, R. M., Smithgall, C., & Gwynee, J. (2010). Reading on grade level in third grade: How is it related to high school performance and college enrollment? A longitudinal analysis of third-grade students in Chicago in 1996-97 and their educational outcomes. A report to the Annie E. Casey Foundation. Retrieved from Literacy Connects website:

 http://literacyconnects.org/img/2013/03/Reading-on-Grade-Level-Chicago-Longitudinal-Study.pdf
- Magnuson, K. A., Ruhm, C., & Waldfogel, J. (2004). *Does prekindergarten improve school preparation and performance?* (Working Paper #10452). Retrieved from National Bureau of Economic Research website: http://www.nber.org/papers/w10452
- Miami-Dade County Public Schools. (2012). Pre-kindergarten: Research-based recommendations for developing standards and factors contributing to school readiness gap. Retrieved from http://drs.dadeschools.net/InformationCapsules/IC1201.pdf
- Minnesota Department of Education. (2005). Early childhood indicators of progress:

 Minnesota's early learning standards. Retrieved from

 http://www.dhs.state.mn.us/main/groups/children/documents/pub/dhs16 144667.

 pdf
- National Institute for Literacy. (2009). *Early beginnings: Early literacy knowledge and instruction*. Retrieved from http://lincs.ed.gov/publications/pdf/NELPEarlyBeginnings09.pdf
- National Institute of Child Health and Human Development Early Child Care Research Network. (2000). The relation of child care to cognitive and language development. *Child Development*, 71(4), 958-978.
- National Reading Panel. (2000). *National Reading Panel reports combination of teaching phonics, word sounds, giving feedback on oral reading most effective way to teach reading* (Press release). Retrieved from http://www.nationalreadingpanel.org/Press/press rel 4 13 00 1.htm

- Reynolds, A., Magnuson, K., & Ou, S-R. (2006, January). *PK-3 education: Programs and practices that work in children's first decade* (Foundation for Child Development Working Paper: Advancing PK-3 No. 6). Retrieved from http://fcd-us.org/sites/default/files/ProgramsandPractices.pdf
- Rodriguez, E. T., & Tamis-LeMonda, C. S. (2011). Trajectories of the home learning environment across the first 5 years: Associations with children's vocabulary and literacy skills at prekindergarten. *Child Development*, 82(4), 1058-1075.
- Schultz, J. L., & Mueller, D. (2007). Effective approaches to tutoring young readers: A preliminary look at factors affecting tutoring success. Saint Paul, MN: Wilder Research.
- Sénéchal, M., & Young, L. (2008). The effect of family literacy intervention on children's acquisition of reading from kindergarten to grade 3: A meta-analytic review. *Review of Educational Research*, 78(4), 880-907.
- Snow, C., Burns, S., & Griffin, P. (Eds.). (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academy Press.
- Storch, S. A., & Whitehurst, G. J. (2002). Oral language and code-related precursors to reading: Evidence from a longitudinal model. *Developmental Psychology*, *38*, 934–947.
- Terzian, M., Moore, K. A., & Hamilton, K. (2009). Effective and promising summer learning programs and approaches for economically-disadvantaged children and youth: A white paper for the Wallace Foundation. Retrieved from http://www.wallacefoundation.org/knowledge-center/summer-and-extended-learning-time/summer-learning/Documents/Effective-and-Promising-Summer-Learning-Program.pdf
- Wasik, B. A., & Slavin, R. E. (1993). Preventing early reading failure with one-to-one tutoring: A review of five programs. *Reading Research Quarterly*, 28(2), 179-200.

Appendix

Third-grade reading

Early literacy initiatives in Minneapolis and Saint Paul

Key informants in early literacy interviews

Interview questions

Third-grade reading

A1. 3rd grade MCA reading achievement tests: 2012 Minneapolis

	Percent proficient ^a						
	Minneapolis Public Schools		Charter so Minnea		All schools in Minneapolis		
	%	N	%	N	%	N	
All students	64%	2,604	60%	853	63%	3,457	
Race/ethnicity							
American Indian	45%	142	Too few to	report ^b	45%	142	
Asian	56%	176	64%	134	59%	310	
Hispanic	48%	492	55%	86	49%	578	
Black	47%	814	53%	428	49%	1,242	
White	91%	975	83%	99	90%	1,074	
Eligibility for free or reduced-price meals							
Eligible	47%	1,647	56%	652	50%	2,299	
Not eligible	93%	952	78%	111	91%	1,063	
Limited English proficiency	43%	697	54%	301	46%	998	

Source: Minnesota Department of Education.

Note. Race/ethnicity, free or reduced-price meals, and LEP status were not reported for all students (many charter schools have missing data or could not report on the data due to small numbers of students in the category).

^a MCA-II scores are categorized as "does not meet the standards," "partially meets the standards," "meets the standards," and "exceeds the standards." Proficiency is defined as meeting or exceeding the standards.

^b Fewer than 10 students in the group.

A2. 3rd grade MCA reading achievement tests: 2012 Saint Paul

		Percent proficient a						
	Saint Paul Public Schools			chools in Paul	All schools in Saint Paul			
	%	N	%	N	%	N		
All students	63%	2,826	62%	549	63%	3,375		
Race/ethnicity								
American Indian	48%	58	Too few t	to report ^b	48%	58		
Asian	54%	739	41%	149	52%	888		
Hispanic	60%	392	47%	74	58%	466		
Black	53%	845	61%	146	54%	991		
White	85%	792	93%	102	86%	894		
Eligibility for free or reduced-price meals								
Eligible	53%	1,993	54%	418	53%	2,411		
Not eligible	88%	833	93%	95	89%	928		
Limited English proficiency	53%	1,064	42%	220	51%	1,284		

Source: Minnesota Department of Education.

Note. Race/ethnicity, free or reduced-price meals, and LEP status were not reported for all students (many charter schools have missing data or could not report on the data due to small numbers of students in the category).

^a MCA-II scores are categorized as "does not meet the standards," "partially meets the standards," "meets the standards," and "exceeds the standards." Proficiency is defined as meeting or exceeding the standards.

^b Fewer than 10 students in the group.

Early literacy initiatives in Minneapolis and Saint Paul

The figure below shows the various early literacy efforts in Minneapolis and Saint Paul. Much of the information was gathered by the University of Minnesota. Programs were included if they identified specific early literacy initiatives, reading instruction, or tutoring in reading. After school programs, not specific to reading or literacy, are not included. The information is organized by:

- Organization and/or program that provides early literacy
- Program type
- Description of services
- Key strategies
- District served
- Demographics of student served
- Evidence of impacts, as available

Early literacy efforts in Minneapolis and Saint Paul

Organization Name/ Program Name	Program Type	Description of Services	District served	Key Strategies	Demographic Group Served	Evidence of Impact
Augsburg College/Tutoring & instruction	Higher Education Institution	Tutoring and instruction: Augsburg partners with several Minneapolis Schools, placing college students in the classrooms for tutoring, small group instruction, or whole class instruction.	Minneapolis	Tutoring, reading instruction	All	
Augsburg College/Augsburg Reads	Higher Education Institution	Augsburg students provide homework help to Minneapolis youth from 1st to 12th grade.	Minneapolis	Tutoring	All	
Bethel University	Higher Education Institution	Tutoring and outreach: As part of Bethel's education program, students are regularly placed in high-needs schools in Minneapolis, St. Paul, and some suburban districts. Bethel students also routinely participate in volunteer and service learning experiences, including AVID and the East Side Learning Center, a one-on-one tutoring program for children in grades K-4.	Multiple	Tutoring	All	
Boys & Girls Clubs of the Twin Cities	Nonprofit	Eight clubs located in Minneapolis and St. Paul for children K-12th grade. Programming includes Academic Enrichment: Children get homework help through an intense two- to -three-hour after school program. Children read by themselves, to other children, listen to a mentor read, or read to a mentor for 20 minutes. Children who complete the work earn prizes.	Multiple	Tutoring		
Breakthrough Saint Paul	Nonprofit	Provides tutoring by community members	St. Paul	Tutoring	All	
Community Action Partnership	Government	Head Start and Early Head Start-Preschool child and family development program.	St. Paul	Quality Early Childhood Education	Low income	
East Side Learning Center Tutoring Program	Nonprofit	Tutoring program: Literacy tutoring program for St. Paul K-4 students who read below grade level and are unable to get help elsewhere. Training and lesson plans are provided by professional tutors for each student.	St. Paul	Tutoring	Low income; below-average in reading	Wilder Research report: Students made significant gains on the Diagnostic Reading Assessment.
East Side Learning Center PACT (Parents and Children Together) Program	Nonprofit	Provides opportunities for parents to participate in their child reading progress.	St. Paul	Parenting education	Low income	
Ethiopian Education Center	Nonprofit	Provides community-based tutoring	St. Paul	Tutoring, more time for learning	African- American	

Organization Name/ Program Name	Program Type	Description of Services	District served	Key Strategies	Demographic Group Served	Evidence of Impact
Greater Twin Cities United Way	Nonprofit (funder)	Strategic goal: Ensure early grade literacy- serves 7,200 students	All	Funding	All	
Hamline University School of Education Project SOAR	Higher Education Institution	Project SOAR: Provides K-3 low-income students with tutoring and family support activities led by preservice and licensed teachers of color. SOAR provides 60 hours of reading instruction per student per school year, small work groups, and trainings for participating schools.	St. Paul	Tutoring, reading instruction; family engagement	Low income	During summer 2008, Project SOAR reached the goal of increasing, by 90%, the basic reading skills of 40 K-3 learners who lived and attended school in urban communities.
Hennepin County Library: Summer Reading Program	Nonprofit	Encourages children to read during the summer. Kids track reading time and earn prizes. Libraries host summer reading program events, book clubs, and story times.	Minneapolis	More time for learning	All	
Hennepin County Medical Center	Nonprofit	Children's Literacy Program: Books are distributed at the hospital and clinics to pediatric patients and visitors. Volunteers read stories to pediatric patients in the waiting room.	Minneapolis	More time for learning	All	
Kaleidoscope Place	Nonprofit	After School Kids and Summer Kids: After school and summer programming for students in kindergarten through 8th grade. Students receive homework help, academic skill instruction based on the Minneapolis Public Schools standards, and participate in recreational activities. They use KidzLit curriculum to teach reading while also teaching social development skills to students. It also partners with the America Reads program through the University of Minnesota.	Minneapolis	Tutoring; reading instruction; summer learning	Low income	
Ladder 18 - Fire fighters	Government	Fire station provides a crew every working segment, currently at St. Paul City School, to tutor students in reading.	St. Paul	Tutoring, more time for learning	All	
LDA Minnesota	Nonprofit	Early Literacy programming: Prepares parents to support their child's early reading skill development through workshops, strategies, and materials; provides childcare professionals with training and materials; and uses Raising a Reader take-home book bag program. LDA specializes in learning disabilities for people of all ages.		Parenting education	All	

Organization Name/ Program Name	Program Type	Description of Services	District served	Key Strategies	Demographic Group Served	Evidence of Impact
Lutheran Social Service	Nonprofit	Foster Grandparents volunteer to read/tutor in schools for 294 students	Minneapolis	Tutoring, more time for learning	All	
Macalester College	Higher Education Institution	Tutoring and outreach: Macalester partners with several local schools, placing college students in the classrooms for tutoring, small group instruction, or whole class instruction.	St. Paul	Tutoring, small group instruction		
McKnight Foundation	Nonprofit Foundation (funder)	Working along a developmental continuum from pre- kindergarten to grade 3, McKnight Foundation seeks to increase the percentage of successful third grade readers in the Twin Cities.	All	Funding; advocacy	All	
		McKnight Foundation provides the funding to Saint Paul Public Schools and Minneapolis Public Schools.				
Minneapolis Public Schools: High Five	School district	High Five: Half-day preschool program for Minneapolis children with priority given to children who qualify for free/reduced lunch. Program uses research-based and age appropriate curricula that includes language and literacy development.	Minneapolis	Quality Early Childhood Education	Low income	
Minneapolis Public Schools: Reading and Math Partners Program (RAMPP)	School district	Reading and Math Partners Program (RAMPP): Funded by Title I, RAMPP tutoring serves students in grades K, 3, 6, and 9 at Priority and Focus schools. Student eligibility is based on academic need as shown on standardized assessments. MPS partners with community organizations and tutoring companies to provide tutoring to students.	Minneapolis	Tutoring		
Minneapolis Public Schools	School District	Strategic goal: Establish a PreK to 3 rd grade integrated system for getting children ready for Kindergarten and getting 3 rd graders reading at grade level. The focus is on English Language Learners (ELL)	Minneapolis	Family engagement; alignment of standards	ELL students, students of color	
Minnesota Center for Reading Research: America Reads	Higher Education Institution	America Reads: The University of Minnesota-Twin Cities America Reads program is dedicated to increasing the literacy skills of Kindergarten - 8th grade students, supporting the educational efforts of our community partners, and together fostering the academic, personal, and career development of students and University of Minnesota literacy mentors.	Multiple	Tutoring	All	

Organization Name/ Program Name	Program Type	Description of Services	District served	Key Strategies	Demographic Group Served	Evidence of Impact
Minnesota Center for Reading Research: PRESS (Path to Reading Excellence in School Sites)	Nonprofit	PRESS aims to prepare all students to read by third grade. Driven by research-based approaches to literacy, PRESS incorporates quality core instruction, data-driven instructional decisions and interventions, expanded support for English Language Learners, and meaningful professional development to support systemic change.	Minneapolis	Alignment of standards, tutoring, small group instruction, professional development	All	
Minnesota Department of Education: ECFE (Early Childhood Family Education)	Government Agency	ECFE program is offered through MN public school districts for families with children between the ages of birth to K. ECFE's goal is to enhance the ability of all parents and other family members to provide the best possible environment for their child's learning and growth.	All	Parenting education	All	
Minnesota Literacy Council: Children's Tutor Training	Nonprofit	Children's Tutor Training: The ABCs of Reading training is a three-hour, hands-on workshop that prepares adults to be reading tutors for children in grades K-3. Custom trainings for children's tutors are available on request.	Multiple	Professional development		761 tutors attended training in 2010. More than 90% of attendees reported greater confidence in their ability to tutor children.
Minnesota Literacy Council: Consulting Services	Nonprofit	Consulting Services: Serve as consultants to help nonprofit organizations develop successful strategies for initiating and completing a wide variety of literacy related projects and programs.	All	Consulting to organizations		
Minnesota Literacy Council: Early Literacy and Families	Nonprofit	Early Literacy and Families: Foster family literacy through preschool activities at two preschools, Children's English Schools at Arlington Hills Lutheran Church and in Northeast, and through home visiting. Preschool classes focus on literacy skills and parents join their children in an enrichment activity once a week. The home visiting sessions focus on improving parent-child interactions that strengthen children's development and early literacy.	Multiple	Family engagement, quality early childhood education	Low income	100% of children made literacy development gains on the Individual Growth and Development Indicators. 88% of parents reported making changes in behaviors to support their child's education.
Minnesota Literacy Council: Summer Reads VISTA	Nonprofit	Summer Reads VISTA: Provides quality tutoring to children in grades K-3 from low-income families. VISTAs serve in summer schools, libraries, and community organizations, with the goal of helping children improve their literacy skills and fight the summer slide.	All	Tutoring, summer learning	Low income	

Organization Name/ Program Name	Program Type	Description of Services	District served	Key Strategies	Demographic Group Served	Evidence of Impact
Minnesota Reading Corps	Nonprofit	Minnesota Reading Corps is an AmeriCorps program that provides trained literacy tutors for children age three to grade three.	All	Tutoring	All	MRC placed 674 AmeriCorps members in 2010-2011 and tutored 19,135 children. In 2010- 2011, MRC achieved an 80% pass rate on 3rd grade MCA reading test. See also Wilder Research report for 2009-2010 program evaluation.
Neighborhood House	Nonprofit	Provides information on children's literacy, and parent education in school readiness	St. Paul	Parenting education	Low income	
Network for the Development of Children of African Descent (NDCAD)	Nonprofit	The Sankofa Reading Program is an after-school tutoring program for students in K-8th grade that helps students build reading confidence and cultural identity resulting in better academic performance. The program teaches students to master reading skills and strategies that can be applied to any text, any time, for any purpose over a lifetime.	Multiple	Tutoring	African American	
Northside Achievement Zone (NAZ)	Nonprofit	Strategic goal: Closing the achievement gap and replacing it with culture of high expectations	Minneapolis	Family engagement, quality early childhood education; focus on cradle- to- career education.	Students of color in the geographic area.	
Parents in Community Action (PICA)	Government	Head Start and Early Head Start-Preschool child and family development program.	Minneapolis	Family engagement, quality early childhood education	Low income	
Pillsbury United Communities	Nonprofit	Kids College: Youth in Pillsbury Neighborhood Center's after school programs participate in this literacy program, which focuses on coaching youth in specific reading skills, including both fluency and comprehension. Each youth reads one-on-one with a tutor at least once a week.	Minneapolis	Tutoring	Low income	

Organization Name/ Program Name	Program Type	Description of Services	District served	Key Strategies	Demographic Group Served	Evidence of Impact
R.E.A.D. Dogs Minnesota	Nonprofit	Improves the literacy of children through the use of therapy animal partners. Dogs and their trainers are part of programs in libraries and schools. The program conducts training workshops for dog owners, matches volunteers and facilities, and creates and facilitates R.E.A.D. events.	All	Tutoring		
Reach Out and Read physician-based book program	Private Sector	Doctors provide books and info on reading aloud to children to their patients.	All	Family Engagement	All	Research findings from 14 published, peer-reviewed studies clearly demonstrate that Reach Out and Read works. Compared to families who have not participated in the program, parents who have received the Reach Out and Read program are significantly more likely to read to their children and have more children's books in the home. Children served by the Reach Out and Read program score significantly higher on vocabulary tests. This increase represents a sixmonth developmental gain for children in the preschool years.
Saint Paul Promise Neighborhood	Nonprofit	Collaboration focused on single community	St. Paul	Family engagement, quality early childhood education, focus on cradle-to- career education.	Low income in the Promise Neighborhood area.	
Saint Paul Public Library: Summer Reading Program	Government	Summer Reading Program: Encourages children to read during the summer. Kids track reading time and earn prizes. Libraries host summer reading program events and story times.	St. Paul	More time for learning	All	

Organization Name/ Program Name	Program Type	Description of Services	District served	Key Strategies	Demographic Group Served	Evidence of Impact
Saint Paul Public Schools: Extended Day for Learning	School District	Additional learning time in math, reading, and other subjects for students in grades K-12. Each school customized their on-site program. Voluntary, free of charge, available to all SPPS students, staffed by certified teachers.	St. Paul	More time for learning	All	
Saint Paul Public Schools Pre- Kindergarten Program (formerly Project Early K)	School District	Pre-Kindergarten Program (Pre-K): Provides a rigorous academic preschool education for children. Priority is given to children who are eligible for free or reduced lunch, children with learning and development needs and children without preschool experience. It involves Reading Corps members.	St. Paul	Quality early childhood education	Low income;	Wilder Research report 2005-2006 to 2011-12: PEK children had academic skills that were substantially more advanced than their
		Note that Saint Paul Public Schools is currently participating in Child-Parent Center and McKnight Foundation Education and Learning to align Pre-K and K-3.				kindergarten classmates. In third grade, some academic advantages were maintained for PEK students over classmates without prior preschool experience.
Saint Paul Public Schools Foundation	Foundation (funder)	Provides financial support for programs such as tutoring	St. Paul	Funding	All	
Saint Paul Urban Tennis	Nonprofit	Delivers the life-long game of tennis with living skills to 5200 urban youth (972 kids of color, 57% were on scholarship) in Saint Paul using a curriculum that is part tennis and part living skills, and summer program includes a reading component. The SPUT Reading Program: For children age 5-8 who are taking tennis lessons during the summer. At the conclusion of the tennis lesson, instructors invite kids off court to do a reading activity.	St. Paul	More time for learning	Low income	
Twin Cities Housing Development Corporation Liberty Plaza	Private Sector	PLUS Time: An after-school program for K-5th graders that focuses on science, math and reading.	St. Paul	More time for learning	Low income	
University of St. Thomas	Higher Education Institution	Summer Reading Programs: Five-week reading skills programs taught by instructors from the Institute of Reading Development. Offered to children age 4 and up. Maximum class size is 18 students. Programs are available on campus and in 10 suburban locations. A limited number of scholarships are available.	All	Reading instruction; summer learning	All	

Organization Name/ Program Name	Program Type	Description of Services	District served	Key Strategies	Demographic Group Served	Evidence of Impact
Urban Battle's Tutoring Program	Nonprofit	Free academic tutoring program that focuses on reading and math. Available for grades 1-12 two evenings per week.	St. Paul	Tutoring	All	
Urban Ventures	Nonprofit	Learning Lab: Academic based after-school program that serves 1st through 8th grade students. Students in the Learning Lab receive academic support from licensed teachers who create an individualized curriculum for each child. The curriculum is designed to help the students increase their math and reading abilities and learn study skills. In addition, the Learning Lab staff provides a multi-faceted schedule that includes enrichment opportunities such as book clubs, art classes, science experiments and writing workshops. Students also receive support from the many volunteer tutors who come to the Learning Lab each day. Tutors provide the kids with important one-on-one attention and help them develop both personally and academically.	Minneapolis	Tutoring	Low income	
Volunteers of America	Nonprofit	Minnesota RSVP provides 137 senior volunteers to read/tutor in schools	Minneapolis	More time for learning	All	
Volunteers of America of Minnesota	Nonprofit	AARP Experience Corps: Older adults provide literacy tutoring in kindergarten through third-grade classrooms in 10 Minneapolis and St. Paul schools. Tutors are community members who work with students one-on-one or in small groups under supervision of the classroom teacher.	Multiple	Tutoring	All	Of the 96 percent of students whose overall reading skills were rated as being below grade level at the beginning of the year, 71 percent were rated as having improved by the end of the year.
Way to Grow	Nonprofit	Provides multiple services for families with preschool children, including home visits. It uses the "Read Together, Talk Together" in curriculum. The Great by Eight Initiative expands programming to include MPS students.	Minneapolis	Family engagement	Low income	
West 7th Community Center	Nonprofit	Community Kids After-School Program: After-school program for students in grades K-8. They are a SPPS Extended Day Learning Center, utilizing district curriculum targeted to improve student achievement. Students receive reading and math instruction twice weekly from licensed teachers, daily homework help, and library visits.	St. Paul	Tutoring	All	

Organization Name/ Program Name	Program Type	Description of Services	District served	Key Strategies	Demographic Group Served	Evidence of Impact
YW Reads (K-3rd grade from Jackson)	Nonprofit	Provides after school reading program for readers below grade level.	St. Paul	Tutoring	Low income	
MinneMinds	Coalition of nonprofit organizations	Increase access to high-quality childcare and education	Statewide	Advocate for increasing funding (e.g., for early childcare scholarships) and quality of care and education	Low income	

Key informant interviews: List of interviewees

Meghan Barp

Vice President of Community Impact, Greater Twin Cities United Way

Bobbie Burnham

Deputy Director, Minnesota Department of Education

Lisa Gruenewald

Supervisor, Saint Paul Public Schools Office of Early Learning

Lori Helman

Co-Director, University of Minnesota Center for Reading Research

Kate Horst

PreK Master Coach Coordinator, Minnesota Reading Corps

Carrie Johnson

Director of Early Education, Way to Grow

Amanda Lodermeier

Elementary Education Manager, Way to Grow

Scott McConnell

Professor, University of Minnesota, Center for Early Education and Development (CEED)

Eileen Nelson

Education Specialist, Minnesota Department of Education Early Learning Services Division

Christine Osorio

Executive Director of Curriculum, Instruction, and Professional Development, Saint Paul Public Schools

Todd Otis

Director of Community Partnerships, Think Small

Kari Ross

Reading Specialist (Academic Standards and Instructional Effectiveness), Minnesota Department of Education

Ronel Robinson

Program Director, Way to Grow

Maureen Seiwert

Executive Director, Early Childhood Education, Minneapolis Public Schools

Bharti Wahi

Children and Family Literacy Program Director, Minnesota Literacy Council

Key informant interview protocol: Early literacy

Introduction

Wilder Research is doing some background research to help inform the Generation Next initiative in the Twin Cities on several issues. We would like to do a brief telephone interview with you regarding your views on **early literacy** efforts in Minneapolis and St. Paul. This includes readiness for kindergarten and third grade proficiency, current strengths and gaps in these efforts, suggestions for improvement. The interview will take about 20 minutes. We are interviewing 12-15 local experts and leaders about early literacy. Results of the interviews will be included in a report that will be used by a network of Generation next stakeholders working on the early literacy issue. The comments you provide will not be associated with your name in the report (unless you grant us permission to do so). Is this a good time for the interview, or would you like to schedule it at a later time. Also, if you are not the best person to talk to in your organization about this issue, could you tell us who we might contact?

A few words about Generation Next... This is an initiative committed to closing the achievement gap among Twin Cities' low-income students and students of color. It is an unprecedented partnership of key education, community, government, and business organizations dedicated to accelerating educational achievement for all our children – from early childhood to early career. The Generation Next model includes a shared community vision, evidence-based decision making, collaborative action, and investment and sustainability.

By early literacy focus, we mean policy and practices regarding:

- Transition (or continuum) from prekindergarten to K-12 system, focusing on children age 3 to grade 3. This includes the roles of different organizations, programs, and school systems in aligning/coordinating efforts to support children's early literacy skills (e.g., Head Start, school-based programs, childcare centers, licensed family childcare, K-12 school systems).
- Effective reading instruction along this continuum, preparing children for later literacy and school success.
- Common measurements and meaningful assessments for age 3 to grade 3 continuum.
- Targeted early identification and interventions for children (especially children from low-income families, minorities, special education). For example, high quality preschool programs to prepare children for kindergarten; group-specific interventions.
- Teacher recruitment and development in supporting children's literacy skills.

■ Family interventions around literacy and in and out of school services.

Can we begin?

1. Do you have a particular area of knowledge or expertise within the general field of early literacy (focusing on children age 3 to grade 3)?

The following questions refer to early literacy efforts (age 3 to grade 3) in Minneapolis and Saint Paul, unless indicated otherwise. Please answer for Minneapolis or Saint Paul, or both, depending on your knowledge, but please indicate to which area your answers apply.

2. What do you think are the strengths of current efforts to foster student kindergarten readiness and proficiency in reading by grade 3? That is, in what areas are we doing well?

Why do you feel this way?

- 3. Is there a specific strategy or program that you think is especially effective? If so, what is the name of the strategy/program (and organization)? Who is the strategy/program reaching? (e.g., specific demographic groups, age/grade levels). What impact is it having?
- 4. How well is the State of Minnesota doing in aligning standards, curricula, and assessment for age 3 to grade 3 education? Please explain your answer.
- 5. What are the weaknesses or gaps in current efforts to help ALL students become prepared for kindergarten and proficient in reading by grade 3 (again, in Minneapolis, Saint Paul or both)? Is there a particular issue or problem that is not being addressed effectively?
- 6. Are there any specific student groups that are not being reached adequately by current efforts?
- 7. In your view, what is the most pressing issue that needs to be addressed if student success in reading/ literacy is to be improved substantially?
- 8. What would you suggest or recommend to address this issue?
- 9. Do you have any further thoughts on improving student early literacy skills, or what Generation Next might do in this regard?
- 10. Do you have any suggestions for who else we might talk to about early literacy issue locally? If so, please provide the person's name, organization, phone number, and e-mail address.
- 11. Any closing comments?