

Project Early Kindergarten-Early Reading First

*Evaluation report on the second year of a
Saint Paul Public Schools initiative*

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Contents

Executive summary.....	1
Introduction.....	3
National Early Reading First	3
Local Early Reading First.....	4
Contents of the report.....	6
Program components and goals	7
Program components	7
Goals and benchmarks	13
Research methods	16
Implementation results.....	18
Overview.....	18
Student demographics and attendance	21
Goal 1: Staff capacity.....	24
Goal 2: Curriculum and instruction	29
Goal 3: Classroom environment	36
Goal 4: PAE alignment.....	37
Use of child and classroom assessments.....	40
Issues for consideration.....	42
Outcomes results.....	44
Overview.....	44
Goal 5: Student achievement	47
Goal 6: Parent capacity	58
Issues for consideration.....	59
References.....	60
Appendix.....	63
Program components	65
Student demographics and attendance	68
Goal 1: Staff capacity.....	70
Goal 2: Curriculum and instruction	76
Goal 4: PAE alignment.....	80
Goal 5: Student achievement	83
Goal 6: Parent capacity	87

Figures

1. PEK-ERF goals and benchmarks.....	15
2. Research-based assessment tools used in PEK-ERF evaluation.....	17
3. Progress toward PEK-ERF implementation goals and benchmarks, Year 1 and Year 2.....	20
4. Number of children by location, Year 2	21
5. Children’s income status and home language, Year 2.....	22
6. Children’s race/ethnicity, Year 2	23
7. ELLCO results for subscales pertaining to Goal 2, Year 2 pre – post.....	30
8. CLASS PreK means by subscale, Year 2 pre – post.....	33
9. ELLCO results for subscales pertaining to Goal 3, Year 2 pre – post.....	37
10. Progress toward PEK-ERF outcomes goals and benchmarks, Year 1 and Year 2 ...	46
11. IGDI scores, Year 2 pre – post.....	48
12. Percent of 4-year-olds meeting IGDI target scores, Year 2 pre – post.....	49
13. TROLL average scores, Year 2 pre – post.....	51
14. PEK-ERF total TROLL scores compared to TROLL norming sample, Year 2 pre – post.....	52
15. Percent of children meeting TROLL target scores, Year 2 pre – post.....	53
16. PALS average scores, Year 2 pre – post.....	54
17. Children meeting PALS target scores, Year 2 pre – post	56
18. PPVT average standard scores, Year 2 pre – post	57

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Executive summary

Program overview

The federal Early Reading First program provides financial support to transform early childhood centers into “centers of excellence” that promote language and cognitive skills and a strong early reading foundation. In 2006 Saint Paul Public Schools received a three-year, \$3.8 million grant through the initiative. Saint Paul used its funds to expand its Project Early Kindergarten (PEK) program to an additional two schools and two child care centers.

Project Early Kindergarten – Early Reading First (PEK-ERF) is a partnership between Saint Paul Public Schools, Wilder Child Development Center, and Bethel University King Family Foundation Child Development Center. The program provides pre-kindergarten education to 3- and 4-year-olds in Saint Paul, and targets those who are low-income, English Language Learners, or need Special Education services.

PEK-ERF takes a rigorous academic approach to early education, aligning pre-kindergarten education with the district’s K-12 academic reform model, the Project for Academic Excellence. The program emphasizes standards-based learning, extensive professional development, parent education and support, and a community-wide approach involving both schools and child care settings. Participating schools and child care centers implement the literacy-rich *Doors to Discovery* curriculum.

PEK-ERF served a total of 125 children during its second year of programming, from September 1, 2007, to July 31, 2008. The grant funds services through September 30, 2009.

Research methods

Wilder Research conducts an independent evaluation of PEK-ERF, working in conjunction with Saint Paul Public Schools’ Department of Research, Evaluation and Assessment. Research-based assessment tools measure children’s academic progress and classrooms’ support for language and literacy. Assessments conducted in the spring of children’s pre-kindergarten year also provide measures of their school-readiness.

Activities and results

The program achieved a number of successes during its second year:

- Almost all participants fell into one or more of the program’s three target categories.
- Overall, teaching staff were positive about their involvement with the program and its training and coaching.
- Observations found that overall, teachers provided strong emotional support and actively engaged children in learning activities.
- Classrooms showed overall improvement in the extent to which they promote literacy and language development.
- All classrooms observed were found to have implemented a majority of the indicators of alignment with the Project for Academic Excellence.
- Classrooms showed stronger implementation in curriculum and instruction, and classroom environment components in the second year than the first year, partly due to a longer programming year.

- Compared to their peers nationally, 4-year-olds in both school and child care settings made faster progress in English receptive vocabulary on average.
- Based on teachers' ratings of oral language, reading, and writing, PEK-ERF participants appeared to make faster progress than peers in a national sample.
- Additional assessments measuring alphabet knowledge, print and word awareness, and other measures of early language and literacy also showed improvements for both 3- and 4-year-olds on average, although it is difficult to know at this point how progress compares to typical development.

Issues for consideration

PEK-ERF showed strong implementation efforts. Implementation is an ongoing process, and the program gathered valuable information during its second year on ways to continue strengthening these efforts. Staff can use the following evaluation insights to inform future planning.

- Based on feedback from teaching staff, the program may want to provide coaching support on working effectively with mixed-age classrooms and with behavioral issues.
- Teachers communicated that future professional development can now delve deeper into program elements, and that they can also benefit from additional professional development on ways to increase parent involvement.

- Teachers voiced strong appreciation for opportunities to connect with each other, and program staff may want to consider additional ways to foster these connections.
- Variations existed among classrooms in the extent to which they were literacy-rich, their alignment with the Project for Academic Excellence, and teacher-student interactions. Staff can use classroom-level results to target coaching to individual classrooms.
- Program staff can explore ways to boost children's progress. Across language and literacy assessments, 3-year-old children at school sites generally seemed to be further from attaining benchmarks than child care children. Differences could in part reflect the higher percentage of children at school site with a home language other than English. However, differences in meeting language and literacy targets between the settings were not found for 4-year-olds.
- The program can continue to work toward increasing parents' understanding of how best to support their children's learning, including how often they take their children to the library and check out books, and allow their children to watch television.

Looking ahead

Future evaluation results for PEK and PEK-ERF will also provide valuable information as the district pursues a larger initiative to ensure consistency across 4-year-old programs and to align them with the Project for Academic Excellence.

Introduction

“The mission of Early Reading First is to ensure that all children enter kindergarten with the necessary language, cognitive, and early reading skills for continued success in school.”

—(U.S. Department of Education, 2007a)

National Early Reading First

The federal No Child Left Behind Act of 2001 added two new reading programs to the Elementary and Secondary Education Act. Reading First supports evidence-based reading instruction in kindergarten through third grade (USDOE, 2007b). Early Reading First (ERF) supports high-quality early education for preschool-age children. ERF awards grants to help improve early childhood centers serving primarily low-income children, with the goal of transforming them into “centers of excellence” that promote language and cognitive skills and an early reading foundation (USDOE, 2007a). As stated by the U.S. Department of Education in its own language (USDOE, 2007a), ERF funds must be used to do the following:

- Enhance children’s language, cognitive, and early reading skills through professional development for teachers;
- Provide early language and reading development and instructional materials as developed from scientifically based reading research;
- Provide preschool-age children with cognitive learning opportunities in high-quality language- and literature-rich environments;
- Use screening assessments to effectively identify preschool-age children who may be at risk for reading failure; and
- Improve existing early childhood programs by integrating scientifically based reading research into all aspects of the program (including instructional materials, teaching strategies, curricula, parent engagement, and professional development).

Local Early Reading First

In 2006 Saint Paul Public Schools (SPPS) received a three-year, \$3.8 million ERF grant. The program began serving children in January 2007, with a shorter initial programming year spanning January 8 through July 31, 2007. The grant funds services through September 30, 2009. The 2008-09 school year will mark the third year of the program. The current grant builds on the work of the district's previous ERF project, Children Have Opportunities in Centers of Excellence (CHOICE). Personnel from CHOICE assisted in the development of the proposal for the current ERF grant and have been involved in its implementation. Learning from the previous grant has also informed the current initiative.

Expanding Project Early Kindergarten

Saint Paul used its ERF funds to expand its Project Early Kindergarten (PEK) program. PEK began in 2005 and provides pre-kindergarten education primarily to low-income children, English Language Learners, and children needing Special Education services in Saint Paul. PEK takes a rigorous academic approach to early education, aligning pre-kindergarten education with the district's K-12 academic reform model, the Project for Academic Excellence. The program emphasizes standards-based learning, extensive professional development, parent education and support, and a community-wide approach involving both schools and child care settings. As of fall 2008, 28 Saint Paul schools, 8 child care centers, and 13 family child care homes are offering PEK. The program is funded primarily by Saint Paul Public Schools and The McKnight Foundation, with the Minnesota Early Learning Foundation contributing funds to the child care portion.

With the federal ERF grant, the district extended the PEK approach to an additional two schools (Eastern Heights and Highwood Hills) and two child care centers (Bethel University King Family Foundation Child Development Center and Wilder Child Development Center). The local ERF evaluation and this report focus on these two schools and two child care centers. Hereafter, PEK-ERF refers to the portion of Project Early Kindergarten covered by the federal ERF grant, and PEK refers to the portion of Project Early Kindergarten funded by the district and McKnight.

PEK-ERF

PEK-ERF follows the “Early Childhood Workshop,” a preschool classroom framework developed for PEK. With sensitivity to young children’s developmental needs, the framework emphasizes standards-based early education and alignment with the Project for Academic Excellence. The Early Childhood Workshop provides daily rituals and routines that structure the daily activities of participating classrooms. While both PEK-ERF and PEK implement the Early Childhood Workshop framework in all sites, with variations based on individual sites’ needs, the programs differ somewhat in their curricula. In conjunction with the Early Childhood Workshop, PEK-ERF implements the literacy-rich *Doors to Discovery* curriculum in both elementary school and child care settings. In PEK, child care centers implement *Doors to Discovery*, school teachers develop lesson plans to use within the Early Childhood Workshop framework, and family child care providers follow a theme-based curricular model developed specifically for them. As with PEK, PEK-ERF also provides extensive professional development in the form of teacher training sessions and on-the-job coaching, and promotes parent involvement in children’s learning.

Children who are 3 or 4 years old as of September 1 of the program year may participate in PEK-ERF. Some children may attend the program for two years. While PEK offers the program to 4-year-olds at school sites and 3- and 4-year-olds at child care sites, all PEK-ERF sites offer the program to 3- and 4-year-olds. Both programs target children who are low-income, English Language Learners, or need Special Education services. PEK-ERF children participate in the full-day, five-day-a-week program at their child care center or one of the participating schools. At school sites, the six-and-a-half-hour day mirrors the length of the regular school day. Program services are offered year-round, including the summer months. PEK schools differ somewhat in that they offer a half-day program following the traditional school calendar.

Each PEK-ERF location has two classrooms offering the program, for a total of eight classrooms. The program selected these sites based on their history of serving populations targeted by the program and an analysis of their potential to be transformed into “centers of excellence.” The program cites the quality, commitment, and education of staff as one of the key strengths across sites. School sites also bring with them the district’s commitment to strengthening early education programs and aligning programs with the Project for Academic Excellence. Program staff value participating child care centers’ formal associations with professional teacher preparation (Bethel University) and research (Wilder) institutions.

Contents of the report

This report provides an overview of PEK-ERF and summarizes implementation and outcomes results following the program's second year of operation, which spanned September 1, 2007 to July 31, 2008.

The following section describes program components and goals, and research methods for assessing progress toward those goals. The report then summarizes second-year evaluation results, starting with a section on program implementation followed by a section on program outcomes. Both the implementation and outcomes sections begin with a summary of results and conclude with a list of issues that can be considered in future program planning. Throughout the report are references to figures appearing in the main body of the report and the Appendix.

Program components and goals

This section provides an overview of program components and goals, as well as research methods used to assess progress toward those goals. Key components of the program include alignment with the Project for Academic Excellence, involving implementation of the Early Childhood Workshop framework; literacy-rich instruction using the *Doors to Discovery* curriculum; extensive ongoing professional development; parent education and support; and contributions to district efforts to streamline 4-year-old programs. The program established six overarching goals, with annual benchmarks supporting attainment of those goals. An independent evaluation assesses progress toward those goals and benchmarks.

Program components

Alignment with the Project for Academic Excellence

With differences based on young children's developmental needs, PEK and PEK-ERF bring children's preschool experience into alignment with the educational experience they will have in their K-12 years in Saint Paul Public Schools. This educational experience centers on the Project for Academic Excellence. The district introduced the Project for Academic Excellence in 2001 as a comprehensive academic reform model. Since that time, the Project for Academic Excellence has expanded from a pilot project in selected elementary schools to a district-wide approach implemented in every grade level.

The Project for Academic Excellence emphasizes standards-based education and extensive professional development. It aligns the district's curriculum model with state and national standards in reading, writing, math, and science. It also provides ongoing training for teachers and administrators based on national standards for effective training. Professional development includes best practices in standards-based instruction of core academic subjects. The model also emphasizes on-the-job coaching to help teachers develop lessons with clearly defined learning goals. Principals play an important role as instructional leaders who are involved in classrooms and oversee classrooms' implementation of the model (Saint Paul Public Schools, 2005). In the case of PEK-ERF, this role also extends to child care center directors. Underlying the model are Principles of Learning developed by the University of Pittsburgh's Institute for Learning. These principles emphasize the role of effort-based education, rather than aptitude, in educational achievement (Saint Paul Public Schools, n.d.-a).

In the district's own language, following are the 10 core components of the Project for Academic Excellence (Saint Paul Public Schools, n.d.-b):

1. Standards-based curriculum and instruction as the foundation of reform;
2. Extensive continuing professional development for teachers and administrators;
3. Focus on a small number of core academic skills;
4. Demonstration sites to promote replication;
5. A shared sense of instructional leadership across the school and district;
6. Content-based coaching of teachers, principals, and district leaders;
7. Availability of essential materials for learning;
8. Peer support for teachers;
9. Standards-based assessment to monitor progress; and
10. Increasing to scale across the district.

Early Childhood Workshop

PEK-ERF classroom instruction and routines are guided by the Early Childhood Workshop, a preschool classroom framework developed for PEK by local and national experts in early childhood development. Materials are geared toward the developmental needs of young children and are based on best practices in early childhood education. The framework aligns instructional methods and classroom routines with the Project for Academic Excellence and emphasizes specific standards in personal and social development, language and literacy, mathematical thinking, and physical development and health. The Early Childhood Workshop is presented in a comprehensive implementation manual for teachers. During the second year, PEK-ERF teachers participated in Level II Early Childhood Workshop training along with PEK staff and received the Level II version of the implementation manual.

The program identified the following best practices that teachers are expected to follow in their implementation of the Early Childhood Workshop framework:

- Designing a print-rich environment;
- Following a predictive schedule with rituals and routines;
- Planning standards-based lessons in a monthly area of study;
- Implementing clearly defined centers, organized around an area of study;
- Scheduling a 50-60 minute center-based learning block;

- Adult interaction during active learning time;
- Incorporating shared reading and interactive writing techniques;
- Conducting repeated readings of classroom literature;
- Conducting three read alouds per day;
- Introducing at least three new vocabulary words each day;
- Engaging children in purposefully planned and targeted-skill small groups each day; and
- Using a variety of strategies on an ongoing basis to facilitate the home-school connection.

As addressed in the best practices, classrooms follow a structured daily classroom schedule under the Early Childhood Workshop framework (Figure A1). Rituals and routines, materials, and activities are based on research on developing language, cognitive, and early reading skills. The core of the framework is implemented in a two-and-a-half-hour morning block, and includes the following four main components:

1. *Community circle time:* Teachers deliver standards-based lessons in core content areas to the full group of students. Teachers can use a variety of techniques to deliver the lesson, including read alouds, shared reading, interactive writing, and calendar activities.
2. *Small groups:* An expectation for daily small group instruction allows teachers to differentiate instruction based on information gathered through their assessments of individual children. The literacy coach helps teachers group children based on needs identified in the assessments, and change groups over time based on changing needs. Small groups also provide children opportunities to practice cooperation and problem-solving skills.
3. *Active learning time:* Teachers help children engage in hands-on learning through independent and small group activities around the room during active learning time, considered the central part of the workshop. Learning centers offer literacy props and activities designed to extend the day's lesson.
4. *Regroup to revisit:* At the end of the workshop, students gather for a closing meeting, where the full group of children regroup and revisits the day's lesson and their work. During this time, the class may also make plans to extend an area of learning in the afternoon or on the following day.

PEK-ERF extended the Early Childhood Workshop schedule to accommodate a full day of programming. This extension includes two additional literacy blocks in the afternoon: a block of time for extended learning and projects, and a block of time for additional small groups. Teachers plan instruction for these blocks that follows the needs and interests of the children and fits within the areas of study. The extended learning and projects block provides time for children to deepen their understanding and skills, encounter new problems, and incorporate newly mastered skills into their play. Teachers are encouraged to follow the children's lead and interests, while using the additional time to talk, read, and write with children. The afternoon small group block is used for an additional five-day read aloud. Teachers read the same book for five days and follow a protocol that targets different book and print skills each day, including comprehension. On the fifth day, teachers are encouraged to have children share the stories in fun and meaningful ways.

***Doors to Discovery* curriculum**

In both elementary school and child care settings, PEK-ERF implements *Doors to Discovery*, a complete, literacy-focused curriculum. *Doors to Discovery* promotes oral language skills, phonological awareness, alphabet knowledge, print concepts, and a love of books in pre-kindergarten children. Literacy-enriched learning centers, referred to as "Discovery Centers," are used to integrate the curriculum into active learning activities (Wright Group/McGraw-Hill, n.d.).

The curriculum provides teachers with defined lessons organized by themes or areas of study. The PEK-ERF literacy coach works with teachers to help them incorporate the theme into classroom learning centers. Teachers supplement the curriculum with five-day read alouds. As described above, these involve reading the same book for five days with a different teaching point each day. During the second year, PEK-ERF teachers have also begun implementing the math curriculum, *Everyday Math*.

PEK-ERF purchased a variety of classroom materials to support curriculum implementation and promote children's literacy skills. For example, in addition to books and picture cards, program staff felt that English Language Learners as well as other children with low language skills needed real objects that could be manipulated during active learning time to help them master new vocabulary words. Materials purchased for participating classrooms include books related to areas of study; book kits with puppets and other props; concept- and vocabulary-building kits and games; audio tapes; alphabet and word puzzles; alphabet and number games; book easels for shared reading; writing tools; music and disc players; children's magazines; stamps, stencils, and dry erase boards; and computers and printers for classrooms that did not already have them. PEK-ERF also supported teachers' efforts in developing classroom materials to support the

areas of study. Some of the materials included a vocabulary bingo, matching games, shared reading materials, and group reading kits. For Positive Behavior Supports, teachers developed a vocabulary wheel to teach children about emotions, a problem solution kit, and a book to help children develop problem-solving skills.

Professional development

As with the Project for Academic Excellence, PEK-ERF emphasizes extensive ongoing professional development. Program standards for professional development include that it be research-based, aligned with the principles of the Project for Academic Excellence, and focused on helping teachers build skills in the four areas of preschool literacy: oral language, phonological awareness, print awareness, and alphabet knowledge. Professional development activities aim to improve the quality of teaching, model instruction after research-based best practices, improve the classroom environment, provide strategies for engaging families, and help teachers inform their instruction with information gathered in student assessments.

The program's professional development takes place both in the form of formal training sessions and coaching of teachers. Training sessions are conducted by professional trainers, including consultants from the California-based Foundation for Comprehensive Early Literacy Learning (CELL), a Positive Behavior Supports consultant, an early literacy consultant from the Hamline University, and an educational consultant formerly with the Minnesota Early Literacy Training Project. A consultant from the University of Virginia's Preschool Language and Literacy Lab also provided staff professional development on interpreting and using results from the Classroom Assessment Scoring System PreK (CLASS PreK). Also, PEK assistant director and Saint Paul Public Schools' School Readiness and Community Kindergarten manager facilitated trainings.

A literacy coach works individually with school and child care teachers and assistants each week to help them incorporate strategies and activities from the training provided. The literacy coach reinforces training topics by observing classrooms, modeling strategies learned in training, and coaching teachers one-on-one based on their individual needs. The coach also works with teachers to establish goals and to plan their weekly lessons. The program views strong relationships as integral to successful coaching, and the coach works to establish a rapport with teachers, assistants, child care center directors, and school principals. The coach, in turn, also receives ongoing training on coaching.

Parent education and support

As with PEK, PEK-ERF emphasizes parents' involvement in their children's learning. Professional development provided during the first and second year included training on informing and involving families in a child's school readiness. The program provides parents with information and support aimed at encouraging parents to engage their children in literacy activities at home, and expanding parents' understanding of school-readiness expectations. According to program staff, both child care and school-based teachers have the opportunity to talk with many parents on a daily basis. Teachers also share results of child assessments with parents to help parents understand children's early academic skills, progress, and needs.

Additionally, during the second year, the PEK-ERF parent educator created materials for families to support their children's language and literacy learning at home. The parent educator provided each family with a *School-Home Partners in Learning* teaching resource box. The resource box contains materials to support 12 preschool themes, eight of which are specific to the *Doors to Discovery* curriculum. Each theme has a *Talk-Read-Write* child booklet and parent handout, along with *Teaching Tool* games and a *Helping your Child Learn to Read* parent handout. Using the *Teaching Tools* games (such as dice, predicting cards, truck puzzles, memory games), parents are encouraged have fun with their children as they practice the *Talk-Read-Write* skills. The *Helping Children Learn to Read* handout gives explicit instruction to parents on how and why to use the tools (games) at home. Teachers are also coached to incorporate these activities into their weekly lesson plans before sending materials home to families.

Streamlining district 4-year-old programs

Before PEK and PEK-ERF, Saint Paul Public Schools' early childhood programs reflected varying funding sources and populations served. Different departments administered the programs, and programs differed in their curricular approach. School programs also operated in a separate sphere from community child care programs, with no formal attempts to link curriculum or instructional practices. In 2005, the district established a planning committee to improve consistency and quality across programs for 4-year-olds. With the goal of aligning early childhood education with the Project for Academic Excellence, the committee established district standards for 4-year-old programs. The district's 2006-2011 Strategic Plan for Continued Excellence now specifies early childhood program consolidation in alignment with the Project for Academic Excellence as a key action step (Saint Paul Public Schools, 2007).

It is within the context of this larger initiative to streamline early childhood programs that the district pursues PEK and PEK-ERF. Both emerged from this initiative, and also serve

as a catalyst within it by implementing the curricular approach and professional development that is being promoted across 4-year-old programs. Over the next few years, PEK and PEK-ERF will also inform these efforts through their evaluation results. Results can help determine whether program strategies warrant replication within and beyond Saint Paul. In a report to the federal government, PEK-ERF staff described the program's role in district efforts to align pre-kindergarten programs as follows:

“PEK-ERF is an important step in the ongoing district wide effort in Saint Paul to align and set consistent criteria for all district preschool programs through the work of the district’s 4-Year-Old Planning Committee. The outcomes and findings from Project ERF will inform and guide future decisions about how to structure programs and allocate resources.”

—PEK-ERF program staff in report to federal government

In fall 2008, the Saint Paul Public Schools made the PEK-ERF Home-School curriculum available to all pre-kindergarten programs in the district. Two of the PEK-ERF assessments (ELLCO and CLASS PreK) used to monitor curriculum and classroom instruction are now being used in all pre-kindergarten classrooms in Saint Paul Public Schools.

Goals and benchmarks

PEK-ERF established six overarching program goals to guide its work. The goals, categorized by whether they pertain to program implementation or outcomes, follow:

Implementation goals

1. *Staff capacity*: Improve staff capacity to provide effective literacy instruction, and improve staff qualifications.
2. *Curriculum and instruction*: Improve instructional practices, curricula, and materials at each preschool site to meet the assessed needs of pre-K students.
3. *Classroom environment*: Improve the classroom environment to ensure an oral language and print-rich environment that is meaningful and culturally and linguistically appropriate.
4. *PAE alignment*: Increase standardization of practices and environments and improve student transition to kindergarten through alignment with Saint Paul’s school-based reform model, the Project for Academic Excellence.

Outcomes goals

5. *Student achievement*: Increase the early readiness skills of students and ensure that all students learn the language, cognitive, and early reading skills they need to succeed in kindergarten and beyond, including the specific reading skills of oral language, phonological awareness, print awareness, and alphabet knowledge.
6. *Parent capacity*: Increase parent/family involvement in family literacy activities.

For each goal, the program established measurable annual benchmarks that can be used to assess progress. Figure 1 shows benchmarks aligned with each program goal. It should be noted that Figure 1 abbreviates the titles of formal assessment tools used by the program, and complete names and descriptions of tools are provided in Figure 2.

1. PEK-ERF goals and benchmarks

Goals	Benchmarks
1. Staff capacity	<ul style="list-style-type: none"> ▪ 80% of classroom teachers and assistants who participate in both training and coaching will attend at least 10 days of professional development each year ▪ Increased teachers' knowledge and skills
2. Curriculum and instruction	<ul style="list-style-type: none"> ▪ 90% of classrooms will achieve at least a 4 on ELLCO language, literacy, and curriculum subscale ▪ 90% of classrooms will achieve an average score of 3.75 or higher on ELLCO general classroom environment subscale ▪ 90% of classrooms will achieve an average score of 5 or higher on CLASS PreK ▪ The current curriculum theme will be represented in 7 out of 9 Discovery Centers in all of the classrooms
3. Classroom environment	<ul style="list-style-type: none"> ▪ 18 out of 20 on ELLCO book subscale ▪ 19 out of 21 on ELLCO writing subscale
4. PAE alignment	<ul style="list-style-type: none"> ▪ All classrooms and teachers will demonstrate alignment with PAE
5. Student achievement ^a	<ul style="list-style-type: none"> ▪ 60% of 4-year-olds will attain target scores or better on each of the three IGDI tests^b ▪ 75% of 4-year-olds will score at the 50th percentile or above on TROLL based on norming sample ▪ 90% of 4-year-olds will identify at least 14 of the 26 letters (PALS) ▪ 90% of 4-year-olds will correctly identify 7 out of 10 possible items in the print and word awareness task (PALS) ▪ Children will gain 4 standard score points or more on PPVT
6. Parent capacity	<ul style="list-style-type: none"> ▪ All parents will have at least 75% of responses scored as acceptable or model on Family Learning Strategies Survey ▪ 90% of parents will attend a school-sponsored event

^a For student achievement benchmarks, this table focuses on 4-year-olds' attainment of program targets.

^b Targets were based on scores attained by children entering kindergarten in Minneapolis schools.

Research methods

Wilder Research and Saint Paul Public Schools' Department of Research, Evaluation and Assessment conduct the evaluation of PEK-ERF, with Wilder Research serving as the independent evaluator. The evaluation assesses the extent to which PEK-ERF achieves the implementation and outcomes goals established for the program. Ultimately, the evaluation will provide insights into how well a high-quality preschool program emphasizing early literacy skills and aligned with the Project for Academic Excellence prepares children for kindergarten. The program's evaluator from Saint Paul Public Schools focused on program implementation, and Wilder Research focused on program outcomes and some areas of program implementation during the second year.

The evaluation uses research-based assessment tools to measure children's academic and social skills, to assess the quality of teachers' interactions with students, and to gauge the extent to which classrooms promote literacy and language development (Figure 2). The evaluation also uses several data-collection tools and methods developed or shaped specifically for PEK-ERF. These local tools and methods gather information on teachers' perceptions of professional development and other program components, classrooms' alignment with the Project for Academic Excellence, parent involvement, and children's prior preschool and child care experience. These tools and methods include teacher self-administered questionnaire and focus groups, parent survey, and a classroom observation tool used to check alignment with the Project for Academic Excellence. The evaluation also uses program and district records to report participant demographics, participant attendance, teachers' attendance at professional development, and parent attendance at school events and conferences.

Children are assessed at the beginning and end of program years, and also during the year on some assessments, to provide measures of their progress and school readiness. In the case of the Peabody Picture Vocabulary Test III (PPVT) and the Teacher Rating of Oral Language and Literacy (TROLL), participants' progress can be compared to that of peers in national samples. Assessments conducted at the end of children's pre-kindergarten year provide measures of their school readiness just before kindergarten entry.

2. Research-based assessment tools used in PEK-ERF evaluation

Tool	Area measured	Administration/timeline
Peabody Picture Vocabulary Test III (PPVT)	Children's receptive vocabulary (Goal 5)	Wilder Research staff administer to children age 4 and older Administered at beginning of the program year and at kindergarten entry in Year 1; in Year 2, beginning and end of program year
Phonological Awareness Literacy Screening (PALS)	Children's alphabet knowledge and print and word awareness (Goal 5)	Teachers administer to 3- and 4-year-olds Every two months for the upper alphabet task and beginning and end of program year for the print and word awareness task in Year 1; in Year 2, both tasks administered monthly for children below the 25 th percentile and four times a year for all children
Teacher Rating of Oral Language and Literacy (TROLL)	Children's oral language, reading, and writing (Goal 5)	Teachers complete for 3- and 4-year-olds Beginning and end of each program year
Social Skills Rating System (SSRS) ^a	Children's social skills and problem behaviors (Goal 5)	Teachers complete for 4-year-olds beginning in Year 2 Beginning of program year and at kindergarten entry
Work Sampling System (WSS): Developmental Checklist	Children's growth in personal and social development, language and literacy, and mathematics (Goal 5)	Teachers complete three times each program year (fall, winter, spring) beginning in Year 2
Individual Growth and Development Indicators (IGDIs)	Children's progress in picture naming, alliteration, and rhyming (Goal 5)	Administered to 3- and 4-year-olds by teachers or literacy coach Approximately every two months in Year 1; in Year 2, monthly for children below the 25 th percentile and four times a year for all children
Early Language and Literacy Classroom Observation (ELLCO)	Classrooms' support of literacy and language development (Goals 2 and 3)	Independent consultant conducts for SPPS Beginning and end of each program year
Classroom Assessment Scoring System PreK (CLASS PreK)	Quality of instructional and social-emotional interactions between teachers and students (Goal 2)	Independent consultant conducts for SPPS Beginning and end of each program year

^a During Year 2, SSRS assessments were completed at the beginning of the program year (fall 2007) and at kindergarten entry (fall 2008). SSRS results will be included in the Year 3 report.

Implementation results

This section profiles students participating in the program's second year and discusses the program's progress toward implementation goals. The program's use of child and classroom assessments is also discussed. Progress toward outcomes goals is described in the next section of the report. Both sections present information in the following order: 1) an overview of progress, 2) detailed information on progress toward specific goals, 3) and issues for consideration. The overview section summarizes first- and second-year progress toward goals and specific benchmarks established for the program. In the section presenting detailed results, the second-year information is presented and organized by goal, and within goals by data-collection method. For example, results for the staff capacity goal are organized by teacher satisfaction survey and teacher focus group. The section on issues for consideration discusses ways the program can continue to strengthen services.

Overview

Program activities and changes seen from the beginning to the end of the year suggest strong implementation efforts during PEK-ERF's first and second years. As intended, the program offered extensive professional development and served children at risk of poor academic success. From the beginning to the end of the first and second program years, overall improvements were seen in teachers' early literacy knowledge, their instructional support, and classrooms' supports for language and literacy learning. Classrooms also met a number of the indicators of alignment with the Project for Academic Excellence at the end of both program years.

Teachers indicated they were very enthusiastic about the program. In each spring, the Saint Paul Public Schools evaluator conducted a focus group with a group of PEK-ERF teaching staff. Overall, participants in both years were very positive about their involvement with PEK-ERF, communicating that they had advanced their practice as a result of their participation in the program (Heinrichs, 2007a and Heinrichs, 2008).

The following list summarizes first- and second-year progress toward implementation goals, followed by a figure summarizing the progress toward annual benchmarks associated with those goals. Even though implementation efforts in both program years appear strong, implementation is an ongoing process that can be informed by the evaluation's ongoing feedback mechanisms. Areas of implementation that can be strengthened or adjusted as the program matures and pursues its annual benchmarks are discussed at the end of this section.

- Almost all participants (92% in first year and 90% in second year) fell into one or more of the program’s three target categories, meaning they were low-income, English Language Learners, or received Special Education services.
- As intended, the program provided intensive professional development in the form of weekly coaching and monthly training sessions.
- Teaching staff who participated in spring 2007 and spring 2008 focus group were very positive about their involvement with PEK-ERF, communicating that they had advanced their practice as a result of their participation in the program.
- Teaching staff also provided positive feedback about the program’s training and coaching through the focus group and a spring satisfaction survey.
- On average, classrooms showed improvement from beginning to end of the program year on each of the four ELLCO subscales, indicating overall improvement in the extent to which classrooms promoted literacy and language development. Moreover, results of the second year’s ELLCO are higher than the first year. That is, most or all classrooms in the second year met their targets, as compared to none or a few in the first year.
- All classrooms observed in both years were found to have implemented a majority of the indicators of alignment with the Project for Academic Excellence.
- Spring CLASS PreK observations found that overall, teachers provided strong emotional support and actively engaged children in learning activities. Spring scores were generally in the upper mid to high range, and variability among classrooms was generally relatively low. Spring scores for the instructional support domain in the second year were mostly in the mid-range. The number of classrooms meeting the target for CLASS is the same in both years (5 out of 7 classrooms).

Figure 3 summarizes the program’s progress toward annual implementation benchmarks during the first and second program years. Areas that can be strengthened as the program works toward these annual benchmarks are summarized at the end of this section under “Issues for consideration.”

3. Progress toward PEK-ERF implementation goals and benchmarks, Year 1 and Year 2

Goals	Benchmarks	Year 1 progress ^a	Year 2 progress ^a
1. Staff capacity	<ul style="list-style-type: none"> ▪ 80% of classroom teachers and assistants who participate in both training and coaching will attend at least 10 days of professional development ▪ Increased teachers' knowledge and skills 	<ul style="list-style-type: none"> ▪ All 18 teaching staff who participated in training/ coaching and who were with the program from the beginning of the year into the summer attended more than 10 days ▪ Teachers' responses to a survey assessing early literacy knowledge indicate improvement from baseline 	<ul style="list-style-type: none"> ▪ All 21 teaching staff who participated in training/ coaching and who were with the program from the beginning of the year into the summer attended 10 days or more. ▪ A similar pre-post teacher surveys is not available.
2. Curriculum and instruction	<ul style="list-style-type: none"> ▪ 90% of classrooms will achieve at least a 4 on ELLCO language, literacy, and curriculum subscale ▪ 90% of classrooms will achieve an average score of 3.75 or higher on ELLCO general classroom environment subscale ▪ 90% of classrooms will achieve an average score of 5 or higher on CLASS PreK ▪ The current curriculum theme will be represented in 7 out of 9 Discovery Centers in all of the classrooms 	<ul style="list-style-type: none"> ▪ 0/7^b classrooms met target; classrooms improved on average from baseline ▪ 2/7 classrooms (29%) met ELLCO target; classrooms improved on average from baseline ▪ 5/7 classrooms (71%) attained target for CLASS PreK; spring scores were generally in upper mid-range ▪ 7/7 classrooms met target, as observed by literacy coach 	<ul style="list-style-type: none"> ▪ 8/8 classrooms met target; classrooms improved on average from baseline ▪ 8/8 classrooms met ELLCO target; classrooms improved on average from baseline ▪ 5/7 classrooms (71%) attained target for CLASS PreK; spring scores were generally in mid to upper mid-range ▪ 8/8 classrooms met target, as observed by literacy coach
3. Classroom environment	<ul style="list-style-type: none"> ▪ 18 out of 20 on ELLCO book subscale ▪ 19 out of 21 on ELLCO writing subscale 	<ul style="list-style-type: none"> ▪ 6/7 classrooms met target; classrooms improved on average from baseline ▪ 3/7 classrooms met target; classrooms improved on average from baseline 	<ul style="list-style-type: none"> ▪ 7/8 classrooms met target; classrooms improved on average from baseline ▪ 8/8 classrooms met target; classrooms improved on average from baseline
4. PAE alignment	<ul style="list-style-type: none"> ▪ All classrooms and teachers will demonstrate alignment with PAE 	<ul style="list-style-type: none"> ▪ 7/7 classrooms had fully or partially implemented a majority of the indicators of alignment ▪ Variations existed among classrooms, and several indicators did not show a high rate of implementation 	<ul style="list-style-type: none"> ▪ 8/8 classrooms had implemented a majority of the indicators of alignment ▪ Variations existed among classrooms, and several indicators did not show a high rate of implementation

^a The initial program year spanned January 8 to July 31, 2007, providing less time to attain annual benchmarks. Year 2 spanned September 1, 2007 to July 31, 2008.

^b One classroom was not observed in the spring because the teacher was on maternity leave.

Student demographics and attendance

During the second year, between September 1, 2007, and July 31, 2008, Saint Paul's PEK-ERF program served a total of 125 preschool-age children. Seventy children were served in four classrooms at the two elementary schools and 55 children in four classrooms at the two child care centers (Figure 4).

4. Number of children by location, Year 2

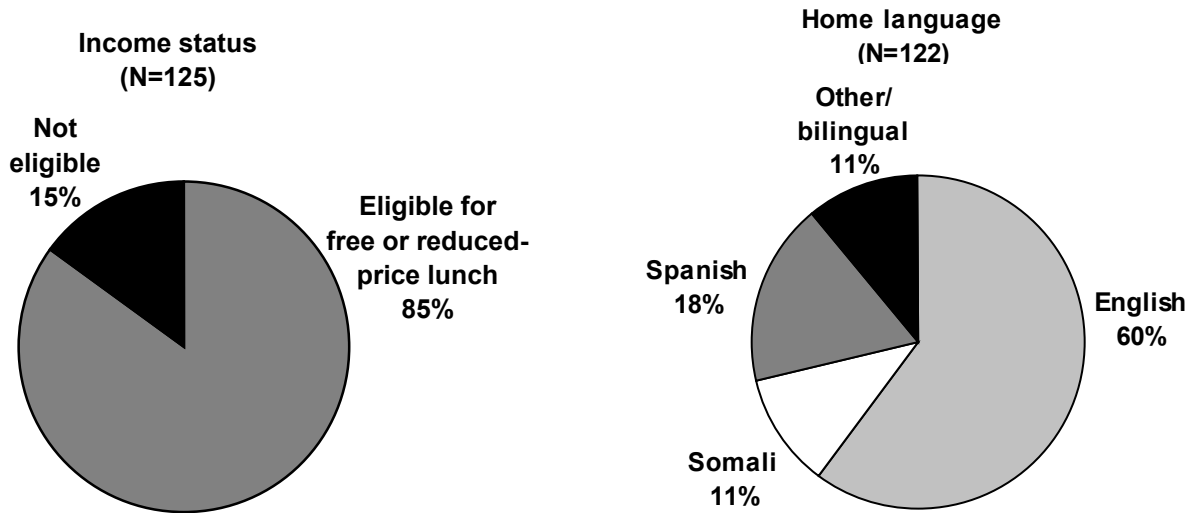
Program site		Number of children
Elementary school sites	Eastern Heights	35
	Highwood Hills	35
	Total	70
Child care centers	Wilder Child Development Center	39
	Bethel University King Family Foundation Child Development Center	16
	Total	55

Note: Year 1 spanned September 1, 2007, to July 31, 2008.

Representation of target populations

Almost all of the 125 participants (90%) fell into one or more of PEK-ERF's target categories, meaning they were low-income, English Language Learners, or received Special Education services. As shown in Figure 5, nearly all of the children were low-income, defined here as eligible for free or reduced-price lunch (85% at child care centers and 84% at schools). About 40 percent of the children had a primary home language other than English. While most of the child care children (92%) had English as their primary home language, 64 percent of school children had a primary language other than English (Figure A2). Four to six children (7-9%) in each setting received Special Education services (Figure A2).

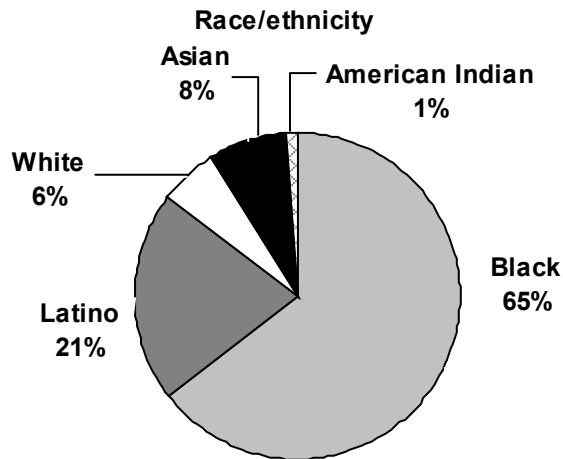
5. Children's income status and home language, Year 2



Race/ethnicity

Almost all students (94%) were students of color (92% at schools and 96% at child care centers). At both the schools and child care centers, the most common racial/ethnic group was Black (47% at schools and 88% at child care centers). Thirty-one percent of the children at schools were Latino, compared to 6 percent at the child care centers. The proportions of White students were similar at both settings (7% at schools and 4% at child care centers). Fewer than 15 percent of children at either setting were Asian (14% at schools and no children at child care centers) or American Indian (2% at child care centers and no children at schools) (Figures 6 and A2).

6. Children's race/ethnicity, Year 2 (N=121)



Age and prior school experience

The proportion of 4-year-olds at schools was slightly higher than 3-year-olds (56% and 44%, respectively). In contrast, child care centers had a slightly lower proportion of 4-year-olds (47%) than 3-year-olds (53%) (Figure A2). Sixteen 4-year-olds at child care centers and 26 4-year-olds at elementary school sites attended the PEK-ERF program the previous year.

Attendance

Between September 1, 2007, and July 31, 2008, the elementary school sites offered 180 days of PEK-ERF programming and the child care centers offered 224 days. The median number of days attended by same-age children was slightly lower at the schools than the child care centers. Three-year-olds attended a median of 162 days at the schools and 197 days at the child care centers. Similarly, 4-year-olds attended a median of 158 days at the schools and 187 days at the child care centers. Overall, 49 percent of school children and 69 percent of child care children attended more than 160 days. Although school children attended somewhat fewer days, attendance rates at the schools (i.e., the proportion of the number of days attended to the number of days offered) were slightly higher than at the child care centers. On average, attendance rates for 3-year-olds were 81 percent at schools and 76 percent at child care centers. For 4-year-olds, they were 85 percent at schools and 78 percent at child care centers (Figure A3).

Goal 1: Staff capacity

Goal: Improve staff capacity to provide effective literacy instruction, and improve staff qualifications.

Activities

PEK-ERF provided research-based professional development to school and child care teachers in the form of monthly training sessions. The program also provided intensive teacher coaching to help teachers translate knowledge and skills gained from professional development into their classroom instruction. Each week, a literacy coach worked individually with classroom teachers and staff to help them incorporate strategies and activities from the training provided.

The coach worked with all eight classrooms, conducting coaching sessions one-on-one and with classroom teams. The coach met with each teacher four times a month for four to six hours each time. During each session, the coach reviewed a goal-setting form with teachers. The coach also conducted classroom observations using an observation form and provided feedback to teaching staff. Teachers were also videotaped, and the coach met with teachers to discuss positive literacy behaviors and areas of growth identified in this videotaping. The coach also helped teachers incorporate progress-monitoring, reviewing results from child and classroom assessments (i.e., IGDI, TROLL, PALS, ELLCO, and CLASS PreK) and exploring ways they could inform instruction and the classroom environment.

Training topics

Training topics during the program's second year included the following (Figure A4):

- formative assessment and differentiated instruction;
- effective small group instruction, differentiation and guided oral reading;
- *Everyday Math* curriculum in early childhood classrooms;
- interactive writing;
- using accountable talk to support rigorous thinking and promote adult-child relationships;
- book making techniques to use in the classroom;
- integrating literacy and math in early childhood classrooms;

- data-driven interventions; small group instruction;
- effective techniques for promoting literacy to struggling learners and effective practices in classroom management (“What to do when they don’t know?”);
- data-driven interventions, importance of teacher’s role in play;
- overview of Positive Behavior Supports (PBS); and
- data-driven results; lesson learned.

Progress toward attendance benchmark

Based on its strong emphasis on teacher professional development, PEK-ERF established the annual benchmark that 80 percent of classroom teachers and assistants would participate in at least 10 days of professional development, including attendance at formal training sessions as well as work with the program’s coach. All 21 of the teaching staff who were with the program from the beginning of the second year into the summer and who participated in coaching completed between 10 and 21 days (an average of 15 days) of professional development, with every six hours of professional development counting as a day. Teaching staff who did not participate in coaching, as well as a few who joined the program in late spring or summer, were not counted in the calculation of progress toward this benchmark. It should be noted that about half of the teaching staff (11 people) had also participated in the program the previous year.

Teacher satisfaction survey

In the spring of 2008, PEK-ERF administered a survey to teaching staff to gather their feedback on the professional development provided by the program. Twenty of the 21 eligible teachers and teaching assistants completed the survey, for a response rate of 95 percent. The survey asked teaching staff to rate their agreement with statements relating to the following: a training program that helps early childhood educators create literacy-rich environments; the program’s support for teaching literacy skills; coaching; program support for building literacy-rich classrooms; the *Doors to Discovery* and *Everyday Math* curriculum; PEK alignment components and practices; and the use of child and classroom assessments. Most teaching staff provided favorable responses throughout the survey (Figure A5).

All survey respondents indicated agreement with statements that the assistance they received from the program in building a literacy-rich environment was helpful, building a literacy-rich environment is an important skill in their program, and they had received enough support with building a literacy-rich environment to continue on their own.

Asked about the specific literacy skills of vocabulary and background knowledge, phonological awareness, book and print rules, alphabet knowledge, and conversation skills, all respondent indicated that the training and coaching they had received was very helpful across these skill areas. While 16 respondents agreed that they have received enough training in these skill areas to continue developing high quality activities on their own, 4 respondents indicated they still need more training in conversation skills, vocabulary and background knowledge, phonological awareness, and book and print rules. Additionally, six to eight respondents indicated that they need additional information and support in all literacy skill areas to work with the children in their program.

Most respondents also responded favorably about the program's coaching, rating their agreement with statements addressing the impact of coaching on their teaching practice, the impact of coaching on the program's ability to prepare children for school, the assistance in setting goals, the importance of goal setting in their teaching, and their progress toward goals.

Overall, all survey respondents indicated positive experiences with the PEK professional development, indicating that they are able to incorporate ideas and strategies presented in the training into their classrooms, they have had sufficient training in how to utilize data to inform their teaching, and that the content and format of the training sessions have met their needs.

Some participants also offered additional comments in the survey. Their responses pointed to the positive aspects of the training as well as suggestions for improvement as follows (as quoted in Heinrichs, 2008):

Coaching has been helpful to have the chance to talk about what is happening with specific students, and then coming up with specific strategies to use in those circumstances.

Professional development should allow for more time to share ideas and less review and more ideas or depth.

Visiting other classrooms would be helpful.

[I need]time during a training day or early release to coordinate math curriculum with literacy.

There was enough training received in each of the PEK practices but needed more training on how to adapt some of the practices for 3-year-olds.

Need more support in Guided Oral Reading.

Teacher focus group

A focus group was conducted in May 2008 by the Saint Paul Public Schools' program evaluator with eight teaching staff from both schools' and child care centers' classrooms. The results closely matched those of the survey (Heinrichs, 2008). Participants were asked about the components of PEK-ERF that have worked well and the components that have not.

Training sessions

The focus group participants communicated that the professional development made positive impacts in their teaching and in their own program.

"I am a lot more intentional with everything I do."
—May 2008 focus group participant (as quoted in Heinrichs, 2008)

"It helps us work together more as a team. The entire team [is] getting on the same page, engages as far as what outcomes we want for the kids, and the practice we use, and looking at the research. It's hard to get everybody at that point without training and coaching."
—May 2008 focus group participant (as quoted in Heinrichs, 2008)

One participant also commented on the opportunities to connect with other teachers, as follows:

"The overall feeling expressed was how important this group was to network with and share ideas."
—May 2008 focus group participant (as quoted in Heinrichs, 2008)

Additionally, participants described teachers' experience with the monthly training sessions, as follows:

"Diversity of the presentations was good."
—May 2008 focus group participant (as quoted in Heinrichs, 2008)

"[There are] always some good ideas to take back to the classroom."
—May 2008 focus group participant (as quoted in Heinrichs, 2008)

Participants also provided feedback on how professional development can better serve teaching staff. Their comments follow:

"Sometimes [the trainings are] repetitive."
—May 2008 focus group participant (as quoted in Heinrichs, 2008)

"[I] would like more videos on putting it into practice."
—May 2008 focus group participant (as quoted in Heinrichs, 2008)

“[We] need more discussion with coworkers at other sites to see how others are implementing the program.”

—May 2008 focus group participant (as quoted in Heinrichs, 2008)

Coaching

Focus group participants also indicated they appreciated the coaching provided by the program. Many participants agreed with the following sentiments:

“I like having someone come into my room to see the things I cannot see – someone with an outsider opinion.”

—May 2008 focus group participant (as quoted in Heinrichs, 2008)

“The coach keeps you on track with what your goal is.”

—May 2008 focus group participant (as quoted in Heinrichs, 2008)

“We are given SO much information at trainings but the coach helps you work on one or two ideas.”

—May 2008 focus group participant (as quoted in Heinrichs, 2008)

“I like the video tape [used during coaching] as a positive teaching tool.”

—May 2008 focus group participant (as quoted in Heinrichs, 2008)

Suggestions for ways to strengthen coaching in the future also emerged from the discussion. Participants suggested that the coach focus on fewer tasks. Two participants commented as follows:

“The list of things to be done in the classroom is lengthy and often collides with the reality.”

—May 2008 focus group participant (as quoted in Heinrichs, 2008)

“Weekly coaching can be hard to fit into the schedule and coach’s expectations [are] sometimes unrealistic.”

—May 2008 focus group participant (as quoted in Heinrichs, 2008)

Parent involvement

In the future, teaching staff would also like the PEK-ERF program to provide strategies or training for increasing parent involvement. Participants commented as follows:

“What strategies can we use to get more parents, particularly working parents, involved?”

—May 2008 focus group participant (as quoted in Heinrichs, 2008)

“We need to work on their mind set – this isn’t baby-sitting, but getting children ready for school.”

Goal 2: Curriculum and instruction

Goal: Improve instructional practices, curricula, and materials at each preschool site to meet the assessed needs of pre-K students.

ELLCO

To assess the extent to which PEK-ERF classrooms promote literacy and language development, Saint Paul Public Schools hired an independent consultant to conduct observations using a research-based tool for preschool classrooms, the Early Language and Literacy Classroom Observation (ELLCO). ELLCOs are divided into three sections: 1) a literacy environment checklist, 2) a classroom observation and teacher interview, and 3) a literacy activities rating scale. Results from the first two sections are used to calculate scores for four subscales: 1) book, 2) writing, 3) general classroom environment, and 4) language, literacy, and curriculum.

The book and writing subscales are scored using the literacy environment checklist, a checklist of indicators related to classrooms' organization of book and writing materials. With the program's focus on literacy, targets were set high for these subscales. Indicators for the remaining two subscales – general classroom environment and language, literacy, and curriculum – are scored based on a grading rubric ranging from “deficient” (1) to “basic” (3) to “excellent” (5). Program expectations are that classrooms will be rated at higher than the basic level in these areas (Heinrichs, 2007b).

PEK-ERF established targets for the assessment's four subscales. The general classroom environment and language, literacy, and curriculum subscales are used to assess progress toward the curriculum and instruction goal. The book and writing subscales pertain to Goal 3 and are discussed in that section.

ELLCOs were conducted in all eight PEK-ERF classrooms at the beginning of the program year, and again at the end of the year. One classroom had a different teacher in the spring, and this teacher had participated in all of the training the program provided. Analyses of ELLCO results compare changes among the eight classrooms observed from pre- to post-test.

Progress toward general classroom environment benchmark

The general classroom environment subscale includes six items addressing the organization of the physical environment, the organization and content of classroom materials and displays, opportunities for children's choice and initiative in their learning, classroom management, and classroom climate. The PEK-ERF benchmark establishes a target that classrooms will score above the basic level, with an average of 3.75 or higher.

Again, the grading rubric ranges from “deficient” (1) to “basic” (3) to “excellent” (5) (Smith & Dickinson, 2002; Heinrichs, 2007b).

All of the eight classrooms assessed in the spring met the target, up from six classrooms at the beginning of the program year. On average, classrooms scored almost at excellent level in the spring, with an average score of 4.8. This overall average represents an increase from the average of 4.0 at the beginning of the year. Individual classrooms’ spring scores ranged from 4.4 to 5.0. Six classrooms increased from pre-test to post-test, and two classrooms with a high score in pre-test (4.6 and 4.8) scored the same at post-test. At post-test, four classrooms achieved the highest score (5.0) (Figures 7 and A6).

7. ELLCO results for subscales pertaining to Goal 2, Year 2 pre – post

Subscale (possible points)	Pre-test	Post-test
Language, literacy, and curriculum (5)		
Average	4.1	4.8
Range	3.1 – 4.9	4.5 – 4.9
No. of classrooms reaching target	6/8	8/8
General classroom environment (5)		
Average	4.0	4.8
Range	2.6 – 4.8	4.4 – 5.0
No. of classrooms reaching target ^a	6/8	8/8

^a The program established target scores of 3.75 for the general classroom environment subscale and 4.0 for the language, literacy, and curriculum subscale on average.

Note: During the program’s second year, baseline ELLCO assessments were conducted in September and October 2007 (pre-test), and follow-up assessments were conducted in April and May 2008 (post-test). Saint Paul Public Schools hired an independent consultant to conduct ELLCO assessments.

Looking at individual indicators within the subscale, classrooms scored the lowest on average in the area of opportunities for child choice and initiative, with an average of 4.6 (almost “excellent”) for that indicator.¹ Three classrooms scored a 4.0 and five classrooms scored a 5.0 for that indicator. Classrooms scored the highest on the indicator contents of the classroom, with all eight classrooms scored 5.0 (“excellent”) (Figure A7).

¹ Classrooms scored an average of 4.0 on the indicator related to the presence and use of technology, but that indicator was not used when calculating the subtotal for general classroom environment as recommended in the *ELLCO Toolkit* (Smith & Dickinson, 2002).

Progress toward language, literacy, and curriculum benchmark

The language, literacy, and curriculum subscale includes 10 items addressing teacher-student interactions; the use of books to support learning; teachers' approaches to reading and writing instruction and book reading; curriculum integration; the active use of classroom diversity as a basis for learning; interactions between teachers and families; and the use of ongoing child assessments. Again, the PEK-ERF benchmark establishes a target that classrooms will score above the basic level, with an average of 4.0 or higher on this subscale (Smith & Dickinson, 2002; Heinrichs, 2007b).

Classrooms improved their overall average from 4.1 to 4.8 on this subscale. Individual classrooms ranged from average scores of 4.5 to 4.9 for this subscale in the spring, exceeding the program's target. Three classrooms increased from scoring below 4.0 to above 4.0 (Figures 7 and A6).

Averages for individual indicators within the subscale also met the target of 4.0 or higher, with an exception of 3.8 for the indicator related to actively using classroom diversity as a basis for learning. Two classrooms scored at the basic level for this indicator with scores of 3.0. Individual classrooms scored 4.0 or 5.0 on all other indicators, with an average of 4.6 for oral language facilitation; 4.9 for the areas of presence of books and facilitating home support for literacy; and 5.0 for approaches to book reading, approaches to children's writing, curriculum integration, and approaches to assessments (Figure A7).

Classroom Assessment Scoring System PreK (CLASS PreK)

To assess classrooms' instructional quality, videotapes were taken of PEK-ERF classrooms in November 2007 and June 2008 and sent to researchers at the University of Virginia's Preschool Language and Literacy Lab for independent analysis. Single videotaped observations of individual classrooms were assumed to represent typical interactions in that classroom. Videotapes were analyzed using CLASS PreK, a tool for assessing the quality of teacher-student interactions in preschool classrooms. CLASS PreK is used to examine classrooms based on interactions between all adults and all students in the classroom, providing a picture of a typical student experience in the room rather than assessing the experiences of individual children and with individual adults (Justice, June 2007).

CLASS PreK encompasses 11 subscales organized into three domains: emotional support, instructional support, and student engagement. Subscales include the following: positive climate, negative climate, teacher sensitivity, regard for student perspectives, and behavior management (emotional support domain); productivity, concept development, instructional learning formats, quality of feedback, and language modeling (instructional support domain); and student engagement (CLASS PreK manual cited in Justice, June

2007). Subscales are scored on a 7-point scale, ranging from “not at all characteristic of a classroom” (1) to “highly characteristic of a classroom” (7). Scores of 1-2 are generally considered low-range, 3-5 mid-range, and 6-7 high range. The negative climate scale is an exception to this scoring system. Scores for this scale are reversed, with 1 representing “highly characteristic of a classroom” and 7 representing “not at all characteristic of a classroom” (Justice, June 2007).

University of Virginia researchers addressed the validity of CLASS PreK as an observational tool:

The CLASS instrument has been widely used in large-scale studies of preschool classrooms across the United States. Such studies show that preschool classrooms typically are rated highly on measures of emotional support, and are related lower on measures related to instructional support. Importantly, scores on all dimensions of the CLASS are predictive of children’s short- and long-term academic and social success, and thus represent an important area to address within professional development.

—(Justice, June 2007)

Progress from pre- to post-test

Analyses of CLASS PreK results compare changes among classrooms observed at both pre- and post-test. One teacher left the program just before the post-test. Pre- and post-test data are available on seven of the eight classrooms. Figure 8 shows spring 2008 results and changes in mean (average) scores between fall and spring. Spring observations found that overall, classrooms provided strong emotional support and actively engaged children in learning activities. In these domains, spring scores were generally in the upper-mid to high range, and variability among classrooms was generally relatively low (Figure A9). The average spring scores in the instructional support domain were mostly in the mid-range.

8. CLASS PreK means by subscale, Year 2 pre – post

Subscale	Mean score at pre-test	Mean score at post-test ^a
Emotional support		
Positive Climate	6.0	6.1
Negative Climate ^b	6.7	6.7
Teacher Sensitivity	4.7	5.1
Regard for Student Perspectives	4.6	5.3
Behavior Management	5.0	5.4
Instructional support		
Productivity	5.0	5.4
Concept Development	2.9	3.1
Instructional Learning Formats	4.7	4.4
Quality of Feedback	3.0	3.1
Language Modeling	3.1	3.4
Student engagement		
	4.7	6.0

^a Seven of the eight classrooms participated in the June 2008 observations (post-test). One was not observed because the teacher left the program shortly before post-test. All eight participated in November 2007 (pre-test). This analysis compares only those seven observed at both pre- and post-test.

^b To be consistent with the other items, the negative climate score is recoded as 1=high and 7=low. High score means less negative climate.

Note: During the program's second year, CLASS PreK assessments were completed by researchers at the University of Virginia's Preschool Language and Literacy Lab based on classroom videotapes taken in November 2007 (pre-test) and June 2008 (post-test).

For emotional support, mean scores for the positive and negative climate subscales were in the high range in the spring, meaning classrooms generally displayed characteristics of a positive climate. Teacher sensitivity, regard for student perspectives, and behavior management showed the lowest mean scores in the spring (5.1, 5.3 and 5.4, respectively), although they were still in the upper mid-range. Researchers also compared changes in mean scores between fall and spring for the seven classrooms observed at both times. Mean scores in this domain remained relatively stable between fall and spring, with the largest increase seen in the regard for student perspectives subscale, and slight or no increases in positive and negative climate mean scores, although both remained in the high range (Figure 8).

For instructional support, results from the fall and spring observations showed relatively low scores at both times. The mean score for the productivity subscale in the spring was in the upper mid-range (5.4). However, mean scores for the concept development, quality of feedback, and language modeling subscales in the spring were in the low mid-range, showing only slight movement from the fall observations. The average score for the instructional learning formats subscale declined slightly from fall to spring, although it was still in the mid-range category (Figure 8).

Spring 2008 observations found classrooms to be actively engaging children in learning activities. The student engagement subscale had a mean score in the high range (6.0) in the spring (up from a mean score of 4.7 in the fall), and only one classroom received a score in the mid-range in this area (Figures 8 and A9).

Progress toward program benchmarks

PEK-ERF established a program target for 90 percent of classroom teachers to achieve an average CLASS PreK score of 5 or higher. As shown in Figure A9, five of the seven classrooms (71%) assessed in the spring attained the target.

Teacher focus group

Teaching staff indicated in the spring focus group that they appreciated the *Doors to Discovery* curriculum, including its strong literacy approach and its impact on children's vocabulary and writing skills. Following are some of their comments:

"The classrooms have become so much more enriched – word walls, interactive writing, etc."

—May 2008 focus group participant (as quoted in Heinrichs, 2008)

"Adding the props and the vocabulary to as many centers as possible has helped our children to increase their vocabulary, and has also encouraged some of the children to try different things. We still have a couple kids that just play at one center, but we're getting more kids to play with different things. There is more writing involved in the dramatic play than we used to have."

—May 2008 focus group participant (as quoted in Heinrichs, 2008)

Some teachers indicated they felt the need to supplement the curriculum with other activities or their own science and art lessons. Their comments follow:

"Curriculum doesn't provide enough activities and ideas for a five day week, full day program for 3s and 4s."

—May 2008 focus group participant (as quoted in Heinrichs, 2008)

“To what extent are we allowed to include our own ideas and ideas from other curriculum (e.g., science, art...)?”

—May 2008 focus group participant (as quoted in Heinrichs, 2008)

“Doors [to Discovery curriculum] doesn’t offer a lot of good fun ideas.”

—May 2008 focus group participant (as quoted in Heinrichs, 2008)

Teacher satisfaction survey

The spring 2008 survey completed by 20 teaching staff also addressed *Doors to Discovery* and teachers’ implementation of the curriculum. All respondents provided favorable ratings, indicating agreement with statements that the curriculum is a useful tool for implementing early literacy in the classroom, and all except one respondent agreed that they have been able to adapt the curriculum to meet the needs of their children. While nearly all respondents agreed that having both literacy and math curriculums provides meaningful learning opportunities for their children, a few respondents indicated that having the two curriculums has not made their planning easier. Slightly fewer respondents agreed that they have implemented *Everyday Math* activities and that they have received enough support to implement the math curriculum in their classrooms.

Literacy coach observations

As another way to improve curriculum and instruction, PEK-ERF established a benchmark that literacy props, activities, or materials reflect the area of study in seven out of nine Discovery Centers in all of the classrooms. Discovery Centers are learning centers that children use during the Early Childhood Workshop’s active learning time. They may include block, writing, dramatic play, reading, math, science, sensory, computer, or art centers. In the spring, the literacy coach observed that the target was met in all eight classrooms.

Goal 3: Classroom environment

Goal: Improve the classroom environment to ensure an oral language and print-rich environment that is meaningful and culturally and linguistically appropriate.

Early Language and Literacy Classroom Observation (ELLCO)

PEK-ERF uses the ELLCO book and writing subscales to assess progress toward the classroom environment goal. Again, this section presents results for the eight classrooms assessed at both pre- and post-test.

Progress toward book benchmark

The book subscale includes 12 indicators organized in the categories of book area, book selection, and book use. These indicators address the content of books, their location around the room, and the environment of designated book areas. Out of a possible score of 20 points on this subscale, the PEK-ERF benchmark strives for classrooms to achieve a score of at least 18 (Smith & Dickinson, 2002; Heinrichs, 2007b).

Seven of the eight classrooms assessed met the target in the spring, up from six classrooms at the beginning of program year. The one classroom not meeting the book subscale target in the spring improved its score from 12 points at pre-test to 17 points each at post-test, one point away from the target. As a group, classrooms averaged 18.0 points on this subscale at the beginning of the year and 19.1 in the spring (Figures 9, A6, and A7).

Progress toward writing benchmark

The writing subscale includes 13 indicators organized into the categories of writing materials and writing around the room. These indicators address displays of print around the room, the variety and availability of writing tools and their location around the room, and the designation of a writing area. Out of a possible 21 points, the PEK-ERF benchmark establishes a target of at least 19 (Smith & Dickinson, 2002; Heinrichs, 2007b).

All eight classrooms met the target in the spring, up from two classrooms at the beginning of the year. Classrooms increased their average on this subscale from 17.1 points at pre-test to 20.6 at post-test. Seven of the eight classrooms improved from pre-test to post-test. One classroom scoring 20 points at pre-test scored the same point at post-test. Classrooms showed the most variation in their scores for the category addressing writing around the room, which encompasses varieties of writing on display, the availability of writing tools in dramatic play or block areas, and the availability of alphabet and word puzzles (Figures 9, A6, and A7).

9. ELLCO results for subscales pertaining to Goal 3, Year 2 pre – post

Subscale (possible points)	Pre-test	Post-test
Book (20)		
Average	18.0	19.1
Range	12 – 20	17 – 20
No. of classrooms reaching target	6/8	7/8
Writing (21)		
Average	17.1	20.6
Range	14 – 20	19 – 21
No. of classrooms reaching target ^a	2/8	8/8

^a The program established target scores of 18 for the book subscale and 19 for the writing subscale.

Notes: During the program's second year, baseline ELLCO assessments were conducted of all eight classrooms in September and October 2007 (pre-test), and follow-up assessments were conducted in April and May 2008 (post-test). Saint Paul Public Schools hired an independent consultant to conduct ELLCO assessments.

Progress across ELLCO benchmarks

Looking at all four ELLCO subscales, including those addressing Goal 2 as well as those addressing Goal 3, classrooms generally improved from their initial scores at the beginning of the program year. Seven of the eight classrooms assessed in the spring met targets for all four subscales (Figure A6).

Goal 4: PAE alignment

Goal: Increase standardization of practices and environments and improve student transition to kindergarten through alignment with Saint Paul's school-based reform model, the Project for Academic Excellence.

PAE observation

Working with the program's evaluator from Saint Paul Public Schools, PEK and PEK-ERF staff developed an observational tool to assess classrooms' alignment with Project for Academic Excellence principles. The tool delineates expectations for alignment based on the content of professional development and coaching provided during the program's second year. The tool has been modified over time based on increasing levels of implementation and experience working with the tool. Observations were conducted by the program's evaluator from Saint Paul Public Schools, and teachers were notified of when observations would take place. In April 2008, all eight PEK-ERF school classrooms were observed based on the assessment tool. The version of the tool used in 2008 included a

“yes/no” checklist of items associated with 20 indicators of alignment with the Project for Academic Excellence (Figure A10). These indicators relate to the classroom environment, rituals and routines, and the Early Childhood Workshop model.

Results suggest that overall, the program has achieved relatively high levels of alignment with the Project for Academic Excellence.

Early Childhood Workshop model

Based on spring 2008 observations, PEK classrooms have achieved a high rate of implementation of the Early Childhood Workshop model. Six to eight classrooms met indicators related to the following portions of the day: the initial transition into the classroom, community circle time, and active learning. During these times, teachers provided opportunities for children to “talk, read, and write.” The remaining Early Childhood Workshop indicators addressed the small group and “regroup to revisit” portions of the day and were met by four to five classrooms.

Rituals and routines

PEK classrooms also showed a high rate of implementation for most of the indicators related to classroom rituals and routines. Indicators with a high rate of implementation for each of the checklist items (i.e., at least six of eight classrooms meeting each item) included the following: use of sign-in, use of interactive writing, incorporation of a read aloud, minimization of downtime, use of visual schedule, use of accountable talk, and opportunities for independent reading. Seven to eight classrooms also met the basic expectation of shared reading, but evidence of other use of shared reading around the room was lacking in a few classrooms.

Classroom environment

Classrooms also generally met indicators related to classroom environment, although in some areas there was room for moving beyond the basic expectations. Indicators with a high rate of implementation included displays of children’s original work and displays of children’s names. Seven to eight classrooms had also posted PEK core content standards and had an apparent area of study embedded in the day’s activities, but there was room for improvement in children’s understanding of the standards, displaying children’s work that support the standards, and children’s ability to identify the area of study. The development and use of a detailed lesson plan was also implemented in seven to eight classrooms, but family connection was not included in the lesson plans of four of the eight classrooms. All eight classrooms also had a word wall, but the word wall was not always referred to by the teacher or children.

Progress toward program benchmark

PEK-ERF established the benchmark that all classrooms and teachers will demonstrate alignment with the Project for Academic Excellence. While variations existed among classrooms, spring 2008 observations found that overall, teachers were implementing a number of the components of the Early Childhood Workshop and introducing its routines and rituals into their daily practice. All eight classrooms were found to have implemented a majority of the indicators of alignment with the Project for Academic Excellence. The Saint Paul Public Schools' program evaluator in her presentation to the PEK-ERF staff indicated that classrooms were found to have implemented an average of 18 of the 20 indicators, with individual classrooms ranging from 14 to 20 indicators implemented (Heinrichs, 2008). Individual classrooms varied in the specific indicators they had fully implemented, and most indicators were fully implemented by a majority of classrooms (Figure A10) (Heinrichs, 2008).

Teacher satisfaction survey

Results from the spring 2008 teacher survey showed that all or most survey respondents have received helpful information and support for the following PAE Alignment components: accountable talk, rituals and routines, read aloud, community circle, lesson planning, and active learning. Also, all or most respondents agreed that these components are important to help children become ready for school.

Despite the favorable ratings, a few respondents indicated that they still needed more training in community circle and active learning (five to six respondents) and in accountable talk, rituals and routines, and lesson planning (two to three respondents) in order to continue developing high quality activities on their own.

Teacher focus group

In the May 2008 focus group, teaching staff described positive changes in their classroom practices as a result of their participation in PEK-ERF. One participant stated the difference in her classroom instruction as follows:

“The piece I have strengthened is the accountable talk. It used to be ‘old school’ – just let them play – but now I get in there and ask questions, keep them exploring, keep their minds going.”

—May 2008 focus group participant (as quoted in Heinrichs, 2008)

Participants also spoke of some challenges and indicated that they need more support in implementing some of the PAE Early Childhood Workshop components. Their comments are listed as follows (Heinrichs, 2008):

Guided reading – need more information and training.

Shared reading – need more information and training.

Participants seemed to have implemented the basic component of small group activities and wanted program guidance to further implement the activities. Their questions follow:

“How often do you change the group?”
—May 2008 focus group participant (as quoted in Heinrichs, 2008)

“What activity will best suit each group?”
—May 2008 focus group participant (as quoted in Heinrichs, 2008)

Also, participants addressed some challenges of working with a combined age group (3- and 4-year-olds). Their concerns follow:

“Twenty minutes for community circle is too long for 3-year-olds; you end up spending too much time with classroom management than with teaching.”
—May 2008 focus group participant (as quoted in Heinrichs, 2008)

“[How do we implement] accountable talk strategies with 3-year-olds?”
—May 2008 focus group participant (as quoted in Heinrichs, 2008)

“[It’s] hard to scaffold because of the great levels of difference in ability.”
—May 2008 focus group participant (as quoted in Heinrichs, 2008)

“[We need] ongoing support on ways to keep the kids on tasks –Behavior management.”
—May 2008 focus group participant (as quoted in Heinrichs, 2008)

Use of child and classroom assessments

While not associated with a formal program goal, ongoing progress-monitoring is an important part of the program’s efforts to continually inform its services. PEK-ERF assesses classrooms and children on an ongoing basis, using the research-based assessment tools described in Figure 2. Classroom assessments include the following: the ELLCO, used to assess the extent to which classrooms support language and literacy; the locally developed PAE observation tool, used to check classrooms’ alignment with the district’s Project for Academic Excellence; and CLASS PreK assessments of teacher-student interactions. Teachers monitor individual children’s progress on an ongoing basis by administering IGDIs, PALS, and TROLL assessments. Teachers also use Work Sampling System assessments.² Evaluators conduct additional child assessments, including the PPVT (assessing English receptive vocabulary) and the SSRS (assessing social skills).

² Results of Work Sampling System assessments were presented by the Saint Paul Public Schools’ program evaluator to the PEK-ERF teaching staff and are not included in this report.

The program intends to use these results to inform implementation efforts, including professional development and classroom instruction and activities. Professional development during the program's first and second years included training on data-driven decision making, which involves using data to inform instruction and target teaching in small groups of students. Teachers began using assessment data during the initial year. The program has expanded its use of progress-monitoring in the second year.

Teacher satisfaction survey

The spring 2008 survey completed by 20 teaching staff also asked teachers and teaching assistants to rate their agreement with statements about child and classroom assessments. The survey responses provide evidence of teachers' use of child and classroom assessments during the second program year. All respondents indicated agreement with three statements in this area, including that the information about children's scores was helpful in informing their teaching, the student achievement goals set by the program are achievable, and that they were aware of children's strengths and needs based on data. All but one respondent agreed that the classroom and student assessments have been helpful in informing their teaching practice.

Teacher focus group

Focus group participants voiced appreciation for both the child and classroom assessments used in PEK-ERF. One teaching staff described using information gathered through the assessments of individual children to differentiate instruction in small groups based on different needs of different children (Heinrichs, 2008).

"Small group is really a time when you can target the skills and individualize what you're doing to what the kids need. It makes for a lot of fun because you can really see progress and you know what you're doing is really appropriate for the kids."

—May 2008 focus group participant (as quoted in Heinrichs, 2008)

Participants also described using the IGDI results as follows:

"I find the IGDI's really useful to use – it makes it so much easier to go back to the classrooms and know what to work on."

—May 2008 focus group participant (as quoted in Heinrichs, 2008)

"It makes it easier for teachers to target on what the kids' needs are."

—May 2008 focus group participant (as quoted in Heinrichs, 2008)

Despite the positive reaction to the assessments, one participant had a concern about the frequency of assessments as follows:

“Monthly testing takes a lot of time away from class.”
—May 2008 focus group participant (as quoted in Heinrichs, 2008)

Issues for consideration

PEK-ERF showed strong implementation efforts. Implementation is an ongoing process, and the program gathered valuable information on ways to continue strengthening implementation through several feedback mechanisms during the second year. As the program engages in ongoing planning efforts, the following evaluation insights can be considered in relation to the experiences of program staff and teachers. It should be noted that program leaders and staff may have already made adjustments in some of these areas.

- *Professional development.* Based on feedback from the spring focus group and teacher satisfaction survey, the program may want to consider whether more can be done in the following areas when planning future professional development:
 - Allowing more time to share ideas and delving deeper into program elements.
 - Providing recommendations or strategies for increasing parent involvement.
- *Coaching.* Program staff can take into consideration the following coaching suggestions based on feedback from the spring focus group and teacher satisfaction survey, as well as findings from classroom observations:
 - Using classroom-level results from the ELLCO, CLASS PreK, and observations of alignment with the Project for Academic Excellence to target coaching to individual classrooms’ needs.
 - Providing strategies to work effectively with mixed-age classrooms, particularly with 3-year-olds.
 - Providing coaching support for other classroom issues such as behavioral concerns.
- *Opportunities for teachers to connect.* In the spring focus group, teachers voiced strong appreciation for the opportunities training sessions provide to connect with each other to share ideas and problem-solve. Program staff may also want to consider providing opportunities for teachers to visit each other’s classrooms.

- *Classroom instruction.* In working toward CLASS targets, the program may want to consider the following strategies for helping classrooms strengthen quality of classroom instruction:
 - Focusing on improvements in results on the instructional support subscale, including strengthening concept development, quality of feedback, and language modeling.

- *Curriculum support.* Based on teachers’ feedback in the spring focus group and survey, program staff can continue supporting curriculum implementation in the following ways:
 - Providing assistance to any teachers who may need support in implementing the *Everyday Math* curriculum and supplementing their curriculum with science or art content.

- *Alignment with the Project for Academic Excellence.* To continue strengthening alignment with the Project for Academic Excellence, future coaching can address the following indicators not showing a high rate of implementation across classrooms:
 - Implementing the small group and “regroup to revisit” portion of the Early Childhood Workshop;
 - Increasing use of shared reading;
 - Increasing children’s understanding of the PEK core content standards;
 - Displaying children’s work to support the PEK core content standards;
 - Improving children’s ability to identify the area of study;
 - Having family connection in lesson plans;
 - Increasing the use of word wall.

Additionally, teaching staff who participated in the spring focus group and survey wished to have more training and information on guided oral reading.

Outcomes results

This section assesses second-year progress toward the program's outcomes goals. As in the section on implementation results, this section begins with an overview summarizing first- and second-year progress toward goals and specific benchmarks, followed by a presentation of detailed second-year results organized by goal and within goals by data-collection method, and concluding with issues for consideration.

Overview

Assessments conducted during the program's first and second year show academic progress among participants, including improvements in their early literacy skills and alphabet knowledge. Results for the Peabody Picture Vocabulary Test III (PPVT) suggest children experienced accelerated progress in their English receptive vocabulary. TROLL results suggest that on average, participants made faster progress while in the program than their peers in a national sample. Children also showed progress on IGDI and PALS assessments, although it is difficult to know at this point how progress corresponds to that which would be expected based on typical growth and development.

The following list summarizes first- and second-year progress toward overall outcomes goals, followed by a table summarizing the progress toward annual benchmarks. Areas that can be strengthened are discussed at the end of this section.

- On average, both 3- and 4-year-olds in both years improved on all three IGDI areas of picture naming, rhyming, and alliteration, with the highest overall improvement in picture naming and the lowest in alliteration.
- Based on teachers' TROLL assessments, children improved on average in alphabet knowledge and all three subscales, including oral language, reading, and writing. The most improvement was seen in reading and alphabet knowledge. Overall, 67 percent of the children in the first year and 76 percent of the children in the second-year scored at or above the 50th percentile at post-test based on a norming sample of children with similar socioeconomic status. First- and second- year results suggest that on average, children made faster progress while in the program than their peers in a national sample.
- On average, children in both years showed improvement in both alphabet knowledge and print and word awareness based on PALS assessments, with the largest gains in alphabet knowledge.

- PALS provides spring developmental ranges for 4-year-olds. At the end of the first program year, PEK-ERF 4-year-olds were in the middle of the developmental range for both uppercase alphabet knowledge and print and word awareness. In the second year, PEK-ERF 4-year-olds were above the developmental range for uppercase alphabet knowledge and in the middle of developmental range for print and word awareness at the end of the program year.
- Results from the first- and second-year PPVT indicate that 4-year-olds in both school and child care settings made faster progress than their peers nationally in English receptive vocabulary. Child care children showed the most progress, and improved their average (mean) score from below to at the national mean.
- Generally, there were more children meeting targets in the second year, compared to the first year. It is important, however, to note that PEK-ERF benchmarks are for a full-year of programming, and the first-year results reflect children's progress from January through July 2007. The second-year results reflect the full year of programming, from September 2007 through July 2008.
- Figure 10 summarizes the program's progress toward annual outcomes benchmarks during the first and second program years. Areas that can be strengthened as the program works toward these benchmarks are summarized at the end of this section under "Issues for consideration."

10. Progress toward PEK-ERF outcomes goals and benchmarks, Year 1 and Year 2

Goals	Benchmarks	Year 1 progress ^a	Year 2 progress ^a
5. Student achievement ^b	<ul style="list-style-type: none"> 60% of 4-year-olds will attain target scores or better on each of the three IGDI tests^c 	<ul style="list-style-type: none"> 48-52% of all 4-year-olds attained target scores for individual tests; results show overall improvement from baseline At child care centers, 60% of 4-year-olds attained target score for picture naming, 60% for rhyming, and 50% for alliteration At elementary school sites, 47% attained target for picture naming, 40% for rhyming, and 50% for alliteration 	<ul style="list-style-type: none"> 59-70% of all 4-year-olds attained target scores for individual tests; results show overall improvement from baseline At child care centers, 76% of 4-year-olds attained target score for picture naming, 76% for rhyming, and 56% for alliteration At elementary school sites, 67% attained target for picture naming, 67% for rhyming, and 62% for alliteration
	<ul style="list-style-type: none"> 75% of 4-year-olds will score at the 50th percentile or above on TROLL based on norming sample 	<ul style="list-style-type: none"> 78% scored at or above 50th percentile 	<ul style="list-style-type: none"> 84% scored at or above 50th percentile
	<ul style="list-style-type: none"> 90% of 4-year-olds will identify at least 14 of the 26 letters (PALS) 	<ul style="list-style-type: none"> 81% identified at least 14 letters Results show overall improvement from baseline 	<ul style="list-style-type: none"> 89% identified at least 14 letters Results show overall improvement from baseline
	<ul style="list-style-type: none"> 90% of 4-year-olds will correctly identify 7 out of 10 possible items in the print and word awareness task (PALS) 	<ul style="list-style-type: none"> 77% of 4-year-olds identified at least 7 items Results show overall improvement from baseline 	<ul style="list-style-type: none"> 92% of 4-year-olds identified at least 7 items Results show overall improvement from baseline
	<ul style="list-style-type: none"> 4-year-olds gain 4 standard score points or more on PPVT^d 	<ul style="list-style-type: none"> 59% attained target Overall, children showed accelerated progress compared to peers based on national norms 	<ul style="list-style-type: none"> 49% attained target Overall, children showed accelerated progress compared to peers based on national norms

10. Progress toward PEK-ERF outcomes goals and benchmarks, Year 1 and Year 2 (continued)

Goals	Benchmarks	Year 1 progress ^a	Year 2 progress ^a
6. Parent capacity	<ul style="list-style-type: none"> All parents will have at least 75% of responses scored at acceptable level or higher on Family Learning Strategies Survey 	<ul style="list-style-type: none"> At post-test, 53% of parents had at least 75% of responses at acceptable level or higher. Results should be viewed with caution due to relatively low response rate 	<ul style="list-style-type: none"> At post-test, 85% of parents had at least 75% of responses at acceptable level or higher. Results should be viewed with caution due to relatively low response rate
	<ul style="list-style-type: none"> 90% of parents will attend a school-sponsored event 	<ul style="list-style-type: none"> Progress toward this benchmark was not tracked during the initial year because the program was not yet operational in the fall 	<ul style="list-style-type: none"> All parents attended at least one school activity.

Note: Work Sampling System results were presented by the Saint Paul Public Schools' program evaluator to the PEK-ERF staff in June 2008 and are not included in this report.

- ^a The initial program year spanned January 8 to July 31, 2007, providing less time to attain annual benchmarks. The second year spanned September 1, 2007, to July 31, 2008.
- ^b For student achievement benchmarks, this table focuses on 4-year-olds' attainment of program targets. In cases where separate targets were established for 3-year-olds, their attainment of targets is discussed in the body of the report.
- ^c Targets were based on scores attained by children entering kindergarten in Minneapolis schools.
- ^d There is no specific target in terms of the percentage of children gaining 4 points from pretest to posttest in PPVT.

Goal 5: Student achievement

Goal: Increase the early readiness skills of students and ensure that all students learn the language, cognitive, and early reading skills they need to succeed in kindergarten and beyond, including the specific reading skills of oral language, phonological awareness, print awareness, and alphabet knowledge.

Individual Growth and Development Indicators (IGDIs)

Teachers use Individual Growth and Development Indicators (IGDIs) to monitor individual children's early language and literacy development over time. Preschool IGDIs measure children's progress in three areas: picture naming, alliteration, and rhyming. To conduct the assessments, teachers hold up cards with color pictures. During picture naming, children are presented with pictures of objects (e.g., a book, glue, a cake, a rabbit). Children are told to name the pictures as quickly as possible, and their score reflects the number identified correctly in one minute. During rhyming, children are presented with a series of cards each showing four pictures. At the top of the card is a picture depicting the stimulus word (e.g., bees), followed underneath by a row of three

other pictures (e.g., a house, pants, and cheese). The teacher points to and says the name of each picture, and tells the child to point to the picture that rhymes with or sounds the same as the stimulus. The child's score reflects the number of correctly identified rhymes in two minutes. Alliteration also uses cards with a stimulus picture at the top followed by three pictures underneath. Children are asked to find the picture that starts with the same sound as the stimulus picture, and their score reflects the number of correct responses in two minutes. IGDIs provide teachers with feedback on individual children's progress over time toward developmental outcomes, and alert teachers when additional interventions may be needed (ECRIMGD, 1998; Get It! Got It! Go! website, n.d.).

Progress from pre- to post-test

During PEK-ERF's second year, teachers administered IGDIs in October, January, April, and June. Figure 11 presents results for 119 3- and 4-year-old children for whom assessments were completed in both October 2007 and June 2008 (95% of all children). On average, both 3- and 4-year-olds improved in all three IGDI areas from pre-test to post-test. Both groups experienced the highest overall improvement in picture naming. Four-year-olds also experienced a high average improvement in rhyming. Both groups improved the least in alliteration on average.

11. IGDI scores, Year 2 pre – post

IGDI area	Average score		Difference
	Pre-test	Post-test	
Age 3 (N=54-55)			
Picture Naming	11.82	22.80	+10.98
Rhyming	1.36	7.36	+6.00
Alliteration	0.46	2.15	+1.69
Age 4 (N=64)			
Picture Naming	16.75	25.56	+8.81
Rhyming	4.80	12.16	+7.36
Alliteration	2.61	8.50	+5.89

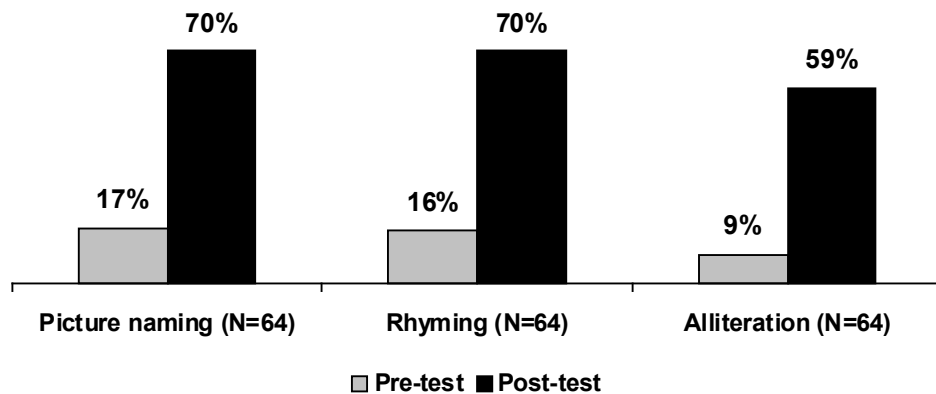
Note: During the program's second year, teachers administered IGDIs in October, January, April, and June. This figure presents results for children administered IGDIs in both October 2007 (pre-test) and June 2008 (post-test).

Evaluators also looked for relationships between the number of days 3- and 4-year-olds attended in each setting (i.e., the “dosage”) and changes in their IGDI scores. A significant relationship (i.e., correlation) between changes in picture naming scores and the total number of days attended was found for 3-year-olds in the child care centers. That is, 3-year-olds in the child care centers who attended more days showed higher improvement in picture naming. Relationships were not detected for other areas.

Progress toward program benchmarks

PEK-ERF established target scores for each of the three IGDI areas. Program benchmarks strive for 60 percent of 3- and 4-year-olds to reach the target for each test. Targets for 4-year-olds are 26 for picture naming, 12 for rhyming, and 8 for alliteration, and for 3-year-olds are 18 for picture naming, 7 for rhyming, and 5 for alliteration. Four-year-old targets were based on scores attained by children entering kindergarten in Minneapolis schools. Three-year-old targets reflect the 50th percentile for children under the age of 48 months who were assessed as part of a Minnesota Early Literacy Training Project. Figure 12 shows the percentage of 4-year-olds attaining the target score or better in each of the three areas at the beginning and end of the program year. It is not known how much children would have been expected to progress during this time in the absence of participation in PEK-ERF.

12. Percent of 4-year-olds meeting IGDI target scores, Year 2 pre – post



Notes: During the program’s second year, teachers administered IGDI in October, January, April, and June. This figure presents results for children administered IGDI in both October 2007 (pre-test) and June 2008 (post-test). It is not known how much children would have been expected to progress in the absence of PEK-ERF.

In October, 17 percent of 4-year-olds met the picture naming target, 16 percent the rhyming target, and 9 percent the alliteration target. In June, 70 percent met the picture naming target, 70 percent the rhyming target, and 59 percent the alliteration target. In other words, between 50 and 54 percent more 4-year-olds met the targets in June than in October (Figures 12 and A11). Three-year-olds also showed progress, with between 13 and 51 percent more 3-year-olds meeting targets in June than in October. In October, 27 percent of the 3-year-olds met the picture naming target, 7 percent met the rhyming target, and 4 percent the alliteration target. In June, 78 percent met the picture naming target, 53 percent the rhyming target, and 17 percent the alliteration target (Figure A11).

Results in Figure A11 show that during the second program year, PEK-ERF did not meet the goal of having 60 percent of children reaching target scores in all IGDI areas. However, 3-year-olds at child care centers and schools did achieve the target in one of the three areas, and 4-year-olds at child care centers and schools in two and three areas, respectively. In June, 92 percent and 65 percent of 3-year-olds at child care centers and schools, respectively, met the picture naming target. Additionally, 76 percent of 4-year-olds at child care centers met the picture naming and rhyming targets, and 62-67 percent of 4-year-olds at schools met the target in each of the IGDI areas.

Teacher Rating of Oral Language and Literacy (TROLL)

The Teacher Rating of Oral Language and Literacy (TROLL) is a research-based observational assessment tool designed to help teachers monitor children's language and literacy development. Teachers can complete the assessment in about 5 to 10 minutes per child, and without interrupting regular classroom activities. Teachers rate children on items in three subscales: oral language, reading, and writing (Dickinson et al., 2001). In addition to reporting on these three subscales, PEK-ERF also reports separately on one question asking how many letters the child recognizes. During the program's second year, PEK-ERF teachers conducted baseline TROLL assessments in October 2007, and conducted follow-up assessments in April 2008.

Progress from pre- to post-test

Teachers completed both baseline and follow-up assessments for 106 children (85% of all children). As shown in Figure 13, on average children improved on all three subscales and the question addressing alphabet knowledge. Looking at total scores, which combine scores for the three subscales, 3-year-olds improved 13.76 total score points on average and 4-year-olds improved 14.68 total score points on average out of a possible score of 98. Both 3- and 4-year-olds improved the most in reading and alphabet knowledge.

13. TROLL average scores, Year 2 pre – post

Subscale (highest possible score)	Average score		Difference
	Pre-test	Post-test	
Age 3 (N=50)			
Oral language (32)	17.82	21.34	+3.52
Reading (42)	20.98	27.08	+6.10
Writing (24)	9.28	13.42	+4.14
Alphabet knowledge	6.72	16.08	+9.36
Total score (98) ^a	48.08	61.84	+13.76
Age 4 (N=56)			
Oral language (32)	20.66	25.29	+4.63
Reading (42)	27.04	32.30	+5.27
Writing (24)	13.32	18.11	+4.79
Alphabet knowledge	13.59	21.38	+7.79
Total score (98) ^a	61.02	75.70	+14.68

^a Total scores combine oral language, reading, and writing scores, and can range from a minimum of 24 to 98 total possible points (Dickinson et al., 2001).

Notes: Teachers complete the TROLL for individual students. During the program's second year, teachers conducted baseline TROLL assessments in October 2007 (pre-test), and follow-up assessments in April 2008 (post-test).

A TROLL technical report places total scores in the context of percentiles based on a norming sample of low-income, high-risk children (Dickinson et al., 2001).³ Corresponding percentiles (i.e., 10th, 25th, 50th, 75th, and 90th percentiles) are provided for separate ages and for the fall and spring of the year. At pre-test, 3-year-olds' average score of 48.08 was slightly higher than the 25th percentile score of 44 for the fall. At post-test, 3-year-olds' average score of 61.84 was at the 75th percentile (62) for the spring. Looking at 4-year-olds, at pre-test their average score of 61.02 was at the 50th percentile (61) for the fall. At post-test, 4-year-olds' average score of 75.70 was slightly above the 75th percentile (74) for the spring. These results suggest that on average, PEK-ERF participants made faster progress while in the program than their peers.

³ The technical report notes norms are "provisional" based on the sample, although especially useful for comparisons with low-income children (Dickinson et al., 2001, 3-4).

14. PEK-ERF total TROLL scores compared to TROLL norming sample, Year 2 pre – post

	PEK-ERF		Norming sample		
	Average TROLL scores ^a		TROLL scores ^b		Percentiles
	Winter	Spring	Fall	Spring	
3-year-olds	48.08	61.84	40	44	10 th percentile
			44	49	25 th percentile
			51	56	50 th percentile
			61	62	75 th percentile
			68	69	90 th percentile
4-year-olds	61.02	75.70	43	46	10 th percentile
			52	55	25 th percentile
			61	66	50 th percentile
			71	74	75 th percentile
			80	84	90 th percentile

^a N=50 for 3-year-olds and N=56 for 4-year-olds.

^b For 3-year-olds, N=115 in the fall and N=55 in the spring. For 4-year-olds, N=336 in the fall and N=234 for in the spring. TROLL raw total scores were converted to percentiles to provide total TROLL scores that correspond to particular percentiles based on a norming sample of low-income, high-risk children. The TROLL technical report providing the scores and percentiles notes that norms are “provisional” based on the sample (Dickinson et al., 2001, 3-4).

Notes: Teachers complete the TROLL for individual students. During the program’s second year, teachers conducted baseline TROLL assessments in October 2007 (pre-test), and follow-up assessments in April 2008 (post-test).

Researchers also examined relationships between improvements in TROLL scores and the number of days attended by children in each age group in each setting. Results indicate there is no significant relationship (i.e., correlation) between the number of days attended by children and gain in their overall TROLL score. That is, children who attended PEK-ERF more days did not show significantly more improvement in their overall TROLL score.

Progress toward program benchmarks

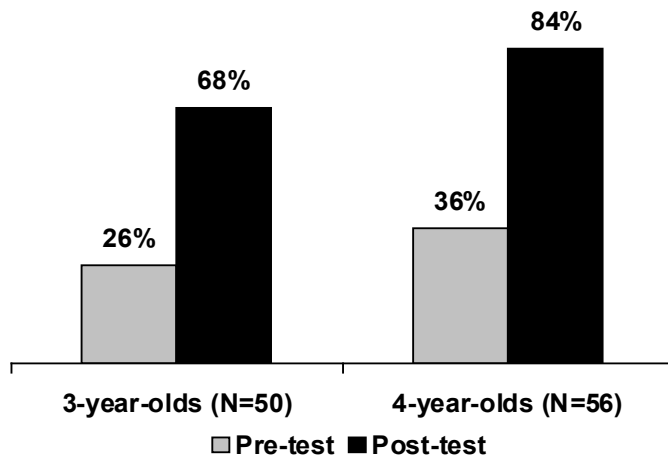
As with other assessments, PEK-ERF established benchmarks for TROLL results. The program’s annual target is for 75 percent of the children to obtain a TROLL total score (i.e., across the three subscales) that is at the 50th percentile or above based on the assessment’s norming sample of low-income, high-risk children. In this case, scores at the 50th percentile indicate children are making average progress for their age compared

to peers of similar socioeconomic status. The 50th percentile for 3-year-olds in the spring is 56 and for 4-year-olds in the spring is 66 (Dickinson et al., 2001). To facilitate comparisons, this section examines pre- to post-test changes in attainment of the *spring* 50th percentiles that are targeted by the benchmark.

Figure 15 shows the percentages of 3- and 4-year-old children meeting program targets for the assessment at baseline and follow-up. At baseline, 26 percent of the 3-year-olds and 36 percent of the 4-year-olds scored at or above the 50th percentile for the spring of their year. At follow-up, 68 percent of the 3-year-olds and 84 percent of the 4-year-olds scored at or above the spring 50th percentile. That is, 42 percent more 3-year-olds and 48 percent more 4-year-olds scored at or above the 50th percentile at post-test than at pre-test.

Overall, 76 percent of the children scored at or above the 50th percentile in the spring. Both 3-year-olds and 4-year-olds in child care setting met the target. In schools, the target was also attained for 4-year-olds, but not for 3-year-olds (Figure A12).

15. Percent of children meeting TROLL target scores, Year 2 pre – post



Notes: Teachers complete the TROLL for individual students. For each age group, both fall and spring scores were compared to the spring 50th percentiles based on a norming sample of low-income, high-risk children (Dickinson et al., 2001). During the program's second year, teachers conducted baseline TROLL assessments in October 2007 (pre-test), and follow-up assessments in April 2008 (post-test).

Phonological Awareness Literacy Screening (PALS)

Teachers use Phonological Awareness Literacy Screening (PALS) to assess children's knowledge of the alphabet and their awareness of print concepts. In the alphabet knowledge subtest, teachers ask children to name the 26 upper-case letters presented in random order.⁴ In the print and word awareness subtest, teachers read a familiar nursery rhyme printed in a book and ask each child to point to different components in the book (e.g., pictures, letters, and words). PALS also includes name writing, beginning sound awareness, rhyme awareness, and nursery rhyme awareness tasks, but those are not used in the PEK-ERF program (PALS, n.d.).

Progress from pre- to post-test

PALS baseline assessments were conducted in October 2007, and end-of-year assessments were conducted in June 2008. Both pre- and post-tests were completed for 120 children (96% of all children). On average, both 3- and 4-year-old PEK-ERF children showed improvement in both alphabet knowledge and print and word awareness from baseline to follow-up. Both age groups showed the largest gains in alphabet knowledge. On average, 3-year-olds improved by 10.86 points and 4-year-olds by 8.70 points out of a possible 26 points for alphabet knowledge. In the area of print and word awareness, 3-year-olds showed an average gain of 4 points and 4-year-olds of 2.75 points out of a possible 10 (Figure 16).

16. PALS average scores, Year 2 pre – post

Task (highest possible score)	Average score		Difference
	Pre-test	Post-test	
Age 3			
Alphabet knowledge ^a (26) (N=56)	6.27	17.13	+10.86
Print and word awareness (10) (N=51)	2.96	6.96	+4.00
Age 4			
Alphabet knowledge (26) (N=64)	13.78	22.48	+8.70
Print and word awareness (10) (N=64)	5.56	8.31	+2.75

^a PEK-ERF administers only the upper-case task. PALS also offers a lower-case alphabet recognition task for children able to identify 16 or more upper-case letters (Invernizzi et al., 2004).

Notes: Teachers administer PALS assessments to children. During the program's second year, baseline assessments were administered in October 2007 (pre-test), and follow-up assessments in June 2008 (post-test).

⁴ The *PALS-PreK Teacher's Manual* cites data indicating upper-case letter naming as a more developmentally appropriate task for preschool children, although the assessment also offers a lower-case alphabet recognition task for children able to identify 16 or more upper-case letters (Invernizzi et al., 2004, p. 49). PEK-ERF administers only the upper-case task.

Researchers also examined relationships between improvements in PALS scores and the number of days attended by children in each age group in each setting. For 3-year-olds at PEK-ERF elementary school sites, results suggest a significant relationship (i.e., correlation) between the number of days attended and improvements in PALS scores for alphabet knowledge. That is, 3-year-olds at elementary schools who attended the program more days improved more than those who attended fewer days from baseline to follow-up on PALS. Similar results were not found in the other groups.

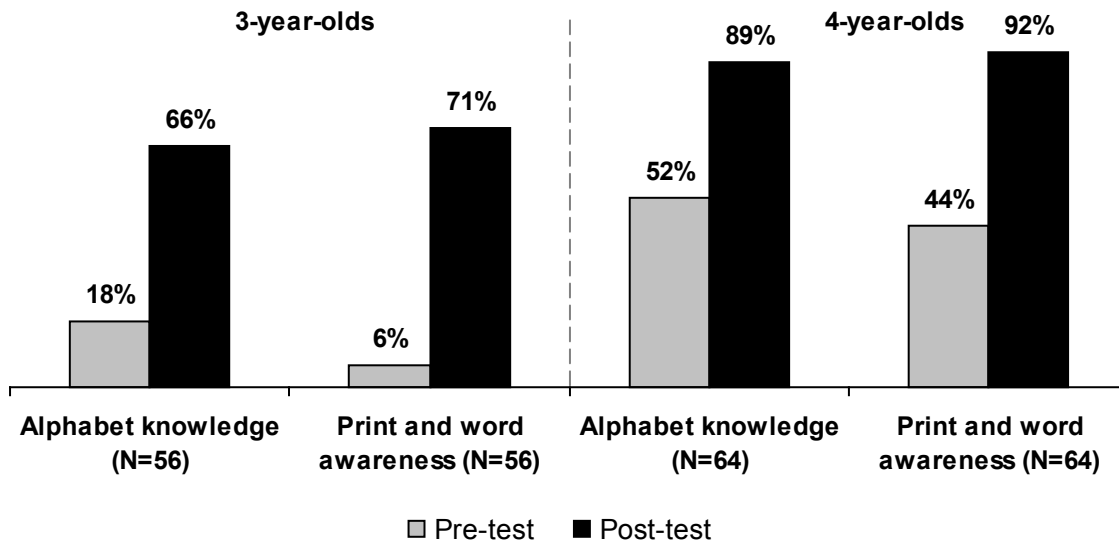
Progress toward program benchmarks

PEK-ERF also established benchmarks for PALS assessments. The program target for alphabet knowledge strives for 90 percent of children identifying at least 14 of the 26 letters. The target for print and word awareness strives for 90 percent of children identifying 7 out of the 10 possible items. These targets can be viewed in light of the following spring developmental ranges for 4-year-olds' scores presented in the *PALS-PreK Teacher's Manual* (Invernizzi et al., 2004): 12 to 21 for uppercase alphabet knowledge, and 7 to 9 for print and word awareness. The manual cautions readers that ranges are based on a preliminary analysis of approximately 350 children, and that it should not be assumed that those falling below the ranges are at risk and that those above do not need additional literacy instruction. In the manual's own language, ranges are described as follows:

In this analysis, we found that PALS-PreK scores within the spring developmental ranges ... were typical of students in the bottom quartile of those who were later defined as successful readers in first grade. That is, preschool children scoring within these developmental ranges tended to be those who just met the definition of successful reader in the fall of first grade.
—(Invernizzi et al., 2004, p. 63).

On average, 4-year-olds were in the middle of the developmental range for print and word awareness (with an average of 8.31) and above the developmental range for uppercase alphabet knowledge (with an average of 22.48). Figure 17 shows the percentages of 3- and 4-year-old children meeting PEK-ERF's targets for PALS at baseline and follow-up. Results show that for alphabet knowledge, 18 percent of the 3-year-olds and 52 percent of the 4-year-olds met the target (i.e., correctly identified 14 letters) at pre-test and 66 percent of the 3-year-olds and 89 percent of the 4-year-olds met the target at post-test. For print and word awareness, 6 percent of the 3-year-olds and 44 percent of the 4-year-olds met the target (i.e., correctly identified 7 or more items) at pre-test and 71 percent of the 3-year-olds and 92 percent of the 4-year-olds met the target at post-test. The target was met for the 4-year-olds in print and word awareness (92%), and was almost met for the 4-year-olds in uppercase alphabet knowledge (89%).

17. Children meeting PALS target scores, Year 2 pre – post



Notes: Teachers administer PALS assessments to children. During the program's second year, baseline assessments were administered in October 2007 (pre-test), and follow-up assessments in June 2008 (post-test).

Looking at differences between children at elementary school sites and children at child care centers, fewer children in child care centers (28-38%) made improvement from below to at or above target score in uppercase alphabet knowledge than children in elementary schools (44-57%). Also, 4-year-olds in the elementary schools met the target of 90 percent for both subtests, but 4-year-olds in the child care centers only met the target for print and word awareness (Figure A13).

Peabody Picture Vocabulary Test III (PPVT)

The Peabody Picture Vocabulary Test III (PPVT) measures children's English receptive vocabulary. Wilder Research staff conducted one-on-one assessments with 4-year-olds participating in PEK-ERF school and child care programs. Pre-assessments were administered in fall 2007 and post-assessments in spring 2008. Results presented here reflect 55 4-year-olds who have both pre- and post-assessment scores (85% of all 4-year-olds).

Progress from pre- to post-test

Researchers analyzed PPVT results using standard scores. Standard scores have a mean of 100 (and a standard deviation of 15) in the national normative sample. These scores are also age-standardized. This means that no change in scores from one year to the next indicates normative progress, positive change indicates accelerated progress, and negative change indicates slower progress in comparison to one's peers. As shown in

Figure 18, PEK-ERF participants made accelerated progress in English receptive vocabulary from pre-test to post-test overall with an average gain of 4.07 points. However, their average (mean) score fell below the national mean of 100 at both time points (90.58 at pre-test and 94.65 at post-test). Accelerated progress was made by children in both elementary school and child care settings (gains of 2.56 and 6.95 points, respectively). Mean scores for children at the child care centers went from below the national mean at pre-test to at the national mean at post-test (93.47 to 100.42).

18. PPVT average standard scores, Year 2 pre – post

Program	Average standard scores ^a		Difference
	Pre-test	Post-test	
Elementary school sites (N=36)	89.06	91.61	+2.56
Child care centers (N=19)	93.47	100.42	+6.95
Overall (N=55)	90.58	94.65	+4.07

^a Standard scores have a mean of 100 and a standard deviation of 15 in the national normative sample. No change in scores from one year to the next indicates normative progress, positive change indicates accelerated progress, and negative change indicates slower progress in comparison to one's peers.

Notes: Wilder Research staff conduct the PPVT one-on-one with participating 4-year-olds. During the program's second year, baseline assessments were administered in October and November 2007 (pre-test). Follow-up assessments were administered to most child care children in April 2008 (post-test). Results presented here reflect 4-year-olds with both pre- and post-assessment scores.

Researchers also examined the relationship between the number of days attended by children in each setting and their improvements on the PPVT. Significant relationships were not found between the number of days attended and gains in PPVT scores.

Progress toward program benchmarks

For the PPVT, PEK-ERF established the target of children gaining at least four standard score points from pre-test to post-test. Again, positive change in standard scores indicates accelerated progress compared to one's peers. Almost 50 percent of PEK-ERF children met the target (49%). A slightly higher percentage of the children at child care centers than at elementary schools met the target (53% vs. 47%, respectively) (Figure A14).

Goal 6: Parent capacity

Goal: Increase parent/family involvement in family literacy activities.

Family Learning Strategies Survey

During the second year, a parent phone interview was conducted by Wilder Research in April 2008. The interview questions were based on the previous year's parent self-administered Family Learning Strategies Survey. The survey was developed by the program's evaluator from Saint Paul Public Schools and the project coordinator to assess parents' involvement in their children's learning. A scoring grid was used to categorize responses to each question as either "developing," "acceptable," or "model." Additionally, parents were asked about their participation in school activities.

Parents of 59 of the 119 children (50%) completed the survey. Eligible parents had 3- or 4-year-olds who were enrolled in PEK-ERF program for at least two months from September 2007 to February 2008. The telephone interviews were conducted in English. Parents who were not interviewed had either moved and their current information was not available, parents refused to be interviewed, or had language barriers.

Results show that 9 of the 11 questions had more than 80 percent of parents scoring at the acceptable or model level. These questions addressed how frequently parents have conversations with their child; keep informed of their child's school or child care activities; take their child to events and activities; allow their child to use paper and crayons or some other writing tools; go to their child's school or child care center to attend events or activities, volunteer, or attend meetings; read in front of their child at home; write in front of their child at home; read aloud to their child or look at books with them; and sing songs with their child. Areas with the highest percentages of parents in the developing category included the amount of television viewing by children (59%) and taking children to the public library and checking out books (51% developing) (Figure A15).

Looking at differences between settings, there were more parents of children at child care centers than elementary schools in the developing category for the amount of television viewing by children and taking children to the public library and checking out books (Figure A16). In contrast, more parents of children in child care centers than in schools were in the acceptable or model level for singing songs to their child.

Parents also reported that they attended school activities (Figure A17). Almost all parents attended a parent-teacher conference during the school (100% at schools and 92% at child care centers). Most parents also attended the family social or educational events (74%), student performance events (72%), and the open house (67%). Parents were less

likely to volunteer (48%) or attend parent classes (30%), school committee or site council meetings (21%), and parent organization or group meetings (21%).

Progress toward program benchmarks

PEK-ERF established the benchmark that all parents will have at least 75 percent of their responses scored at the acceptable level or higher on the Family Learning Strategies Survey. The benchmark was not met for all parents, but results show that most parents (85%) had at least 75 percent of their responses at the acceptable level or higher.

All parents attended at least one school activity during the program year.

Issues for consideration

In sum, PEK-ERF results for student achievement and parent capacity in 2007-08 were positive overall. The annual benchmarks were met or almost met in all language and literacy assessments and parent capacity. Results also showed improvement in meeting the targets for all but one measure from the previous year. The findings also suggest that there is still room for improvement. The following issues for consideration can be used to inform the school's future planning efforts.

- *School-based 3-year-olds' attainment of targets.* Program staff can explore ways to enhance children's progress for measures of language and literacy. Compared to child care children, 3-year-olds at elementary school sites generally seemed to be further from attaining program benchmarks, as summarized below. Differences in meeting language and literacy targets by setting were not found for 4-year-olds.
 - 28-92% of 3-year-olds at child care centers met IGDI targets in spring, compared to 6-65% of 3-year-olds at elementary schools.
 - 78% of 3-year-olds at child care centers attained the TROLL target in spring, compared to 59% of 3-year-olds at elementary schools.
 - 69-77% of 3-year-olds at child care centers met PALS targets in spring, compared to 63-64% of 3-year-olds at elementary schools.
- *Parents' support for learning.* Items showing the most room for growth on the Family Learning Strategies Survey included how frequently parents take children to the library and check out books, and how frequently children watch television. Although the response rate was relatively low, results can inform program efforts to help parents understand how best to support their children's learning.

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Appendix

Program components

Student demographics and attendance

Goal 1: Staff capacity

Goal 2: Curriculum and instruction

Goal 4: PAE alignment

Goal 5: Student achievement

Goal 6: Parent capacity

Program components

A1. Sample PEK-ERF daily schedule

Ease into the day	<ul style="list-style-type: none"> ▪ Welcome/greet children; engage children in conversation ▪ Children “sign in” ▪ Children read books or write on white boards independently as they arrive
Community circle (with daily lesson)	<p><i>A time to gather together, introduce the area of study, plan the day, “Show and Tell”</i></p> <ul style="list-style-type: none"> ▪ Use picture/word schedules ▪ Write out daily message and encourage children to read along ▪ Introduce 3-5 new vocabulary words using picture books, picture cards, and real objects ▪ Read to students, using different types of books that support the area of study, including reading and re-reading favorite books and stories ▪ Use shared reading techniques (e.g., sentence completion, prediction, recall, and open-ended questions) and dialogic reading – specifically, the PEER sequence (prompting, evaluating, expanding, and repeating) ▪ Use song charts with pictures and words as cues to help children sing/read ▪ Encourage sound manipulation (e.g., rhyme, stretching, alliteration, matching sounds, clapping syllables, chanting, listening for words that are the same or different, and blending) ▪ Help the children learn the alphabet; notice alliteration, letter usage. Use songs, alphabet books, and nursery rhymes to increase alphabetic knowledge
Small group	<p><i>A time to give extra attention, more conversation, individualize to specific skill needs, and scaffolded instruction, a time for children to “DO”</i></p> <ul style="list-style-type: none"> ▪ Use auditory activities that require children to learn to distinguish and compare sounds ▪ Use select children’s books that emphasize sounds, rhyming and alliteration, including poetry ▪ Encourage sound manipulation (e.g., rhyme, stretching, alliteration, matching sounds, clapping syllables, listening for words that are the same or different, and blending) ▪ Play environmental sound games to connect sounds to meaning ▪ Help the children write letters using a variety of media and provide tactile experiences with print – paint, sand, play dough, etc. ▪ Use teacher dictation; encourage children to read when finished ▪ Adults interact and have conversation with children and encourage conversation among peers, striving for five turn-taking conversations

A1. Sample PEK-ERF daily schedule (continued)

<p>Active learning (50-60 minutes)</p>	<p><i>A time for the children to explore and practice new skills independently with support and input from the teacher</i></p> <ul style="list-style-type: none"> ▪ Adults interact and have conversation with children as they explore the room, investigate learning centers, work on projects, and extend the area of study ▪ Adults are available to talk, read, and write with children, scaffolding learning and discoveries (dictation, computer use, utilize listening centers) ▪ Adults support and encourage children’s use of alphabet puzzles, charts, stencils, tiles, environmental print, logos, calendars, money, etc. ▪ Adults support and encourage book use in centers with children reading and having conversation, building oral language and vocabulary
<p>Regroup to revisit</p>	<p><i>Opportunities to revisit the day’s lesson, explore some aspect of the children’s work, or plan an extension of learning for the afternoon or the following day</i></p> <ul style="list-style-type: none"> ▪ Encourage children to talk about the day’s activities using open-ended questions ▪ Encourage confidence in oral language skills by having children share something specific they worked on that day ▪ Co-create plans for the afternoon or the next day with the children
<p>Meals and snack</p>	<p><i>An opportunity for rich vocabulary and oral language development</i></p> <ul style="list-style-type: none"> ▪ Encourage children to talk about activities (past, present, and future) using open-ended questions ▪ Provide opportunities to be part of conversations that use extended discourse, encourage children to use language for a variety of purposes, and support them in communicative attempts (e.g., gestures, eye contact, imitating the child)
<p>Rest time - A designated time for children to rest. They may look at books or listen to music quietly.</p>	
<p>Extended learning (Active learning, small groups, and extended projects; 30-40 minutes)</p>	<p><i>A time for children to explore and practice new skills independently with support and input from the teacher (extends learning in oral language, phonological awareness, print awareness, and alphabet knowledge)</i></p> <ul style="list-style-type: none"> ▪ Adults interact and have conversation with children as they explore the room, investigate learning centers, work on projects, and extend themes (oral language) ▪ <i>Doors to Discovery Centers</i> are available for active learning in all domains, including math, science, dramatic play, writing, reading, music, etc. ▪ Adults are available to talk, read, write with children, scaffolding learning and discoveries (dictation, computer use, utilize listening centers) (all literacy areas) ▪ Adults support and encourage children’s use of alphabet puzzles, charts, stencils, tiles, environmental print, logos, calendars, money, etc. (all literacy areas) ▪ Adults support and encourage book use in centers with children reading and having conversation, building oral language and vocabulary (all literacy areas) ▪ Use time to pursue projects based on students’ interests (all literacy areas)

A1. Sample PEK-ERF daily schedule (continued)

<p style="text-align: center;">Small group/ Five-day read aloud</p>	<p><i>A time to learn literacy skills and a love of learning.</i></p> <ul style="list-style-type: none"> ▪ Read a book that supports the ongoing area of study focusing on: ▪ Day 1: Vocabulary and storyline ▪ Day 2: Story Elements: characters, feelings, beginning/middle/end, problem/resolution ▪ Day 3: Dialogic Reading: open-ended questions, allow children to predict words and phrases ▪ Day 4: Concepts of Print: front & back, where to start reading, left to right progression, return sweep, difference between word and letter ▪ Day 5: Read for enjoyment and concept development; dramatize/pretend/using props
<p style="text-align: center;">Large motor</p>	<p><i>A time to utilize the joy of movement and sensory input to allow more literacy learning</i></p> <ul style="list-style-type: none"> ▪ Do group movement activities incorporating songs, chants, games, signs, logos ▪ Bring the are of study into large motor play and movement ▪ Have conversations with children
<p style="text-align: center;">Closing meeting</p>	<p><i>A time to review the day, reinforce vocabulary and background knowledge, set the stage for the next day</i></p> <ul style="list-style-type: none"> ▪ Additional large group reading, reread the first book, or a book that supports the ongoing theme ▪ Teach specific book knowledge – discuss the cover of the book, authors, illustrators, title page, etc. ▪ Use social stories to teach academic, social skill, and functional routines to children, with the help of print and pictures
<p style="text-align: center;">Transitions</p>	<ul style="list-style-type: none"> ▪ Use transition rituals, include songs, rhymes and chants ▪ Use picture/word schedules, change boards, transition and process routines integrated into daily activities and routines ▪ Encourage children to notice that letters and symbols are all around them ▪ Play word games, using the children’s names when possible, pointing out sounds, rhyming, etc.

Source: *This figure was based on a table in a grant performance report that PEK-ERF staff prepared for the federal U.S. Department of Education.*

Student demographics and attendance

A2. Children's characteristics, Year 2

	Elementary school sites		Child care centers	
	N	Percent	N	Percent
Age as of September 1, 2007				
3	31	44%	29	53%
4	39	56%	26	47%
Total	70	100%	55	100%
Gender				
Male	37	53%	29	53%
Female	33	47%	26	47%
Total	70	100%	55	100%
Eligible for free or reduced-price lunch				
Yes	59	84%	47	85%
No	11	16%	8	15%
Total	70	100%	55	100%
Ethnicity				
American Indian	0	0%	1	2%
Asian	10	14%	0	0%
Latino	22	31%	3	6%
Black	33	47%	45	88%
White	5	7%	2	4%
Total	70	100%	51	100%
Home language				
English	25	36%	48	92%
Spanish	20	29%	2	4%
Somali	13	19%	0	0%
Hmong	3	4%	0	0%
Other/bilingual	9	13%	2	4%
Total	70	100%	52	100%
Received special education services				
Yes	6	9%	4	7%
No	64	91%	51	93%
Total	70	100%	55	100%
In target population^a				
Yes	65	93%	47	85%
No	5	7%	8	15%
Total	70	100%	55	100%

^a Child is in one or more of the following categories: eligible for free or reduced-price lunch, ELL, or receives Special Education services.

A3. Children's attendance, Year 2

Number of days present	Elementary school sites		Child care centers	
	N	Percent	N	Percent
Age 3				
Fewer than 80 days	4	13%	1	3%
81-100	1	3%	2	7%
101-120	2	7%	5	17%
121-140	1	3%	1	3%
141-160	7	23%	1	3%
161-180 ^a	16	52%	2	7%
181-200	N/A ^b	-	4	14%
More than 200 days	N/A ^b	-	13	45%
Total	31	100%	29	100%
Average	145.2		170.8	
Median	162.0		197.0	
Range	71-177		67-221	
Age 4				
Fewer than 80 days	1	3%	2	8%
81-100	1	3%	1	4%
101-120	2	5%	2	8%
121-140	5	13%	1	4%
141-160	12	31%	1	4%
161-180 ^a	18	46%	4	15%
181-200	N/A ^b	-	4	15%
More than 200 days	N/A ^b	-	11	42%
Total	39	100	26	100%
Average	153.0		175.1	
Median	158.0		187.0	
Range	69-180		77-221	

^a Elementary schools offered 180 days of programming and the child care center offered 224 days of programming.

^b Not applicable.

Note: Year 2 spanned September 1, 2007, to July 31, 2008.

Goal 1: Staff capacity

A4. PEK-ERF professional development, Year 2

Topic	Key learning outcomes	Learning formats	Hours/timeline	Responsible staff
Formative assessment and differentiated instruction	<ul style="list-style-type: none"> ▪ Basic elements of formative assessment ▪ How do teachers figure out “What do they (children) need to know?” ▪ How do teachers assess learning on an on-going basis, “How will I know when they know it?” ▪ Differentiating instruction, “What do I do when they know it?” and “What do I do when they don’t?” ▪ Basic elements of an effective lesson ▪ How to improve phonological awareness skills in small group instruction 	Lecture Small group learning and dialogue Experiential	3 hour sessions for a total of 12 hours (October and December 2007, and April 2008)	Project Early Kindergarten (PEK) Assistant Director Project coordinator Literacy coach
Small group instruction, differentiated and guided oral reading	<ul style="list-style-type: none"> ▪ Using homogenous grouping for small group instruction ▪ Setting up centers for purposeful, planned play ▪ Practical ideas for developing phonological awareness ▪ Overview of guided oral reading, “What early literacy skills do children need to benefit from guided oral reading instruction?” 	Lecture	6.5 hours October 2007	Foundation for Comprehensive Early Literacy Learning (CELL) consultant
<i>Everyday Math</i> curriculum in the early childhood classroom	<ul style="list-style-type: none"> ▪ Overview of <i>Everyday Math</i> curriculum materials ▪ How to use the curriculum in large group, small group, and center-based learning ▪ Creating lesson plans to implement the curriculum 	Lecture Small group learning and dialogue Experiential	6.5 hours November 2007	Project Early Kindergarten (PEK) Assistant Director School Readiness and Community Kindergarten manager and coaches
Interactive writing	<ul style="list-style-type: none"> ▪ Review of continuum of writing stages of young children ▪ Overview and uses of Interactive Writing (IAW) ▪ Incorporating Interactive Writing in your daily routines & rituals ▪ Classroom resources to support Interactive Writing (IAW), letter and name charts, word walls, and ABC charts 	Lecture Small group learning and dialogue Experiential	5 hours December 2007	Educational consultant Project coordinator Literacy coach

A4. PEK-ERF professional development, Year 2 (continued)

Topic	Key learning outcomes	Learning formats	Hours/timeline	Responsible staff
Using Accountable Talk to support rigorous thinking and promote adult-child relationships	<ul style="list-style-type: none"> ▪ Overview of Classroom Assessment Scoring System results ▪ Overview of Accountable Talk: talk must be accountable to the learning community, knowledge and rigorous thinking ▪ How can teachers promote Accountable Talk in the classroom ▪ Importance of providing feedback to students that focuses on the process of learning and understanding role of adults in children's play 	Lecture Small group learning and dialogue Experiential	5 hours January 2008	Educational consultant Project coordinator Literacy coach
Book making techniques to promote early literacy in the classroom	<ul style="list-style-type: none"> ▪ Fun ways to make different books with children to promote early literacy in the classroom ▪ How to use the innovative software program <i>My Own Bookshelf</i>, to help teachers create libraries (bookshelves) of accessible books, stories, lessons, linear tasks, or classroom materials ▪ How to import pictures and create electronic stories to help promote a positive classroom community 	Lecture Small group learning and dialogue Experiential	2.5 hour sessions for a total of 10 hours January, February, and March 2008	Educational consultant from Hamline University Consultants for technology-assisted instruction
Integrating literacy and math in the early childhood classroom	<ul style="list-style-type: none"> ▪ Using appropriate language to construct meaning of basic math concepts ▪ Choosing appropriate math concept books for Read Alouds. ▪ Creating chart stories to incorporate math concepts for Shared Reading 	Lecture Small group learning and dialogue	6.5 hours February 2008	Foundation for Comprehensive Early Literacy Learning (CELL) consultant
Data-driven interventions; effective small group instruction	<ul style="list-style-type: none"> ▪ Techniques for moving children to target through repeated, intentional routines and rituals ▪ Creating small group lesson plans for targeted interventions. 	Lecture Small group learning and dialogue Experiential	5 hours March 2008	Educational consultant Project coordinator Literacy coach
"What to do when they (children) don't know?"	<ul style="list-style-type: none"> ▪ Techniques for promoting alphabet knowledge, phonological awareness, and oral language for the struggling learner ▪ Discussions of successful practices in individual classrooms 	Lecture Small group learning and dialogue	6.5 Hours April 2008	Foundation for Comprehensive Early Literacy Learning (CELL) consultant

A4. PEK-ERF professional development, Year 2 (continued)

Topic	Key learning outcomes	Learning formats	Hours/timeline	Responsible staff
Data-driven interventions; importance of play	<ul style="list-style-type: none"> ▪ How teachers can implement important information from research about play in their classrooms to move kids closer to literacy targets. ▪ Importance of the teacher's role in play, discussing Piaget's vs. Vygotsky's theories 	Lecture Small group learning and dialogue	5 hours May 2008	Educational consultant Project coordinator Literacy coach
Positive Behavior Supports	<ul style="list-style-type: none"> ▪ Overview of Positive Behavior Supports (PBS), a social-emotional teaching pyramid, and how it will be implemented in the Pre-Kindergarten Program. ▪ Presentation of a problem-solving model that prevents and replaces challenging behaviors by addressing the functions of behavior and teaching socially acceptable behaviors ▪ Integrating the Classroom Assessment Scoring System with the PBS model. 	Lecture Small group learning and dialogue Experiential	6.5 hour sessions for a total of 19.5 hours June and August 2008	Positive Behavior Supports (PBS) consultant University of Virginia professor and author of CLASS
Data-driven results; lessons learned	<ul style="list-style-type: none"> ▪ Presentation of final child and classroom data ▪ Discussion and reflection: What worked, what didn't, and how will you change it to begin next year? 	Lecture Small group learning and dialogue		Educational consultant Project coordinator Literacy coach
Possible hours for training sessions:			92.5	
Possible hours for one-on-one or small group coaching sessions:			40	
Total possible professional development hours:			132.5	

Source: This table was developed by PEK-ERF program staff, with minor modifications made for purposes of this report.

A5. PEK-ERF Spring Evaluation 2008

	Disagree	Somewhat disagree	Somewhat agree	Agree
Building a literacy-rich classroom (N=20)				
The assistance I receive from PEK in building a literacy rich environment has been helpful for me.	-	-	5%	95%
Building a literacy rich environment is an important skill in my program.	-	-	-	100%
I have received enough support with building a literacy rich environment to continue on my own.	-	-	25%	75%
Literacy skills (N=20)				
The training & coaching in this literacy skill area has been very helpful.				
Conversation skills	-	-	10%	90%
Vocabulary & background knowledge	-	-	10%	90%
Phonological awareness	-	-	20%	80%
Book & print rules	-	-	15%	85%
Alphabet knowledge	-	-	5%	95%
I need additional information and support in this literacy skill area to help the children I work with in my program.				
Conversation skills	50%	15%	15%	20%
Vocabulary & background knowledge	50%	15%	20%	15%
Phonological awareness ^a	35%	18%	18%	29%
Book & print rules	55%	15%	15%	15%
Alphabet knowledge	60%	10%	20%	10%
I have received enough training in this skill area to continue developing high quality activities on my own.				
Conversation skills	20%	-	25%	55%
Vocabulary & background knowledge	20%	-	25%	55%
Phonological awareness	20%	-	35%	45%
Book & print rules	20%	-	15%	65%
Alphabet knowledge	5%	-	20%	75%
Coaching (N=18-19)				
Participation in the literacy coaching has made a significant impact in my teaching practices.	-	6%	22%	72%
Participation in the literacy coaching is making significant improvement in the ability of the project to prepare children for school.	-	6%	6%	89%
The assistance I receive from coaching in goal setting has been helpful to me.	-	12%	35%	53%
Goal setting is an important part of my teaching.	-	12%	35%	53%

A5. PEK-ERF Spring Evaluation 2008 (continued)

	Disagree	Somewhat disagree	Somewhat agree	Agree
Curriculums: Doors to Discovery, Everyday Math (N=19-20)				
The <i>Doors to Discovery</i> Curriculum is a useful tool to implement early literacy in my classroom.	-	-	45%	55%
I have implemented <i>Everyday Math</i> activities in my classroom.		15%	70%	15%
Having the two curriculums has made my planning easier.	11%	11%	42%	37%
The two curriculums provided meaningful learning opportunities for children.	-	5%	21%	74%
I have received enough support to successfully implement the <i>Doors to Discovery</i> .	-	-	30%	70%
I have received enough support to successfully implement math in my curriculum.	-	20%	65%	15%
I have been able to adapt the <i>Doors to Discovery</i> curriculum to meet the needs of my children.	-	5%	40%	55%
PEK Alignment Components/Practices (N=20)				
I have received helpful information for this PEK component.				
Accountable talk	-	-	10%	90%
Rituals & routines	-	-	10%	90%
Read aloud	-	-	20%	80%
Community circle	-	-	15%	85%
Lesson planning	-	-	5%	95%
Active learning	5%	-	30%	65%
I have received helpful support for this PEK component.				
Accountable talk	-	-	-	100%
Rituals & routines	-	-	5%	95%
Read aloud	-	-	10%	90%
Community circle	10%	-	10%	80%
Lesson planning	-	-	-	100%
Active learning	15%	-	20%	65%
I believe this PEK teaching practice is important to help children become school ready.				
Accountable talk	5%	-	-	95%
Rituals & routines	-	-	-	100%
Read aloud	-	-	-	100%
Community circle	5%	-	-	95%
Lesson planning	5%	-	-	95%
Active learning	15%	-	5%	80%

A5. PEK-ERF Spring Evaluation 2008 (continued)

	Disagree	Somewhat disagree	Somewhat agree	Agree
I have received enough training for this PEK teaching practice to continue developing high quality activities on my own.				
Accountable talk	15%	-	10%	75%
Rituals & routines	10%	-	10%	80%
Read aloud	15%	-	20%	65%
Community circle	25%	-	15%	60%
Lesson planning	10%	-	10%	80%
Active learning	30%	-	30%	40%
Assessments (N=20)				
I am aware of my children's strengths and needs based on data.	-	-	20%	80%
The information about children's scores is helpful to inform my teaching.	-	-	20%	80%
The student achievement goals set by the project are achievable.	-	-	55%	45%
Classroom and student assessments have been helpful to inform my practice.	-	5%	15%	80%
Professional Development (N=20)				
I was able to incorporate ideas and strategies presented in training into my classroom.	-	-	15%	85%
Overall, the content of training sessions has met my needs.	-	-	15%	85%
I have had sufficient training in how to utilize data to inform my instruction.	-	-	30%	70%
Overall, the format of training sessions has met my needs.	-	-	20%	80%

^a N=17

Goal 2: Curriculum and instruction

A6. ELLCO results by classroom, Year 2 pre – post

Classroom	Subscale	Pre-test	Post-test
Class 1	Book	20 T*	20 T
	Writing	15	21 T
	Language, literacy, and curriculum	3.4	4.5 T
	General classroom environment	2.6	4.6 T
Class 2	Book	20 T	20 T
	Writing	20 T	20 T
	Language, literacy, and curriculum	4.9 T	4.9 T
	General classroom environment	4.6 T	4.6 T
Class 3	Book	20 T	20 T
	Writing	18	21 T
	Language, literacy, and curriculum	4.5 T	4.9 T
	General classroom environment	4.2 T	5.0 T
Class 4	Book	18 T	18 T
	Writing	16	21 T
	Language, literacy, and curriculum	4.0 T	4.8 T
	General classroom environment	4.4 T	5.0 T
Class 5	Book	18 T	20 T
	Writing	14	21 T
	Language, literacy, and curriculum	4.4 T	4.9 T
	General classroom environment	4.0 T	5.0 T
Class 6	Book	16	18 T
	Writing	17	19 T
	Language, literacy, and curriculum	3.8	4.9 T
	General classroom environment	4.2 T	5.0 T
Class 7	Book	12	17
	Writing	18	21 T
	Language, literacy, and curriculum	3.1	4.5 T
	General classroom environment	3.0	4.4 T
Class 8	Book	20 T	20 T
	Writing	19 T	21 T
	Language, literacy, and curriculum	4.4 T	4.9 T
	General classroom environment	4.8 T	4.8 T

* T=target met

Notes: During the program's second year, baseline ELLCO assessments were conducted of all eight classrooms in September and October 2007, and follow-up assessments were conducted in April and May 2008. Saint Paul Public Schools hired an independent consultant to conduct ELLCO assessments.

A7. Detailed ELLCO results for areas within subscales, Year 2 pre – post

ELLCO area (possible points)	Pre-test	Post-test
Literacy environment checklist		
Book area (3)	3.0	3.0
Book selection (8)	7.6	8.0
Book use (9)	7.4	8.1
Book subscale (20)	18.0	19.1
Writing materials (8)	8.0	8.0
Writing around the room (13)	9.1	12.6
Writing subscale (21)	17.1	20.6
Language, literacy, and curriculum		
Oral language facilitation (5)	3.8	4.6
Presence of books (5)	4.3	4.9
Approaches to book reading (5)	4.0	5.0
Approaches to children's writing (5)	4.5	5.0
Curriculum integration (5)	3.9	5.0
Recognizing diversity in the classroom (5)	3.3	3.8
Facilitating home support for literacy (5)	4.3	4.9
Approaches to assessment (5)	4.5	5.0
Language, literacy, and curriculum subscale (5)	4.1	4.8
General classroom environment		
Organization of the classroom (5)	4.0	4.9
Contents of the classroom (5)	4.0	5.0
Presence/use of technology (5) ^a	3.0	4.0
Opportunities for child choice and initiative (5)	3.8	4.6
Classroom management strategies (5)	4.0	4.8
Classroom climate (5)	4.1	4.8
General classroom environment subscale (5)	4.0	4.8

^a Not included in subscale total as recommended in the ELLCO Toolkit (Smith & Dickinson, 2002).

Notes: During the program's second year, baseline ELLCO assessments were conducted of all eight classrooms in September and October 2007, and follow-up assessments were conducted in April and May 2008. Saint Paul Public Schools hired an independent consultant to conduct ELLCO assessments.

A8. CLASS PreK results by subscale, spring 2008

Subscale	Mean^a	Standard deviation	Range
Emotional support			
Positive climate	6.1	0.7	5 – 7
Negative climate ^b	6.7	0.8	5 – 7
Teacher sensitivity	5.1	1.1	4 – 7
Regard for student perspectives	5.3	1.0	4 – 6
Behavior management	5.4	1.3	3 – 7
Instructional support			
Productivity	5.4	0.8	4 – 6
Concept Development	3.1	1.3	1 – 5
Instructional Learning Formats	4.4	1.0	3 – 6
Quality of Feedback	3.1	0.9	2 – 4
Language Modeling	3.4	0.8	2 – 4
Student engagement	6.0	0.6	5 – 7

^a One classroom was not observed because the teacher left the program in spring.

^b To be consistent with the other items, the negative climate score is recoded as 1=high and 7=low. High score means less negative climate.

Note: During the program's second year, CLASS PreK assessments were completed by researchers at the University of Virginia's Preschool Language and Literacy Lab based on classroom videotapes taken in November 2007 (pre-test) and June 2008 (post-test).

A9. CLASS PreK scores by classroom and subscale, spring 2008

Subtest	Class 1 ^a	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7
Positive climate	6	6	6	7	7	5	6
Negative climate ^b	7	7	7	7	7	5	7
Teacher sensitivity	5	4	5	6	7	4	5
Regard for student perspectives	6	5	6	6	6	4	4
Behavior management	6	5	6	5	7	3	6
Productivity	6	5	6	5	6	4	6
Concept development	4	1	4	3	3	2	5
Instructional learning formats	5	4	5	6	4	3	4
Quality of feedback	3	2	3	4	4	2	4
Language modeling	3	3	4	4	4	2	4
Students' engagement	6	6	6	6	7	5	6
Classroom average^c	5.0T*	4.1	5.1T	5.2T	5.5T	3.4	5.0T

* T=target met

^a One classroom was not observed because the teacher left the program before post-test.

^b To be consistent with the other items, the negative climate score is recoded as 1=high and 7=low. High score means less negative climate.

^c Classroom averages were calculated by PEK-ERF evaluators. Negative climate scores were omitted from these calculations.

Note: During the program's second year, CLASS PreK assessments were completed by researchers at the University of Virginia's Preschool Language and Literacy Lab based on classroom videotapes taken in November 2007 (pre-test) and June 2008 (post-test).

Goal 4: PAE alignment

A10. Number of classrooms implementing indicators of alignment with the Project for Academic Excellence, spring 2008 (N=8)

Classroom environment		Yes	No
Standards posted	a. PEK core content standards posted	7	1
	b. With supporting student work posted*	4	3
	c. Children understand the standard*	2	3
Area of study	a. Area of study clearly visible	8	0
	b. Embedded in most parts of the day: community circle, small group, active learning	8	0
	c. Children can identify*	1	2
Children's original work	a. Children's original work is displayed throughout the classroom: pictures, writing, stories, art projects, labels	7	1**
	b. Most children have a sample of work posted	6	2
Children's names	a. Children's names are displayed	8	0
	b. Number of places (n = 8, Total = 47, Average= 5.88 , Range: 5-8)	-	-
Lesson plan	a. Lesson plan is completed and followed*	7	0
	b. Posted or easily assessable	8	0
	c. Detailed to guide daily activities	8	0
	d. Family connection included	4	4
Word wall	a. Horizontal	8	0
	b. Eye level	8	0
	c. Children's names	8	0
	d. Other	7	1
	f. Used by teacher as a reference	4	4
	g. Used by children as a reference	3	5
Rituals and Routines			
Sign-in	a. Sign-in	7	1
	b. Teaching letter formation*	7	0
	c. Adapting procedure for individual progress*	6	1
Shared reading	a. Shared reading – one observed	8	0
	b. There is explicit teaching of a specific standard or concepts about print	7	1
	c. All children can see	8	0
	d. Evidence of other shared reading around the room	5	3

A10. Number of classrooms implementing indicators of alignment with the Project for Academic Excellence, spring 2008 (N=8) (continued)

Rituals and Routines (continued)		Yes	No
Interactive writing	a. Teacher models, demonstrates, guides practice of specific writing strategies, engaging all children	7	1
	b. Evidence of child-initiated interactive writing is posted around the room	6	2
Read aloud	a. One during Community Circle	7	1
	b. There is explicit teaching of literacy concepts (i.e., phonemic awareness, concepts about print, vocabulary, making a connection, prediction, etc.)	7	1**
	c. Teacher and students engage in conversation around the book	8	0
	d. One or two teaching points are raised*	6	1
Classroom expectations	a. Classroom expectations are clear	6	2
	b. Community Circle*	6	1
	c. Active learning time*	6	1
	d. Transitions*	6	1
	e. Small group*	5	0
	f. Other*	2	2
Down time	a. Down time is minimized for students, and time is effectively managed*	6	1
Visual schedule	a. A visual schedule is displayed and may be used to provide support for self-regulation	6	2
Accountable talk	a. Evidence of accountable talk (speech bubbles are posted, and teacher is heard using AT)*	7	0
	b. Teacher intentionally creates the norms and skills of AT (listening, taking turns, asking questions, asking children to respond with proof)	8	0
Independent reading	a. Opportunities for independent reading*	7	0
Early Childhood Workshop			
Ease into the day	a. Teachers engaged in supportive interactions with children around reading and writing	8	0
Community circle	a. Community circle: greeting, daily message, read aloud, daily lesson	8	0
	b. Duration (n = 8, Total = 166, Average = 20.75 minutes, Range: 13-32 minutes)	-	-
	c. Children have opportunities to talk	8	0
	d. There are opportunities for children to participate in leadership roles	7	1

A10. Number of classrooms implementing indicators of alignment with the Project for Academic Excellence, spring 2008 (N=8) (continued)

Early Childhood Workshop (continued)		Yes	No
Small group	a. Small group duration (n = 6 , Total = 114 , Average = 19 minutes, Range: 13-25 minutes)	-	-
	Maximum 6 children / 1 teacher	4	4
	b. Teachers explicitly teach, observe, scaffold and assess children's knowledge*	5	0
	c. Homogeneous groups based on student data*	5	1
Active learning	a. Active learning duration (n = 8, Total = 449, Average = 56.13 minutes, Range: 35-65 minutes)	-	-
	b. Teacher and assistant move around the room engaging with children in conversational turn taking, asking open-ended questions, and making observation that help children extend learning and encourage critical thinking	6	2**
	c. All centers provide opportunities for children to practice "talk, read, write" what was modeled in large or small group	8	0
Regroup to revisit	a. Regroup to revisit – a time is set aside to reflect on the activities of the day	4	4
	b. Children have opportunities to talk*	4	0

* This item was not observed for all eight classrooms.

** The concept was partially implemented in the classrooms.

Note: Classroom observations conducted by a Saint Paul Public Schools evaluator, based on a tool developed by the evaluator and program coaches.

Goal 5: Student achievement

A11. Children meeting IGDl target scores, Year 2 pre - post

	Pre-test		Post-test		Difference ^a	
	N	%	N	%	N	%
Age 3						
<i>Elementary school sites</i>						
Picture Naming	5/29	17%	19/29	65%	14/29	48%
Rhyming	1/29	3%	14/29	48%	13/29	45%
Alliteration	1/29	3%	2/29	6%	1/29	3%
<i>Child care centers</i>						
Picture Naming	10/26	38%	24/26	92%	14/26	54%
Rhyming	3/26	12%	15/26	58%	12/26	46%
Alliteration	1/25	4%	7/25	28%	6/25	24%
<i>Overall</i>						
Picture Naming	15/55	27%	43/55	78%	28/55	51%
Rhyming	4/55	7%	29/55	53%	25/55	46%
Alliteration	2/54	4%	9/54	17%	7/54	13%
Age 4						
<i>Elementary school sites</i>						
Picture Naming	7/39	18%	26/39	67%	19/39	49%
Rhyming	4/39	10%	26/39	67%	22/39	57%
Alliteration	3/39	8%	24/39	62%	21/39	54%
<i>Child care centers</i>						
Picture Naming	4/25	16%	19/25	76%	15/25	60%
Rhyming	6/25	24%	19/25	76%	13/25	52%
Alliteration	3/25	12%	14/25	56%	11/25	44%
<i>Overall</i>						
Picture Naming	11/64	17%	45/64	70%	34/64	53%
Rhyming	10/64	16%	45/64	70%	35/64	54%
Alliteration	6/64	9%	38/64	59%	32/64	50%

^a Difference between the percentage meeting the target at pre-test and the percentage meeting the target at post-test. Target scores for 3-year-olds are 18 for picture naming, 7 for rhyming, and 5 for alliteration, and for 4-year-olds are 26 for picture naming, 12 for rhyming, and 8 for alliteration.

Note: During the program's second year, teachers administered IGDIs in October, January, April, and June. This figure presents results for children administered IGDIs in both October 2007 (pre-test) and June 2008 (post-test).

A12. Children meeting TROLL target scores, Year 2 pre - post

	Pre-test		Post-test		Difference ^a	
	N	%	N	%	N	%
Age 3 (scored 56 or above)^b						
Elementary school sites	4/27	15%	16/27	59%	12/27	44%
Child care centers	9/23	39%	18/23	78%	9/23	39%
Overall	13/50	26%	34/50	68%	21/50	42%
Age 4 (scored 66 or above)^b						
Elementary school sites	15/37	41%	31/37	84%	16/37	43%
Child care centers	5/19	26%	16/19	84%	11/19	58%
Overall	20/56	36%	47/56	84%	27/50	48%

^a Difference between the percentages scoring at or above the 50th percentile at pre-test and post-test.

^b 50th percentile based on norming sample of low-income, high-risk children.

Notes: Teachers complete the TROLL for individual students. During the program's second year, teachers conducted baseline TROLL assessments in October 2007 (pre-test), and follow-up assessments in April 2008 (post-test). For each age group, both fall and spring scores were compared to the spring 50th percentiles based on a norming sample of low-income, high-risk children (Dickinson et al., 2001).

A13. Children meeting PALS target scores, Year 2 pre - post

	Pre-test		Post-test		Difference ^a	
	N	%	N	%	N	%
Age 3						
<i>Elementary school sites</i>						
Alphabet knowledge	2/30	7%	19/30	63%	17/30	57%
Print and word awareness	0/25	0%	16/25	64%	16/25	64%
<i>Child care centers</i>						
Alphabet knowledge	8/26	31%	18/26	69%	10/26	38%
Print and word awareness	3/26	12%	20/26	77%	17/26	65%
<i>Overall</i>						
Alphabet knowledge	10/56	18%	37/56	66%	27/56	48%
Print and word awareness	3/51	6%	36/51	71%	33/51	65%
Age 4						
<i>Elementary school sites</i>						
Alphabet knowledge	20/39	51%	37/39	95%	17/39	44%
Print and word awareness	18/39	46%	35/39	90%	17/39	44%
<i>Child care centers</i>						
Alphabet knowledge	13/25	52%	20/25	80%	7/25	28%
Print and word awareness	10/25	40%	24/25	96%	14/25	56%
<i>Overall</i>						
Alphabet knowledge	33/64	52%	57/64	89%	24/64	38%
Print and word awareness	28/64	44%	59/64	92%	31/64	48%

^a For alphabet knowledge, this difference is between the number and percentage of children improving from scoring below 14 to scoring at or above 14. For print and word awareness, this difference is between the number and percentage of children improving from scoring below 7 to scoring at or above 7.

Notes: Teachers administer PALS assessments to children. During the program's second year, baseline assessments were administered in October 2007 (pre-test), and follow-up assessments in June 2008 (post-test).

A14. Four-year-olds meeting target for PPVT, Year 2 pre - post

Program	Gain of 4 standard score points or more^a	
	Number	Percent
Elementary school sites	17/36	47%
Child care centers	10/19	53%
Overall	27/55	49%

^a Standard scores have a mean of 100 and a standard deviation of 15 in the national normative sample. No change in scores from one year to the next indicates normative progress, positive change indicates accelerated progress, and negative change indicates slower progress in comparison to one's peers.

Notes: Wilder Research staff conduct the PPVT one-on-one with participating 4-year-olds. During the program's second year, baseline assessments were administered in October and November 2007 (pre-test) and follow-up assessments in April 2008 (post-test).

Goal 6: Parent capacity

A15. Results of Family Learning Strategies Survey, Year 2: Overall (N=58-59)

Question	Developing	Acceptable	Model^a
My child watches television.	59%	25%	15%
I read aloud to my child or look at books with them.	7%	34%	59%
I take my child to the public library and check out books.	51%	34%	15%
I have conversations with my child (for example, during mealtimes and when we're traveling together in the car or bus).	-	9%	91%
I sing songs with my child.	12%	41%	48%
I keep informed of my child's school or daycare activities (checking the backpack, reading newsletters, etc.).	-	19%	81%
My children see me reading at home (newspapers, magazines, or books).	3%	14%	83%
I take my child to events and activities (for example, shopping, religious services, movies, museum, or a park).	-	8%	92%
I go to my child's school or daycare to attend events, activities, to volunteer or attend meetings.	3%	22%	75%
My child sees me writing at home (for example, grocery lists, letters, or checks). (N=49)	5%	26%	69%
I allow my child to use paper and crayons or some other writing tools.	2%	10%	88%

^a A scoring grid was used to categorize responses for individual questions into three levels: developing, acceptable, and model.

Notes: The Family Learning Strategies Survey was developed by the program's evaluator from Saint Paul Public Schools and the project coordinator to assess parents' involvement in their children's learning. Wilder Research conducted the survey by telephone in April 2008.

A16. Results of Family Learning Strategies Survey, Year 2: schools and child care centers

Question	Elementary Schools (N=33-34)			Child Care Centers (N=25)		
	Developing	Acceptable	Model	Developing	Acceptable	Model
My child watches television.	56%	29%	15%	64%	20%	16%
I read aloud to my child or look at books with them.	3%	32%	65%	12%	36%	52%
I take my child to the public library and check out books.	44%	35%	21%	60%	32%	8%
I have conversations with my child (for example, during mealtimes and when we're traveling together in the car or bus).	-	9%	91%	-	8%	92%
I sing songs with my child.	21%	32%	47%	-	52%	48%
I keep informed of my child's school or daycare activities (checking the backpack, reading newsletters, etc.).	-	24%	76%	-	12%	88%
My children see me reading at home (newspapers, magazines, or books).	6%	12%	82%	-	16%	84%
I take my child to events and activities (for example, shopping, religious services, movies, museum, or a park).	-	6%	94%	-	12%	88%
I go to my child's school or daycare to attend events, activities, to volunteer or attend meetings.	3%	24%	74%	4%	20%	76%
My child sees me writing at home (for example, grocery lists, letters, or checks).	6%	24%	70%	4%	28%	68%
I allow my child to use paper and crayons or some other writing tools.	-	9%	91%	4%	12%	84%

^a A scoring grid was used to categorize responses for individual questions into three levels: developing, acceptable, and model.

Notes: The Family Learning Strategies Survey was developed by the program's evaluator from Saint Paul Public Schools and the project coordinator to assess parents' involvement in their children's learning. Wilder Research conducted the survey by telephone in April 2008.

A17. Parent participation in school events. Family Learning Strategies Survey, Year 2

Event	Percent “yes”		
	Schools (N=31-34)	Center (N=25)	Overall (N=56-59)
Open house	72%	60%	67%
Parent-teacher conference	100%	92%	97%
Student performance	55%	96%	72%
Family social or educational event (e.g., Come and Read, Books and Breakfast, library events, family nights, meetings at centers)	67%	84%	74%
Parent or adult class	44%	12%	30%
School committee or site council	16%	28%	21%
Parent organization or group meeting (PTA or PTO)	19%	24%	21%
Volunteer in child’s classroom or during field trips	58%	36%	48%

Notes: Participation in school events questions are added to the Family Learning Strategies Survey. Wilder Research conducted the survey by telephone in April 2008.