

**Parents and Teachers Working Together  
to Support Third-Grade Achievement:  
Parents as Learning Partners (PLP) Findings**

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**PARENTS AND TEACHERS WORKING TOGETHER  
TO IMPROVE THIRD-GRADE ACHIEVEMENT:  
PARENTS AS LEARNING PARTNERS (PLP) FINDINGS**

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**EXECUTIVE SUMMARY**

As a society, we strongly believe that it is beneficial for parents to be involved in their children's education. Increasing amounts of research also support the value of parent involvement and its impact on student achievement. As Epstein and Dauber (1993) stated, children are more successful students at all grade levels if their parents participate at school and encourage education and learning at home. Clark (1993) also found positive associations between parent involvement, especially parental attitudes toward homework, and students' mathematics and literacy skills. In addition, Ames, de Stefano, Watkins, & Sheldon (1995) stated that children's motivation, attitudes toward parent involvement, and perceptions of their parents' level of involvement are more positive when their parents receive frequent communications from the teacher. Therefore, a key element through which parental involvement impacts student achievement is two-way communication between parents and teachers whereby they share common expectations and responsibility for the child's learning. As a base, the parent must support the learning of the child in the home, and the teacher must provide high expectations and support for learning at school (Ames et al., 1995; Chavkin, 1993; Epstein, 1995).

The Los Angeles Annenberg Metropolitan Project (LAAMP), in an effort to have schools work more collaboratively with parents surrounding academic issues, granted funds matched by the Weingart Foundation to 29 schools in three School Families in Los Angeles County to focus on three primary areas in which parents and teachers can work together to support children's academic progress: communication, parenting, and learning at home. This effort is entitled Parents as Learning Partners (PLP). The PLP initiative recognizes that when parents and teachers share common responsibility and expectations, assist each other in

providing learning experiences, and establish two-way communication, students will develop better work habits toward attendance, homework, behavior, and achievement.

This report describes goals and context of the PLP evaluation and provides an overview of third-grade classrooms both in the schools in which PLP is operating and in similar schools selected as comparison schools. Specifically, this report describes parent involvement goals of the schools; student, teacher, and classroom characteristics; professional development activities and voicemail usage of teachers; teacher interactions with their students' parents including communication patterns and parent involvement at the school and in the classroom; barriers to parent participation, particularly surrounding parent education workshops; access, usage, and satisfaction with parent education and other school services; parents' habits and structure at home regarding reading and homework; and the behavior and achievement of third graders. Furthermore, the report summarizes the findings of the evaluation and concludes with the limitations of the PLP program and programmatic recommendations.

### **Conceptual Framework and Approach to the Evaluation**

Through the Parents as Learning Partners (PLP) grant, the Los Angeles Annenberg Metropolitan Project (LAAMP) is encouraging schools to work more collaboratively with parents surrounding academic issues. The aim is to enable parents to take an active role in their children's learning. The PLP efforts focus on three primary areas in which parents and teachers can work together to support children's academic progress: communication, parenting, and learning at home.

LAAMP and PLP's theory of how parent involvement impacts student achievement has been adapted from Joyce Epstein's research on parent involvement.<sup>1</sup> Epstein (1995) stated that there are *overlapping spheres of influence* in a child's education: the family and the school.<sup>2</sup> Within the family, the parents and whole family interact with the child. Within the school, the teachers and the whole school influence the child. The child's learning is enhanced when these two spheres overlap and when the teachers and parents within their family and school hold a

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<sup>1</sup> Epstein outlines six types of parent involvement: communicating, parenting, volunteering, decision making, leading, and learning at home; however, Weingart through PLP emphasizes only the three that focus more directly on parents and teachers supporting a child's academic progress: communicating, parenting, and learning at home.

<sup>2</sup> Epstein, J. L. (1995). School/family/community partnerships: Caring for the children we share. *Phi Delta Kappan*, 76, 701-712.

shared responsibility for helping the child learn. Parents and teachers establish and share common expectations for the child. They also establish a two-way means of communicating, as well as assist each other in providing learning experiences for the child. The partnership formed between parents and teachers is based on shared knowledge, actions, and expectations. This type of partnership between the parents and teachers then results in a supportive and consistent learning environment for the child, which in turn encourages better attendance and homework habits. Over time, the cumulative effect of better attendance, more attention to studies, consistent expectations, and regular support should improve achievement and grades.

In addition, particular parent-child interactions in the home influence children's success in the classroom. Two dimensions of parental behaviors—support and pressure—have been identified as important influences on social competence and improved achievement (Baumrind, 1987). In summary, children need encouragement and reinforcement of skills at home to perform well in school. To do this, parents need to read to their children, engage them in educational games, and enforce rules about homework. Furthermore, parents and teachers need to communicate about what is expected of the student, what is being taught in the class, and what the parent can do to help the child at home. Sending of consistent messages between both the teacher and the parent is important to children's self-esteem, particularly in terms of a child's perception of parental acceptance (Kawash, Kerr, & Clews, 1985; Morvitz & Motta, 1992) and parental support (Amato, 1989). This type of parent-teacher communication informs parents about what assistance a child needs at home to support the child's learning at school. Therefore, PLP's goals are to impact students through the change in behavior, perception, and attitude of parents and teachers in the PLP program.

The PLP program has specific elements targeted toward overlapping a child's spheres of influence. PLP's theory of action is to target both parents and teachers to increase the interaction between them concerning academics and learning. PLP intends to improve parenting, increase communication, and support learning at home through *professional development* for teachers on how to incorporate parents into the classroom, how to contact parents, home-learning activities, and volunteer strategies; through *parent education* for parents on how to communicate with teachers, assess student work, help with homework and reading, as well as computer training; and through *school services* such as voicemail for teachers to increase communication between parents and teachers, lending libraries for parents

to increase the amount of reading in the home, and computer lending programs for parents.

The study is designed to evaluate the operation and impact of PLP. Adopting a comparison group approach, the evaluation centers on the change in parents and teachers that could then lead to change in the performance, attitude, and behaviors of children.

The evaluation approach integrates a longitudinal and a quasi-experimental design with a range of data sources, including a teacher survey, a parent phone survey, interviews, informal site visits, and collection of archival data. The effects of PLP are assessed primarily through a comparison group methodology of tracking parent-child pairs over time. We describe the differences in outcomes and measures across students, parents, and teachers in PLP and Non-PLP schools as well as test for the statistical significance between the two populations. The difference between the Non-PLP and PLP findings were tested for statistical significance (at the  $p = 0.01$  level) using a chi-square test or ANOVA  $t$ -test, as appropriate. These tests indicate the probability that the observed differences are due to chance. In addition, we also examine the change on these measures over time: We have teacher measures from the fall and spring of the students' third-grade year as well as parent measures from when their child was in second grade and in third grade. The over-time trends of these measures can be compared across the PLP and Non-PLP students and parents to establish patterns and potential impact of PLP on student behaviors and performance. Moreover, within a regression framework, we estimate the effect of the PLP program on student outcomes of homework completion and performance, discipline/behavior, and overall math and reading performance. Background characteristics of the parents and students are used as controls in the regressions. The regression analyses were conducted to investigate the relationship between student achievement and parent involvement controlling for a variety of student and teacher characteristics. Based on these analyses, the results examine the similarities and differences between Non-PLP and PLP comparison parent responses as well as the Non-PLP and PLP comparison teacher responses about themselves and parents' third-grade children.

### **Evaluation Questions**

The evaluation centers around three evaluation questions:

- What are the effects of PLP on third-grade teachers' practices?

- What is the impact of PLP activities on parents?
- What are the effects of PLP on students' third-grade achievement?

The unit of analysis for the evaluation is the individual, whether parent, teacher, or child. Analyses are conducted comparing Non-PLP and PLP groups of either parents, teachers or students.

### **What Are the Effects of PLP on Third-Grade Teachers' Practices?**

Third-grade teachers from the 12 schools participating in the Parents as Learning Partners evaluation completed surveys in the fall and spring of the 1998-1999 academic year. The teachers reported information on general classroom characteristics and parent involvement practices, as well as student characteristics and behaviors. Overall, the Non-PLP and PLP classrooms involved in the evaluation for the 1998-1999 school year were similar to each other in student, teacher and classroom characteristics. Non-PLP and PLP classrooms had very comparable students in terms of their demographic background, English skills, motivation, and homework completion. Teachers and parents of students in both the Non-PLP and PLP schools therefore would tend to have similar challenges and student issues to work out and work through in the classroom and at the school. Overall, the similarity in Non-PLP and PLP classrooms validates the ability to make comparisons across important measures of change in Non-PLP and PLP parents, teachers, and students.

First, one quarter (24.9%) of the Non-PLP and half (56.2%) of the PLP third-grade students had teachers who participated in professional development on parent involvement. Thus, significantly more students in third-grade PLP classrooms had teachers who had professional development on parental involvement offered to them by their schools, and, more importantly, twice as many PLP students had teachers who participated in this type of professional development as compared to Non-PLP students. However, half of the teachers in PLP schools and practically all of the Non-PLP teachers who were motivated to involve parents in their classrooms felt that their schools were not preparing them on *how* to involve parents.

Secondly, three fourths of students in PLP schools had teachers who used the voicemail system in their school as compared to students in Non-PLP schools who had teachers that did not use their voicemail at all to assist in communicating with

their students' parents. Primarily, the voicemail was used as a device for leaving message for teachers by the parents.

Overall, the changes in teachers' beliefs appear to be similar in direction and size across Non-PLP and PLP teachers, with small differences favoring the PLP group. In general, by spring of 1999, more PLP teachers as compared to Non-PLP teachers had a basic belief that parental involvement is an important element in children's learning. Overall, there was a higher acceptance of responsibility of teachers at PLP schools to support and ensure that a child gets a good education. But this did not seem to translate into a belief that more effort should be devoted to involving parents.

PLP teachers reported a slightly better communication relationship with their parents as compared to the Non-PLP teachers. The majority of Non-PLP and PLP teachers in the fall and spring reported that their communication with parents was for information purposes only. Moreover, a significant minority of teachers (23% of Non-PLP teachers and 30.8% of PLP teachers) reported an interactive, two-way communication pattern with their parents, with PLP teachers significantly more likely to report such communications.

Teachers also reported the types of activities they use to involve parents in their child's education. Roughly a third (36%) of both Non-PLP and PLP students had teachers who reported using a combination of methods including interactive homework, children reading to parents, requiring that homework be signed by parents, and contacting parents by phone calls or letters home. One quarter of Non-PLP students and a third of PLP students had teachers who reported using only interactive homework as a parent involvement practice. Only 7.7% of Non-PLP students and 3.6% of PLP students had teachers who responded that they did not use any practices to involve parents.

As reported by parents, fewer PLP parents (69%) as compared to Non-PLP parents (83%) indicated that their child's third-grade teacher calls them on the phone or sends a note home. These data indicate that contact among parents and teachers in terms of work and feedback were similar across PLP and Non-PLP teachers, although more Non-PLP teachers tended to contact their parents individually via the phone or a note.

## **What Is the Impact of PLP Activities on Parents?**

Most of the parents in the Non-PLP and PLP schools, as reported through the parent phone survey, knew that their schools provided parent education workshops, a newsletter/bulletin, and access to a parent center, although many fewer actually made use of these available services. More parents knew about the availability of parent education workshops and the newsletter or bulletin in the spring of 1999 as compared to the spring of 1998. But despite more parents knowing about the availability of services, fewer parents overall participated in parent workshops, attended computer training, or visited the parent center in 1998/1999 than in 1997/1998.

Of those parents who had used the services, both PLP and Non-PLP parents shared similarly high levels of satisfaction with their parent centers and their school's newsletter or bulletin. However, significantly more PLP parents were satisfied with the parent training and education workshops: 82% of PLP parents who attended the workshops believed that "parent training is helpful/worth my time" as compared to 64% of Non-PLP parents. Significantly more PLP parents as compared to Non-PLP parents reported that workshops on various topics were helpful, including those on helping children with school work, communicating with teacher and staff, understanding what is expected of the child, learning parent/child activities for the home, and introduction to school policies and programs. These are all areas of emphasis in the PLP initiative.

Parents in general believed that it is "both the school and family's job to make sure that a child gets a good education." Significantly more PLP parents (59%) as compared to Non-PLP parents (45%) believed that it was an equal responsibility of both the school and family. Along the same line, significantly fewer PLP parents (16%) as compared to Non-PLP parents (28%) believed that it is the job of the school and teachers. Overall, this indicates a higher acceptance of responsibility by PLP parents for their children getting a good education.

In general, parental involvement was fairly low. In both Non-PLP and PLP classrooms teachers reported that only about 10% of their parents volunteered at least once over the course of the year. Also Non-PLP teachers reported that 43% of their parents had visited or helped in their classroom at least once during the year, and PLP teachers reported that 41.2% of their parents had visited or helped in the classroom. Similarly, according to the parent phone survey conducted in the spring

of 1999, 39.0% of the parents in Non-PLP schools and 47% of parents in PLP schools reported that they had visited or helped in the classroom at their child's school. Note that both estimates, however, show advantage for PLP schools. Furthermore despite the teacher-reported low levels of involvement by parents, a large number of parents were rated as "somewhat involved" or "very involved" in the academic performance of their child.

Moreover, parents of both Non-PLP and PLP third-grade students tended to visit or help out in their child's classroom less often than when their child was in second grade. However, the decline from second to third grade in parents visiting or helping in the classroom (at least once) was significantly less for PLP parents. In addition, Non-PLP and PLP parents did maintain a similar level of involvement in schoolwide events and maintained a similar number of acquaintances (2.5) with school staff other than the child's teacher as their children moved from second to third grade.

In terms of interactions with their child at home, more Non-PLP and PLP parents talked about school with their child every day in the third grade than in the second grade, and fewer Non-PLP and PLP parents did chores with their child every day. Similarly small percentages of both Non-PLP and PLP parents went to the library every day or several times a week (7% and 8% every day, respectively). Both Non-PLP and PLP parents also checked out, on average, three books from the library in a regular outing to the library with their child. But significantly more PLP parents (73%) as compared to Non-PLP parents (67%) borrowed books or other educational materials from their child's school.

In terms of parents' behaviors surrounding homework, significantly more PLP parents (70%) as compared to Non-PLP parents (62%) reviewed their child's homework every day in the third grade. But a similar number of both Non-PLP (50%) and PLP (51%) parents helped their child with homework every day in the third grade. Fewer parents in both the Non-PLP and PLP parent groups helped their children with homework every day in the third grade (spring 1999) as compared to in the second grade (spring 1998). The number of PLP parents who helped their child with homework every day dropped significantly from the second to the third grade: from 70% of PLP parents to 51% of PLP parents.

Furthermore, Non-PLP parents and PLP parents differed in the frequency in which they signed and returned their child's homework to the teacher. More Non-

PLP parents (39%) signed and returned homework to the child's teacher every day as compared to PLP parents (25%), while more PLP parents (36%) signed and returned the homework to the child's teacher several times a week as compared to Non-PLP parents (27%). But a similar number of Non-PLP and PLP parents had their child's homework require their participation to complete it.

Reading habits of Non-PLP and PLP parents do not seem to differ in the third grade in terms of how often someone was available to help their child with reading, the parent reading aloud to the child in English, or having the child tell the parent a story that he or she had read. However the frequency in which parents read to their child or had them read aloud in a language other than English is different. The same number of Non-PLP and PLP parents read *every day* in third grade with their child and read *every day* aloud with their child in a language other than English. But more PLP parents as compared to Non-PLP parents read with their child and read aloud with their child in a language other than English *several times a week*. Overall, slightly more PLP parents read to their child more frequently as compared to Non-PLP parents, despite the overall decline in parents reading every day with their child from second to third grade.

From second to third grade, more parents in both Non-PLP and PLP schools reported having books in the home in English and reading to their child in English. In both second and third grade, similar percentages of Non-PLP and PLP parents had books in the home in English and read to their child in English.

### **What Is the Effect of PLP on Students' Third-Grade Achievement?**

PLP and Non-PLP third graders have similar ratings by their teachers across several reading measures: standing in reading decoding in the fall and spring, standing in reading comprehension in the spring of 1999, completion of reading homework in the fall and spring, and in reading homework performance in the fall and in the spring. For math, PLP and Non-PLP students as evaluated by their teachers had similar standings in math and standing in math homework performance in the fall and the spring. However, significantly more PLP students than Non-PLP students regularly completed their math homework "moderately well to very well" in the spring, although they had similar completion rates in the fall.

Overall, a higher percent of PLP as compared to Non-PLP third-grade students scored at or above the 50th NPR in language arts, math and reading on the SAT9 test in 1998/99. These data, however, are for *all* third-grade students who took the SAT9

in the 12 Non-PLP and PLP schools, not just the random sample of students who were tracked in these 12 evaluation sites, and the data do not control for differences across the entire student population. For the Los Angeles Unified School District (LAUSD) schools, the evaluation was able to obtain individual SAT9 test score information, which could be linked to student demographic information, the teacher survey data, and the parent phone survey data. This allowed for detailed analyses of the relationship between student achievement and parent involvement.

Primarily, third-grade students in the LAUSD PLP schools scored 4.5 percentile points higher in reading on the SAT9 in 1998/99 than Non-PLP LAUSD students after controlling for student ethnicity, low income status, Title I status, Limited English Proficient status, third-grade class size, number of years teacher taught third grade, teacher's emergency credential status, parent education, and employment status of the household. In addition, these analyses showed no differences for the math and language arts SAT9 scores between the PLP and Non-PLP LAUSD students.

Parent involvement in terms of attending parent conferences, visiting the classroom, volunteering in the classroom, attending schoolwide events, and providing reading support or homework support to their child in the home had varying effects on students' academic performance and achievement even when controlling for student and teacher characteristics. Controlling for student ethnicity, low income status, Title I status, Limited English Proficient status, third-grade class size, number of years teacher taught third grade, teacher's emergency credential status, parent education, and employment status of the household, the evaluation found the following relationships: Reading support in the home had a positive effect on LAUSD math SAT9 scores. Parents visiting the classroom, volunteering in the classroom, and contacting the teacher was associated with increases in student's reading comprehension (measured in spring 1999). Both reading support in the home and parents visiting the classroom, volunteering in the classroom, and contacting the teacher were positively related to LAUSD language arts SAT9 scores. Parent's presence at schoolwide events was negatively related to student's standing in math and student's standing in reading decoding skills (both are measured in spring 1999, and regressions also controlled for their standing in the fall). Homework support also was negatively related to student's standing in reading decoding skills and reading level on running records (both are measured in spring 1999, and regressions also controlled for their standing in the fall). However, none of

these differences was attributable specifically to PLP or Non-PLP participation. These are overall relationships found between parent involvement and third-grade achievement.

### **Recommendations**

PLP aims to impact teachers and parents in schools faced with many challenges and policy changes. In the last several years, schools across the state were required to reduce their class sizes in all grades K-3. By 1997-98, 91% of second-grade cohorts in Los Angeles county had experienced at least one year of reduced size classes, as had 60% of third graders (Los Angeles County Office of Education, Vol. 6, No. 3, May 1999). This meant hiring many new and non-credentialed teachers to join current school staff. Moreover, less affluent schools were much more likely to have a high percentage of untrained teachers (Los Angeles County Office of Education, Vol. 6, No. 2, May 1999). Class size reduction also meant finding the space for new classrooms for these new teachers and classes, which particularly strained the facilities and efforts in the largest and poorest urban districts, including LAUSD and Long Beach Unified School District (LBUSD; LACOE, Vol. 6, No. 3, May 1999). In addition, state funds were cut for professional development days from providing six days to one day. This left schools and principals with a limited ability to schedule formal professional development days for all teachers targeting parent involvement. Within this context of change, LAAMP and the PLP schools still worked to provide professional development time for teachers on parental involvement, to establish lending libraries somewhere on the school campus, and not to lose their parent center space where parent education is offered to parents. Other policy changes (such as Proposition 227, which ended bilingual education) also diverted schools', teachers' and parents' attention and efforts on reforming and improving children's learning environments. Given these pressures and strains on schools and parents from other directions, PLP attempted to change the behavior of teachers and parents.

Given the goals of the School Families and their progress in implementing PLP, there are several recommendations for how LAAMP and the School Families could strengthen the impact of their efforts:

LAAMP and PLP are reaching some of the teachers and parents in some of their schools, but again they need to reaffirm to their School Families the need for significant, coordinated learning opportunities for teachers and parents to increase

meaningful parent involvement in schools to support students' learning. Professional development and parent education need to reach *all* teachers and *all* parents if PLP and LAAMP are going to continue to influence and improve the quantity and quality of the communication between parents and teachers. Increased parental involvement appears to start with increased parent-teacher communication and parent-teacher interaction.

Moreover, half of the teachers in PLP schools who are motivated to involve parents in their classrooms felt that their schools were not preparing them on *how* to involve parents. This needs to be addressed in a concerted and consistent manner in the schools. Engaging teachers in the process of developing strategies for involving parents could provide the necessary buy-in and sufficient detail by grade level to prove successful.

PLP teachers are starting to use the voicemail system in their schools to communicate with their students' parents. But the voicemail is primarily being used by parents as a device for leaving messages for teachers. This is a very limited use of the capabilities of the voicemail system, particularly considering its expense and installation. Teachers and staff in PLP schools may need additional training on the broad uses of voicemail.

With a restricted number of professional development days and limited resources, it is a tough choice for principals and districts to provide the necessary preparation for teachers regarding parent involvement. LAAMP and PLP need to reiterate this need, particularly to principals and district leaders. Furthermore, specific strategies involving parents in their child's academics, engaging parents to visit or help in the classroom, and effectively communicating with parents need to be discussed and supported through informal processes at the school, especially if formal professional development time is limited. Equipping teachers with better strategies on how to encourage parents to visit the classroom and take an active role in understanding what their child is to be learning during the school year is a first big step. This is not to say that such professional development needs to be separate from professional development on curriculum, instruction, and other important school reform topics, but rather that it could be integrated as an important element within these other opportunities. Integrating parent involvement as a serious topic into professional development on curriculum and instructional issues could be another way to provide these types of strategies to teachers and reinforce the importance of such actions. The point is that teachers are not going to change their

practices unless there is support for their learning and changes in expectations in these areas.

Some parents in the PLP schools are attending workshops and finding them valuable. However more parents still need to be reached. Parent education in PLP schools needs to be more than business-as-usual. Offering parent education is not sufficient to ensure effective communication with parents or parent participation in these opportunities. Contact with parents needs to be broadened from a small group of parents to *all* parents. Contact with parents also needs to be deepened by the schools and by the teachers. Schoolwide or School Family-wide strategies need to be developed to combat some of the barriers to parent participation at the schools and in the classrooms, and to parent attendance at workshops. PLP and its schools also should design strategies on how to more effectively recruit parents.

School Families should recognize the large role teachers and other school staff can play in contacting parents and encouraging their participation on campus and in the classroom, as well as in strengthening parents' relationships to schools. Professional development for teachers and direct encouragement from school administration and staff will be necessary to increase parent presence at the schools and in the classroom. School staff and teachers need to take an active role and feel it is part of their responsibility to encourage parents to attend parent workshops and visit their child's classroom if parental participation is going to increase at the schools.

Parent conferences are heavily attended across the School Families, and many parents are on campus for other schoolwide events, particularly as students move from second grade to third grade. This parent presence at the schools would be a good place, for teachers particularly, but also for other school staff, to engage parents in discussions about the benefits of parent education workshops and reading practices at home, and to communicate with them more frequently about the progress of their child. This dialogue between a parent and a teacher is a key to eventually building a supportive learning environment and increasing student achievement.

In summary, PLP has made progress at various levels. Schools have raised their level of consciousness about the importance of parental involvement and have set firmer goals. More teachers are engaging in professional development targeted toward parent involvement. Parent education continues to be offered at the schools,

and parent satisfaction with the workshops has increased. Parents are contacting and visiting their children's classrooms more often. More parents are supporting homework and reading regularly with their children at home. To take advantage of these changes and to improve student achievement, PLP schools need to translate these small changes into a more substantial increase in parental participation at the school and in the classroom. They also need to work to change the current one-way pattern of parent-teacher communication, with teachers passing on information, to a meaningful two-way communication about academics. Only these more dramatic changes will provide the type of supportive learning environment necessary to improve student performance and behavior. These changes will require a more concerted and intense effort to reach *all* teachers and *all* parents in LAAMP, PLP and the School Families.

**PARENTS AND TEACHERS WORKING TOGETHER  
TO IMPROVE THIRD-GRADE ACHIEVEMENT:  
PARENTS AS LEARNING PARTNERS (PLP) FINDINGS**

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**1. INTRODUCTION**

**Background and Context**

Walter H. Annenberg announced his plan to give \$500 million to our nation's public schools in December 1993<sup>1</sup>; this was the largest gift ever of its kind. With these funds, the Annenberg Foundation hoped to enhance the capacities of public education systems throughout the country and ultimately enable students to leave public schools with high intellectual, moral and social abilities. Seven metropolitan areas accepted the Annenberg Challenge and received grants to improve urban education.<sup>2</sup> These include Chicago, Los Angeles, Philadelphia, New York City, the San Francisco Bay area, Boston, and Detroit.

In general, the Annenberg Foundation challenged these urban communities to develop high-quality schools by:

- Setting high academic expectations for all students;
- Assessing student learning and using this information to improve learning;
- Creating School Families, a collection of schools in a feeder pattern from elementary, to middle, to high school, where students are well known;
- Developing resources and authority at the local level so that school staff are flexible to develop quality programs appropriate to their student populations;
- Mobilizing community support for School Families.

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<sup>1</sup> *Annenberg Challenge News*, Summer 1996. Providence, RI: Brown University.

<sup>2</sup> The Annenberg Foundation also supports a similar effort focused on rural public education.

Spearheaded by leadership in professional, academic, and business communities, a coalition of educators and civil leaders in Los Angeles County established the Los Angeles Annenberg Metropolitan Project (LAAMP) to take up the Annenberg Challenge in Los Angeles County. The primary goal was to “fundamentally improve the education of children in this county.”<sup>3</sup> In January 1995, LAAMP was awarded a \$53 million grant for a five-year period, extending through the year 2000. Combined with matching resources, which must come from private, non-public sources, the hope was to invest at least \$106 million in the 14 participating School Families across 10 school districts. This involved 124 schools, 3,800 teachers, and over 106,000 students from kindergarten through 12th grade.

The Los Angeles Annenberg Metropolitan Project (LAAMP), in an effort to have schools work more collaboratively with parents surrounding academic issues, granted funds matched by the Weingart Foundation to 29 schools in three School Families in Los Angeles County. The grant focused on three primary areas in which parents and teachers can work together to support children’s academic progress: communication, parenting, and learning at home. This effort is entitled Parents as Learning Partners (PLP). The PLP initiative recognized that when parents and teachers share common responsibility and expectations, assist each other in providing learning experiences, and establish two-way communication, students will develop better work habits toward homework, behavior, and achievement.

The evaluation of PLP is important as it provides information to those responsible for parental involvement efforts at the policy and the practitioner levels about the effectiveness of an integrated parent involvement approach, factors that make a difference in program success, and recommendations for program design and implementation. Moreover, to date, the promise of professional development on parental involvement strategies and of parent education remains largely untested and unverified. Although anecdotal evidence abounds, there is little empirical information about the effects of teacher participation in professional development on teachers’ strategies and ability to involve parents or the effect of parent education on parents’ involvement in schools and in classrooms.

The evaluation approach involves a comparison group design that collects longitudinal data on parent-child pairs and their teachers at schools participating in PLP activities and at similar schools not participating in PLP activities. Overall, the

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<sup>3</sup> LAAMP proposal submitted to the Annenberg Foundation, November 1994.

evaluation assesses the impacts of participation in PLP activities on parents and teachers and the changes in students' third-grade performance. The findings carry broader significance by expanding the information available about parental involvement efforts generally and addressing specific strategies for schools who wish to target both teachers and parents.

### **Organization of the Report**

This report is divided into seven sections. The first section has described the goals and context of the evaluation. Section 2 provides the conceptual framework and methodology for the research presented in the rest of the report.

Section 3 addresses the question "What are the effects of PLP on third-grade teachers' practices?" This section first presents information on professional development activities and voicemail for the third-grade teachers from findings based on school site interviews and the PLP Teacher Survey. Then it investigates the nature of third-grade parent-teacher interactions from the views of both the teacher and the parent. The data on parent-teacher interactions were collected both from the PLP Teacher Survey and from the PLP Parent Phone survey that was administered two years in a row to a random sample of 673 second-grade parents in the 12 schools in the spring of 1998 when their children were in second grade, and again to 650 of the same parents in the spring of 1999 when their children were in third grade.

Section 4 addresses the question "What is the impact of PLP activities on parents?" Findings are based on the PLP Parent Phone Survey.

Section 5 addresses the question "What is the impact of PLP on third-grade students' performance?" Findings are based on the PLP Teacher Survey administered in the fall and spring according to a pre/post-design to all third-grade teachers in the 6 elementary schools participating in PLP and the 6 comparison elementary schools.

The concluding section summarizes the major findings and provides recommendations.

Appendix A provides student demographics and school characteristics for the 12 schools in the study. Appendix B contains a complete list of sources used to construct the PLP Parent Phone Survey for spring 1998 and 1999.

## **2. CONCEPTUAL FRAMEWORK AND APPROACH TO EVALUATION**

As a society, we strongly believe that it is beneficial for parents to be involved in their children's education. Increasing amounts of research also support the value of parent involvement and its impact on student achievement. As Epstein and Dauber (1993) stated, children are more successful students at all grade levels if their parents participate at school and encourage education and learning at home. Clark (1993) also found positive associations between parent involvement, especially parental attitudes toward homework, and students' mathematics and literacy skills. In addition, Ames, deStefano, Watkins, and Sheldon (1995) stated that children's motivation, attitudes toward parent involvement, and perceptions of their parents' level of involvement are more positive when their parents receive frequent communications from the teacher. Therefore, a key element through which parental involvement impacts student achievement is two-way communication between parents and teachers whereby they share common expectations and responsibility for the child's learning. As a base, the parent must support the learning of the child in the home, and the teacher must provide high expectations and support for learning at school (Ames et al., 1995; Chavkin, 1993; Epstein, 1995).

Through the Parents as Learning Partners (PLP) grant, the Los Angeles Annenberg Metropolitan Project (LAAMP) is encouraging schools to work more collaboratively with parents surrounding academic issues. The aim is to enable parents to take an active role in their children's learning. The PLP efforts focus on three primary areas in which parents and teachers can work together to support children's academic progress: communication, parenting, and learning at home. Below we describe the theory on which PLP is based, the general goals of the program, and the primary activities that define PLP's approach. The section closes with a summary of the questions and design that drive our evaluation inquiry.

### **Parents as Learning Partners: Theory and Goals**

The PLP initiative recognizes that when parents and teachers share common responsibility and expectations, assist each other in providing learning experiences, and establish two-way communication, students will develop better work habits toward attendance, homework, behavior, and achievement.

LAAMP and PLP's theory of how parent involvement impacts student achievement has been adapted from Joyce Epstein's research on parent

involvement.<sup>4</sup> Epstein (1995) stated that there are *overlapping spheres of influence* in a child's education: the family and the school.<sup>5</sup> Within the family, the parents and whole family interact with the child. Within the school, the teachers and the whole school influence the child. The child's learning is enhanced when these two spheres overlap, and when the teachers and parents within their family and school hold a shared responsibility for helping the child learn. Parents and teachers establish and share common expectations for the child. They also establish a two-way means of communicating and assist each other in providing learning experiences for the child. The partnership formed between parents and teachers is based on shared knowledge, actions, and expectations. This type of partnership between parents and teachers then results in a supportive and consistent learning environment for the child. Therefore, PLP's goals are to impact students through the change in behavior, perception, and attitude of parents and teachers in the PLP program.

Consequently, the first evidence of success for the program is in parents' knowledge, attitudes, and behaviors. Parents should acquire knowledge in parenting skills, school functioning, and communication avenues, as well as ways to encourage or support children's learning. Changes would also include parents' attitudes and expectations, particularly expectations for students' academic accomplishments and careers. Parent involvement programs are also intended to affect parents' actions, including more communication with teachers, support for learning in the home, and the establishment of rules and expectations for children.

The second evidence of success for the program, which is equally important, is the direct effect on teachers and the school in general. As teachers gain heightened awareness of parent involvement through professional development and as parents become more engaged with the school, we expect to see teachers becoming more familiar with parents, working more closely with parents, and developing a better understanding of student needs. For example, teachers may adjust their homework and communication strategies to better inform parents and their students. As students develop better work habits, the expectation is that teachers will develop more positive attitudes toward students and increase their expectations of them.

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<sup>4</sup> Epstein outlined six types of parent involvement: communicating, parenting, volunteering, decision making, leading, and learning at home; however, Weingart through PLP emphasizes only the three that focus more directly on parents and teachers supporting a child's academic progress: communicating, parenting, and learning at home.

<sup>5</sup> Epstein, J. L. (1995). School/family/community partnerships: Caring for the children we share. *Phi Delta Kappan*, 76, 701-712.

Changes in parents and teachers are a means to an end, and that end is improved educational behaviors among students. Thus, the PLP parent involvement program's impact should be judged also in terms of student behaviors. The initial effects should be seen in students' daily activities, such as homework completion. Parent encouragement and standards for behavior also should increase desirable student behavior at home and in school. Over the long term, the cumulative effect of better behavior and more attention to studies should be improved achievement and performance.

### **PLP's Programmatic Approach for Targeting Both Parents and Teachers**

The PLP program has specific elements targeted toward increasing overlap and consistency in the spheres of influence in children's education. PLP's theory of action is to target both parents and teachers to increase the interaction between them concerning academics and learning. PLP intends to improve parenting, increase communication, and support learning at home through (a) *professional development* for teachers on how to incorporate parents into the classroom, how to contact parents, home-learning activities, and volunteer strategies; (b) *parent education* for parents on how to communicate with teachers, assess student work, and help with homework and reading, as well as computer training; and (c) *school services* such as voicemail for teachers to increase communication between parents and teachers, and lending libraries for parents to increase the amount of reading in the home.

During 1997-98 and 1998-99, the three PLP School Families and their schools implemented these three types of activities in slightly different ways: professional development on parental involvement, parent education, and school services.

The elementary schools in School Family A aimed to engage teachers in informal staff meetings geared toward parent involvement topics and to provide parent education, in addition to offering other school activities related to increasing and improving parent involvement and communication. All of the elementary schools in School Family A offered parent education sessions on assessing student work, English as a Second Language, home/school collaboration, parenting skills, parent leadership, and parent/child activities. A few of the elementary schools also provided continuing education or workshops on home education techniques.

Prior to PLP, the two PLP elementary school evaluation sites in School Family A differed in their approaches to parent involvement,<sup>6</sup> but with the advent of PLP both schools shared the common goals of increasing parent involvement in their children's academics and of enhancing their current parent involvement efforts by installing a parent voicemail system and setting up a lending library. In addition to these common School Family goals, each of the schools had its own specific goals. One of the schools wanted to enhance its child care, while the other wanted to implement literacy workshops for parents.

School Family B's goals focused on informally providing teachers with strategies for improving parent involvement, and providing parent education, as well as other school activities related to increasing and improving parent involvement. School Family B aimed specifically to establish lending libraries, reading programs, parent centers, and voicemail systems at all the schools in the School Family to facilitate communication between parents and teachers.

Prior to PLP, the two PLP elementary school evaluation sites in School Family B engaged teachers informally in various parent involvement topics and provided basic-level parent education workshops on parenting and volunteering, including the services of the Parent Institute for Quality Education (PIQE).<sup>7</sup> With PLP funds, one of the PLP evaluation schools in School Family B aimed to support additional schoolwide literacy events for its parents. The other PLP evaluation school focused on increasing parent involvement, not through large, schoolwide events, but by starting various parent groups, such as parent support groups, parent leadership

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<sup>6</sup> One of the PLP schools had focused heavily on parents' understanding of standards but also offered a variety of additional parent activities through their parent center, with no attention to informal or formal professional development for teachers. The other PLP evaluation site focused their efforts on leadership and literacy issues prior to PLP. Besides offering parent workshops, this school also had several informal meetings about parent involvement with their teachers, which were mainly held in the context of staff meetings.

<sup>7</sup> The Parent Institute for Quality Education (PIQE) program is taught in the mornings and evenings at the local school site. All parents are invited to attend, but the audience is largely female. By design the program concentrates on schools with large Hispanic enrollments. The course consists of nine sessions, which include an introductory session during which parents talk about what they would like to learn from the course, and a final session, during which there is a graduation ceremony and celebration. The curriculum includes sessions on motivation and self-esteem, how the school system functions, home/school collaboration, communication and discipline, drugs, gangs, school and the community, and college and careers. Underlying the curriculum is the belief that parents are the major force in their children's lives. If parents support education and the schools, children will perform better and be more likely to succeed. The program's belief is also that parents, and particularly recent immigrants, must be helped to understand that despite well-maintained buildings and a well-educated teaching staff, there is an important role for parents—even uneducated ones—in their children's education. If parents come to believe this and learn the skills that they need to negotiate the system, they can become a powerful force for educational excellence.

groups, and reading groups within the reading program. Both schools' main goal for PLP, however, was to increase parent support for their literacy goals.

Prior to PLP, all of the elementary schools in School Family C reported having some professional development in home/school collaboration, strategies for talking to parents about grades and homework, and for how to contact parents, and the importance of parent involvement. The schools also reported that these discussions concerning parent involvement were informal and generally held in staff meetings or shared through bulletins. Specifically, the two PLP evaluation sites in School Family C provided informal meetings on parent involvement for teachers, a variety of parent education classes, and parent volunteer programs, such as (VIPs) and reading programs. In addition to these common activities, one of the schools indicated they usually offered a more formalized day of professional development once a year related to parent involvement, and the other school indicated that they provided parents with several types of newsletters and multi-night back-to-school nights.

With the advent of PLP, however, the approach of School Family C changed. In terms of professional development and parent education workshops, their approach concerning parent involvement moved from a more ad hoc collection of either professional development sessions or parent education workshops chosen by the schools to a systematic training series offered to parents through parent education classes and to teachers through professional development workshop days. As a School Family, School Family C aimed to provide systematic and consistent training to both parents and teachers, to establish lending libraries and voicemail, and to promote schools' individual efforts<sup>8</sup> toward increasing the literacy level of their students. Their overall goal was to establish a new level of trust and communication between parents and teachers. Specifically, their goal was to initiate professional development, parent education, and other school activities related to increasing and improving parent involvement. Through the PLP initiative, the district encouraged all participating PLP schools to be involved in the *same* teacher professional development and parent education workshops during the first year of PLP.<sup>9</sup>

In summary, School Family C's goals and approach reflect the overall vision of PLP to systematically target both teachers and parents. But the approaches of School

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<sup>8</sup> School Family C also focused their LAAMP and PLP efforts in the elementary schools on literacy.

<sup>9</sup> Through the district Parent Center, all the PLP schools—elementary, middle, and high—were scheduled to participate in workshops entitled “Parents on Your Side” and “Teachers on Your Side.”

Families A and B reflect only the general goals of the PLP initiatives and are weak in terms of their commitment toward providing assistance and strategies to teachers for increasing parental involvement in their classrooms.

During the first year of the evaluation the extent to which the School Families implemented their goals was assessed. These first-year findings are drawn primarily from baseline interviews with administrators and teachers from November/December 1997 on the goals and implementation of PLP. A few informal follow-up interviews were conducted in November/December 1998. Interview data were summarized for Non-PLP and PLP comparison groups at the school and School Family levels, by respondent group and by question. The extent to which the School Families implemented their PLP goals of providing professional development and voicemail for teachers and of providing parent education and lending libraries for parents is summarized below.

### **Professional Development Activities and Voicemail for Teachers**

#### **Implementation of Goals**

In the first year of the PLP program, the intensity of PLP professional development activities differed considerably by School Family, although the installation and training for the voicemail system for teachers was similar across the three School Families. The voicemail system installation stretched out over the course of the first year due to scheduling and hardware issues. Training for teachers and parents was limited.

In School Family A, across PLP and Non-PLP evaluation sites, the elementary schools reported no *formal* professional development sessions on parent involvement. All but one of the elementary schools in the School Family reported informal discussions on parent involvement issues, that is, how to contact parents, the importance of parent involvement, and strategies for talking to parents about grades and homework. In the second year, the voicemail system and lending libraries were in place, and the evaluation sites in School Family A devoted more energy to scheduling informal times and meetings for parent-involvement-related professional development activities for teachers in their schools.

The majority of the elementary schools in School Family B, including the two PLP evaluation sites, did not report any formal professional development sessions dedicated to parent involvement topics, but indicated that they had informal

discussions on strategies for talking to parents about grades and homework, how to contact parents, and the importance of parent involvement. Roughly half the teachers in the School Family B reported that these informal discussions occurred at staff meetings or during teacher preparation time. Despite the limited or informal nature of professional development surrounding parent involvement issues, the teachers and administrators in School Family B suggested, however, that the PLP initiative was acting as an impetus for scheduling informal professional development time, such as time during staff meetings, on how to involve parents on the campus and in the schools and what are the best ways to reach parents. Even though the time spent on parent involvement issues was not during a formal professional development day, the efforts were making parent involvement a “real” school goal. As one administrator noted, “If it wasn’t for PLP, [professional development on parent involvement] would not be able to take place at our school. This grant gives our school a concrete goal to reach in terms of parent involvement.” Similarly, the Non-PLP schools indicated the same low level of informal professional development for teachers as found in the PLP schools. One of the school coordinators at a Non-PLP school indicated that professional development on parent involvement for teachers is “for teachers who want extra help for themselves. They really talk about [parent involvement] among themselves.”

During 1997-98, as part of a districtwide initiative, *all* of the elementary schools in School Family C participated in a series of workshops for school staff and teachers that offered strategies for understanding parents and communicating more effectively with them. Specifically, the series consisted of four professional development sessions that took place over the academic year. Nearly all teachers participated. This was a large first step in improving parent-teacher interactions for School Family C. While the district mandate effort to reach all elementary schools was not continued in 1998-99, the majority of the PLP schools in the School Family continued to provide informal professional development regarding parent involvement. In contrast, based on information gathered from Non-PLP schools in School Family C, professional development related to parent involvement was informal and non-systematic. Moreover, not all teachers were required to participate.

Overall, there appears to be some difference in the type of professional development for teachers in the PLP sites as compared to the Non-PLP sites in all three School Families. Parent involvement appears to be a more important goal and

one incorporated into the (primarily) informal discussions among teachers and staff at the PLP schools in School Families A and B. In School Family C, the differences between the Non-PLP and PLP schools are in terms of both the levels and type of professional development offered to their teachers regarding parental involvement because of the district support and mandate for formal professional development targeted at parent involvement.

## **Parent Education Workshops and Lending Libraries for Parents**

### **Implementation of Goals**

In the first two years of the PLP program, the implementation and focus of the PLP parent education workshop activities differed by School Family, whereas the setting up of lending libraries for parents was fairly similar across the three School Families.

School Family A continued to offer a set of parent education classes similar to those that they offered prior to PLP, as did the Non-PLP sites. All of the elementary schools in School Family A, including the two PLP evaluation sites, therefore continued to offer parent education sessions on assessing student work, ESL, home/school collaboration, parenting skills, parent leadership, and parent/child activities. A few of the elementary schools also provided continuing education or workshops on home education techniques. The Non-PLP evaluation sites in School Family A had a history of activities intended to support parent involvement with a general focus on a variety of parent education classes, literacy, and volunteering, which they continued during 1997/98 and 1998/99. One of the Non-PLP evaluation sites also had a lending library, while the other Non-PLP site did not. The PLP evaluation sites for School Family A spent their first year working on the initial phases of installing the lending libraries (and the voicemail system) alongside their existing parent education workshops with new strategies for outreach to parents in their schools. By the second year, with the lending libraries in place, they focused on outreach to all parents and continued their parent education workshops.

School Family B continued to offer the set of parent education classes that they offered prior to PLP, as did the Non-PLP sites. Prior to PLP, the two PLP elementary schools in School Family B provided basic-level parent education workshops on parenting and volunteering, including the services of the Parent Institute for Quality Education (PIQE; see description in Footnote 7). With PLP funds, the PLP sites

continued these education workshops but centered their parent involvement efforts more on literacy and reading with very specific activities. One of the PLP evaluation sites in School Family B supported additional events for their parents, such as a reading night and a math/science night. The other PLP evaluation site focused their PLP efforts on increasing parent involvement, not through large, schoolwide events, but by starting various parent groups, such as parent support groups, parent leadership groups, and reading groups within their reading program. Both schools offered activities that teach parents how to read to their children or that teach families how to write books from oral history. In addition, the PLP schools expanded their previous family reading efforts and expanded their schools' lending libraries. School Family B evaluation sites focused primarily on activities surrounding reading and spent time on organizing and expanding the lending libraries. Both of the Non-PLP evaluation sites for School Family B had a history of activities intended to support parent involvement. The Non-PLP sites had previously established lending libraries and continued to focus heavily on parent volunteering at the school and in the classroom. They also provided reading programs at the schools. One of the Non-PLP schools additionally provided the services of the Parent Institute for Quality Education (PIQE).

Prior to PLP all of the elementary schools in School Family C, including the two PLP evaluation sites, offered to their parents a wide variety of education workshops on parenting skills, parent leadership, and parent-child activities. Parents had access to the District Parent Center in their area, which was where the parent training workshops were offered. With PLP, the District Parent Center provided a set series of workshops in *all* the PLP schools in School Family C. The Non-PLP evaluation sites were offered the same set of workshops through the District Parent Center. However, each of the Non-PLP schools chose a subset of the workshops, as well as a different combination of topics for their parents.<sup>10</sup> Moreover, the Non-PLP evaluation sites had a history of activities intended to support parent involvement. Both Non-PLP schools supported parent education classes. One of the Non-PLP evaluation schools also reported having parent volunteer groups and family reading programs. The difference therefore between the PLP and Non-PLP schools in School

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<sup>10</sup> During 1997-98, one Non-PLP school offered a variety of parent education classes including how to raise a drug-free child, positive discipline, parents as learning partners, make and take storybooks, literacy as a family affair, building self-esteem, and family reading. The other Non-PLP school reported a variety of parent education classes including continuing education, ESL, home education techniques, home/school collaboration, parenting skills, and parent/child activities.

Family C in terms of in their parent education efforts is in the number and topics of workshops they offered their parents. The PLP schools, including the two evaluation sites, received a similar series of workshops mandated by the District through PLP, while the Non-PLP schools made their own choices of workshops. A lending library was established through the District Parent Center for use by both Non-PLP and PLP schools.

In general, the Non-PLP and PLP evaluation sites in School Families A and B differed only in that the PLP sites had a more focused approach to the workshops that they were offering for parent involvement. The PLP sites in these two School Families attempted to center the workshops on parent involvement in academics and literacy. School Family C, supported by the school district and held at the District Parent Center, set up a series of parent education workshops that were offered at the PLP schools, not leaving the choice of the workshops up to the schools and school staff. All of the School Families also tried a myriad of outreach efforts to engage parents and bring them to workshops and onto the school campuses. The Non-PLP schools continued to offer an eclectic array of parent education classes and workshops, maintained their general focus on literacy, and heavily supported parent volunteering at the school and in the classroom.

Therefore the PLP and Non-PLP schools did not differ in their overall parent goals, but did differ in their focus on and implementation of parent education. The PLP schools focused on a consistent and systematic set of parent education workshops for their parents as well as providing them access to lending libraries.

Moreover, in the first year, parent participation in the parent education workshops as reported by the staff varied across the three School Families. In School Family A, parent participation in parent education workshop activities varied among and within schools: Participation ranged from about 20 parents to 40 parents. In School Family B, most of the elementary schools provided parent education workshops on parenting skills, ESL, home education techniques, parent leadership, and parent/child activities. Parent participation in these activities as reported by staff also varied among schools, ranging from 15 to 200 parents. On average, participation ranged from 30 to 60 parents. In School Family C, the District Parent Center provided a set series of workshops in all the PLP schools in the School Family. The participation levels at the various parent education workshops again varied among and within school sites. One school reported an average of 25 parents at a particular activity, whereas another school reported an average of 100 at the

same activity. Across all of the School Families, many of the schools reported that they had no effective system for tracking and reporting the number of parents attending these events.

### **Evaluation Approach**

The evaluation is designed to study the operation and impact of PLP. Adopting a comparison group approach, the evaluation centers on the change in parents and teachers that could then lead to change in the performance, attitude, and behaviors of children.

The evaluation approach integrates a longitudinal and a quasi-experimental design with a range of data sources, including a teacher survey, a parent phone survey, interviews, informal site visits, and collection of archival data. The effects of PLP are being assessed primarily through a comparison group methodology of tracking parent-child pairs over time. In the sections that follow, we provide a description of the methodology that delineates the evaluation design, explain the selection of the 12 elementary school sites, and outline the data collection procedures for 1997-98 and 1998-99.

### **Evaluation Questions**

The evaluation centers around three main evaluation questions:

1. What are the effects of PLP on third-grade teachers' practices?
2. What is the impact of PLP activities on parents?
3. What is the effect of PLP on students' third-grade performance?

Question 1 focuses on the impact of PLP on third-grade teachers' practices related to contacting parents and involving parents in their classrooms. Question 2 investigates the impact of PLP on parents' access and use of parent education and other school services, parents' involvement at the school and in the classroom, parents' barriers to participating, and parents' communication with their child's teacher. Question 3 investigates the effect of PLP on third-grade students' behavior and achievement.

The evaluation of PLP is intended to answer these questions and thereby assess whether the program is making progress toward its goals. However, the evaluation does not indicate whether PLP is more effective than other approaches to improving parental involvement in schools, nor does it indicate whether targeting both parents

and teachers within the context of School Families is more effective than other programmatic approaches.

The unit of analysis for the evaluation is the individual, whether parent, teacher, or child. Analyses were conducted comparing Non-PLP and PLP groups of either parents, teachers or students.

### **Evaluation Design and Comparison Group Methodology**

This evaluation, along with much social science research and evaluation work, is limited in the extent to which it can attribute connections between observed processes and conditions to observed effects since there are many uncontrolled variables likely to affect the outcomes in the targeted sites. Our evaluation design, however, used quasi-experimental methods in addition to the longitudinal tracking of parent-child pairs to provide a rigorous solution to this problem.

This study utilized a quasi-experimental design to collect longitudinal data on parents of a cohort of elementary students and their subsequent teachers in schools participating in PLP and in schools that were similar but were not participating in PLP. This type of data allows us to describe the differences in the above-mentioned areas across parents of students in schools with PLP and in schools without PLP, and to test for the statistical significance between the two populations of parents.

The first year of the evaluation focused on tracking the implementation of the parent involvement programs in all of the sites, including the 12 evaluation sites, as well as documenting the initial changes in parents and teachers in the 12 evaluation sites. This was primarily accomplished with site visits and interviews in all of the schools, as well as a parent phone survey<sup>11</sup> in both the program and comparison schools. The site visits and interviews were conducted formally in November/December 1997 with the LAAMP School Family coordinator, PLP coordinator, Parent Center staff (if applicable), principal, and a select group of four teachers, primarily third-grade teachers. Informal follow-up interviews were also conducted in November/December of 1998. Furthermore, a parent phone survey

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<sup>11</sup> The parent phone survey was designed to target a random sample of elementary school parents. The sample of 1,200 parents was drawn from 12 schools—6 PLP program schools and 6 Non-PLP comparison schools. We planned to interview 60 parents of second graders and 40 parents of third through fifth graders at each school. The phone survey was conducted by trained parents from within the same School Family but not for the same school as the one their child attended. We planned on needing 90 parent interviewers and having 7-8 parents per school to interview 13-15 parents. With an 80% response rate, the 7-8 parent interviewers at each school would interview 10-11 parents and the sample size would be approximately 960 parents.

was conducted with a random sample of 673 parents with a child in second grade in both the program and comparison schools; 605 of these parents were surveyed again when their child reached third grade. Parents had a designated target child, so that if they had more than one child, they responded only for the target child. The parents were interviewed by phone in the spring of 1998 and spring of 1999. The parent phone survey tracks changes in parents' awareness and knowledge of activities at the school and in their child's classroom; their behaviors and attitudes toward the teachers of their children and the school; the frequency and content of the communication with their child's teachers; and the interactions the parents have with their child at home with regard to such activities as reading, homework, and watching TV. The findings from these two data collection efforts are provided in this report.

The focus of the last year of the evaluation, 1998-99, is both on the further implementation of the program and on the impact of the program on students, teachers, and parents. This is achieved by tracking the cohort of parent and child pairs over time as the children move from second into third grade in both PLP and Non-PLP comparison schools as well as by surveying these children's third-grade teachers. The cohort of parent-child pairs being tracked reflects a random sample of second graders' parents who were interviewed in 1997-98 and who in 1998-99 had children in the third grade. The parent-child sample was freshened in 1999. Teacher surveys were also conducted twice a year with the teachers of the target children. For example, in 1998-99 we surveyed all third-grade teachers who were teaching children from the sample. The teacher survey focused on gaining information on the children's grades, behavior in class, motivation levels, etc. Teachers provided information on their classroom practices, parent involvement in the classroom, and parent-teacher interactions.

This design of tracking parent-child pairs, as well as surveying the child's teacher in both program and comparison schools has several notable characteristics. First, it allows for information to be collected about the child from both the parent and the teacher. This helps validate and cross-check the findings. This evaluation strategy also allows for the comparison over time of children who have parents in a parent involvement program group and those who have parents in a comparison group within the same school district. This type of comparison is able to identify both the trajectory of a child's behavior and progress and the trajectory of the parent's involvement in the school and in the classroom in schools *with and without*

the PLP parental involvement program intervention. This allows for an evaluation of the impact of the parent involvement program on the child, the parents, and the teachers.

Furthermore, this design makes a few assumptions. The design assumes that the concern is to evaluate how *all* parents, from the most to the least involved at the start of the program, changed as a result of the program. For example, this design has a broader focus than perhaps tracking longitudinally *only* a sample of parents who are actively participating in the program the first year. The tracking of the actively participating parents in the first year would evaluate whether and how their participation in program activities changes over time and how these parents see the program influencing their home activities, attitudes toward school, expectations, etc. This design, on the other hand, tracks all parents with varying degrees of program participation.

### **Selection of the Twelve Schools**

There were two program schools chosen from each of the PLP School Families and a matched comparison school for each program school chosen from within the same school district, making 12 schools total. The selection of these 12 schools required various steps. First, the PLP schools were selected from within their School Families to represent the range of parent involvement efforts in the School Family. Next, matched comparison schools were chosen for each of the PLP schools.

To inform the selection of the PLP program schools, several parent involvement questions from the LAAMP Teacher Survey (spring 1997) were analyzed for those PLP schools that took the survey.<sup>12</sup> In addition, the PLP interview protocols for the principal, PLP site coordinator and teachers were reviewed for details of the parent involvement efforts at the school. This informed the initial selection of program schools. Once the initial program schools were selected, interviews with the School Family coordinators were conducted. In these interviews, School Family coordinators ranked the schools according to their levels of parent involvement, described various details of the parent involvement efforts at each of the schools, and discussed the appropriateness and representativeness of the initially selected schools for the given School Family. In the end, two PLP elementary schools were selected from each School Family to be PLP program

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<sup>12</sup> Several PLP elementary schools did not participate in the LAAMP Teacher Survey (spring 1997).

schools based on their ability to represent the range of parent involvement efforts within their School Family.

To select a matched comparison school for each PLP program school, we first needed to determine the pool of potential schools. In Los Angeles Unified School District (LAUSD), the potential matched comparison schools were those schools that were involved in LAAMP school reform efforts, but were not part of PLP; however, in Long Beach the pool of schools involved in LAAMP school reform efforts did not contain enough schools with similar characteristics to make a sufficient match.<sup>13</sup> Therefore, the pool of potential match schools for LAUSD were all of the Non-PLP LAAMP School Family elementary schools with similar teacher and student populations, as well as parent involvement efforts. The pool of potential match schools for LBUSD were all Non-PLP elementary schools in LBUSD with similar teacher and student populations, as well as parent involvement efforts.

Several sources of information were compared to find a suitable match for each selected PLP school: parent involvement items, self-reported teacher demographics and teacher-reported student- and classroom-level information from the LAAMP Teacher Survey, school-level student information from the California Basic Education Data System (CBEDS), and district-provided test score information.

Teacher and student demographics were compared for each PLP program school against each of the potential match schools within their given district. These comparisons determined which, if any, schools had teacher characteristics or student/classroom characteristics that were significantly different from those at the PLP program school. For each PLP school, the three or four schools that had very few significant differences (i.e., schools that were the most similar across the examined characteristics) were deemed candidate schools. For these candidate schools, CBEDS information and district-provided information were also compared. Note that one of the PLP families in Los Angeles did not participate in the LAAMP Teacher Survey and, as a result, had only a limited amount of information available from CBEDS to use in selecting the matched comparison schools.

The analysis of these data informed the initial selection of three or four potential-match comparison schools for each PLP program school. Once the initial set of matched comparison schools was selected, informal interviews with the

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<sup>13</sup> The other LAAMP schools in LBUSD were economically very different from the LBUSD PLP schools and were therefore deemed not suitable for matches.

School Family coordinators were conducted. In these interviews, School Family coordinators ranked the three or four potential schools according to their levels of parent involvement efforts, described various details of the parent involvement efforts at each of the schools, and discussed the appropriateness and willingness of the initially selected comparison schools to participate in the PLP evaluation. Using all this information the candidates were ranked. Final selection was based on willingness to participate.

The next step was to contact the schools to confirm their participation. We contacted the principals of the schools and explained to them the requirements and benefits of participating in the evaluation. All 12 schools were contacted in February 1998, and schedules were discussed for data collection procedures. Due to the extraordinary busy schedule at one of the comparison schools, we postponed the administration of the survey from April until May 1998 to accommodate their needs.

### **Data Sources and Collection Procedures**

**Interviews and site visits.** The site visits and interviews were conducted once in November/December 1997 with the LAAMP School Family coordinator, PLP coordinator, Parent Center staff (if applicable), principal, and a selected group of 4 teachers, preferably third-grade teachers. There were approximately 60 elementary teachers in Grades 2 through 4 interviewed at the 12 schools. The interviews focused on the existence of parent involvement activities prior to PLP and the implementation of PLP goals. For example, administrators were asked what their schools and School Families intended to accomplish with PLP; what programmatic supports were considered desirable; and to what extent their plans were actually being implemented in the first year. Moreover, teachers were asked to explain how they contacted parents and what professional development they received for parent involvement.

**Parent phone survey.** The purpose of the 1998 spring and 1999 spring PLP Parent Phone Survey was to learn about parental expectations, attitudes, and behavior regarding their child's academic achievement, as well as parent participation levels, their satisfaction with the workshops on parenting or other related topics, and their communication with the school. In spring 1998, the parent phone survey consisted of 105 items; in spring 1999, it consisted of 98 items. Scales were used for parents to either (a) rate their level of agreement with specific statements, (b) indicate the frequency with which they participate in parent/child

activities, or (c) answer a yes/no question. The 1998 spring phone survey included an open-ended question asking parents to give their suggestions about how to improve the parent involvement programs at their child's school. The items for the 1998 and 1999 surveys were developed from several sources: articles, discussions with PLP staff, and other parent surveys, such as the LAUSD Annual Stakeholder Satisfaction survey. (Refer to Appendix B for a complete list of sources used to construct the PLP Parent Phone Survey for spring 1998 and 1999.)

The parent phone survey was conducted with a random sample of 673 parents with a child in the second grade, for both the program and comparison schools. A parent had a designated target child, so that if parents had more than one child, they only responded for the target child. Sampling took place during the months of February and March for 11 schools, and in June for one school. One hundred second graders were randomly selected using the emergency cards in the schools. If one hundred second graders were not available, we targeted the maximum number of second graders enrolled in the school.

In 1998, a total of 666 parents participated in the survey out of 1,265 sampled: 392 Non-PLP parents and 274 PLP parents participated. This is an overall response rate of 52.6%. The PLP response rate was 46.5% and the Non-PLP rate was 57.9%. The primary reasons for non-response were non-working telephone numbers (31.4%) and refusals (10.2%). PLP and Non-PLP reasons for non-response were very similar. In the PLP schools, 64% of the 163 non-responses were due to wrong numbers, 25.1% due to refusals, and 10.4% due to no one being home. For Non-PLP schools, 70.3% of the 145 non-responses were due to wrong numbers, 18.4% due to refusals, and 11.0% due to no one being home. The overall response rates per school ranged from 44.6% to 78.1%. The individual school samples ranged from 24 (out of the 56 sampled) to 82 (out of 105 sampled).

In 1999, a total of 605 parents participated in the survey out of 1,052 sampled: 298 Non-PLP parents and 307 PLP parents participated. This is an overall response rate of 57.5%. The PLP response rate was 60.6% and the Non-PLP rate was 54.5%. The primary reasons for non-response were non-working telephone numbers (35.2%) and refusals (12.1%). In the PLP schools, 45.4% of the 176 non-responses were due to wrong numbers, 20.4% due to refusals, and 34.0% due to no one being home. For Non-PLP schools, 54.3% of the 236 non-responses were due to wrong numbers, 13.9% due to refusals, and 31.7% due to no one being home. The overall

response rates per school ranged from 41.5% to 60.9%. The individual school samples ranged from 22 (out of the 53 sampled) to 78 (out of 105 sampled).

**Teacher survey.** The purpose of the 1999 third-grade teacher survey was to gain information on the children's grades, behavior in class, motivation levels, etc. Teachers also provided information on their classroom practices, parent involvement in the classroom, and parent-teacher interactions. The teacher survey consisted of 49 items. Scales were used for teachers to (a) rate their level of agreement with specific statements, (b) indicate the frequency with which parents participated in certain activities, (c) answer a yes/no question about their classrooms, (d) rate the severity of a student's behavior, and (e) rate the level of a student's performance. The teacher survey included several open-ended questions asking teachers to describe their discipline practices in the classroom and their use of guided reading groups in reading instruction, and to indicate the books that they recommended to parents to read at home, as well as which books they preferred to use in their classrooms. The items for the teacher surveys in fall 1998 and spring 1999 were developed from several sources: articles, discussions with PLP staff, and other teacher surveys. In the fall, 95 teachers were surveyed, and in the spring, 94<sup>14</sup> teachers were surveyed. On average, 8 teachers were surveyed at each school in the fall and spring, although the number ranged from 4 to 13 teachers across the schools. Each teacher evaluated, on average, 10 students in his or her class in the fall and in the spring, ranging from 8 to 13 students per teacher in the fall, and from 6 to 12 students per teacher in the spring. In each school, an average of 72 students were evaluated in the fall (ranging from 38 to 99) and 70 students in the spring (ranging from 39 to 92).

**School- and student-level achievement data.** Two sources were used to obtain achievement measures for the PLP and Non-PLP schools on the Stanford achievement test, the SAT9. School-level SAT9 test score information on the percent at or above the 50th percentile (NPR) in reading, math, and language arts for all students in the third grade at the 12 evaluation sites for Long Beach and Los Angeles Unified School Districts were aggregated and calculated from data tables provided by the California Department of Education Web site. Individual test score information for 1997/98 and 1998/99 was available for only those students in the

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<sup>14</sup> None of the teachers refused to take the PLP Teacher Survey in the spring; however, one teacher resigned and the students were placed in other classrooms.

Los Angeles Unified School District and was provided by the Information Technology Department.

### **Data Analysis**

The findings in this report are drawn primarily from three sources of data: (1) interviews with administrators and teachers from November/December 1997 on the goals and implementation of PLP, as well as informal follow-up interviews over the course of November/December 1998; (2) the parent phone survey conducted in both the spring of 1998 and spring of 1999; and (3) the fall and spring 1999 teacher surveys with all third-grade teachers. Interview data were summarized for Non-PLP and PLP comparison groups at the school and School Family levels, by respondent group, and by question. Basic descriptive statistics were computed for parent interview responses by School Family and by school for Non-PLP and PLP comparison parents for each year. Basic descriptive statistics were also computed for teacher survey responses by School Family and by school for Non-PLP and PLP comparison teachers and their classrooms for 1998/99 school year. The difference between the Non-PLP and PLP findings were tested for statistical significance (at the  $p = 0.01$  level) using a chi-square test or ANOVA  $t$ -test, as appropriate. These tests indicate the probability that the observed differences are due to chance. Based on these analyses, the results that follow examine the similarities and differences between Non-PLP and PLP comparison parent responses, as well as the Non-PLP and PLP comparison teacher responses about themselves and parents' third-grade children.

In addition, regression analyses were conducted to investigate the relationship between student achievement and parent involvement controlling for a variety of student and teacher characteristics. The teacher survey, parent phone survey, and the LAUSD district data on achievement and demographics were merged. Basic descriptive statistics were computed overall and by PLP and Non-PLP groups for the achievement measures from the LAUSD district data, such as percentile scores on reading, math and language arts on the SAT9 for 1997/98 and for 1998/99. Basic descriptive statistics also were computed for the performance and behavior outcomes reported by the teachers for the individual students in fall 1998 and spring 1999. Parent involvement measures were calculated for attendance at parent conferences, parents' presence at schoolwide events, parents visiting the classroom, volunteering in the classroom, contacting the child's teacher, reading support at home, and homework support at home. Basic univariate regressions were conducted

on all the behavior and performance outcomes comparing the PLP and Non-PLP students. These regressions also were then conducted controlling for student ethnicity, low income status, Title I status, Limited English Proficient status, third-grade class size, number of years teacher taught third grade, teacher's emergency credential status, parent education, and employment status of the household. Additional multivariate regressions were conducted to understand the relationship between parent involvement and a student's behavior and performance in third grade controlling for background characteristics and the influence of PLP on these relationships.

### **3. RESULTS: WHAT ARE THE EFFECTS OF PLP ON THIRD-GRADE TEACHERS' PRACTICES?**

The Parents as Learning Partners program aims to enhance parent-teacher communication and parent involvement activities in the school and the classroom. To address these goals, PLP efforts therefore offered teacher professional development on the importance of parental involvement and on specific strategies for effectively interesting parents and involving them in the school and the classroom. Voicemail systems for use by teachers and parents also were installed in all of the PLP school sites. In this section, we describe the environment of third-grade classrooms first before we report, for Non-PLP and PLP groups, teacher participation in professional development activities targeting parent involvement and use of voicemail and teachers' interactions with their third-grade students' parents.

#### **Overview of Third-Grade Classroom Environment**

Third-grade teachers from the 12 schools participating in the Parents as Learning Partners evaluation completed surveys in the fall and spring of the 1998-1999 academic year. The teachers reported information on general classroom characteristics, parent involvement practices, and student characteristics, behaviors and performance. Based on information gathered from the teacher surveys, the following is an overview description of the third-grade classroom environment of PLP and Non-PLP schools.

Overall, the Non-PLP and PLP classrooms involved in the evaluation for the 1998-1999 school year were similar to each other in student, teacher, and classroom characteristics. Many of the third-grade classrooms in the 12 schools were affected

by class size reduction regulations and thus had approximately 20 students. The majority of the students in these third-grade classes were Hispanic (55.9%). Two thirds spoke a language other than English. In the fall, 64% were Limited English Proficient. One quarter (25.5%) of the students transitioned into regular classrooms between the fall and the spring. With student mobility in and out of the classrooms being so high, in the spring of 1999 55% of the students were still Limited English Proficient: Roughly 80% of the students spoke English in the classroom and roughly 80% spoke Spanish at home. Moreover, a small fraction (6%) also were reported by their teachers as having special needs, which could range from being designated as a Special Education student to a student who was emotionally impacted by divorcing parents.

This description is similar for Non-PLP and PLP classrooms. Slightly more students were Limited English Proficient (LEP) during fall 1998 in PLP classrooms: 60.2% of Non-PLP students and 68.3% of PLP students. But by spring, the proportions of students who were Limited English Proficient were similar in both Non-PLP schools (54%) and in PLP schools (56.3%). This is true because more students in the PLP schools transitioned into classrooms with full-time English instruction: 19.1% of Non-PLP students and 31.7% of PLP students. Roughly similar percentages also used English in the classroom: 82.9% of the Non-PLP students and 87% of the PLP students spoke English in their classrooms. However, teachers estimated also that 48.5% of Non-PLP students and 59.1% of the students in PLP schools spoke English outside of the classroom. Teachers who knew the home languages of their students and could report what language was most often spoken at home reported that 84.9% of the Non-PLP students and 79% of the PLP students spoke Spanish in the home. Finally, 15.3% of Non-PLP students and 17.8% of the students in PLP schools were reported by the teachers as having special needs.

Furthermore, about 60% of teachers in both Non-PLP (63%) and PLP (59.8%) schools had been teaching for five years or more with the average length of experience teaching the third grade as slightly over three years. Half of the students in both Non-PLP (52.3%) and PLP (56%) schools were taught in the third grade by a teacher who had an emergency credential in the previous year, and over 20% were being taught in the third grade by teachers with emergency credentials. Additionally, about one third of the students were taught by teachers fluent in both English and Spanish: 48.8% of Non-PLP students and 35% of PLP students.

Teachers in almost all of the classrooms reported very similar discipline practices with both a check system and positive discipline practice to reward students for good behavior. Most employed some type of check system to control negative behavior, such as: one check—warning; two checks—withhold recess; three checks—parent contacted; four checks—visit to the principal’s office. Half (50.7%) of the Non-PLP classrooms had teachers who reported using both positive and negative discipline practices, whereas 62.6% of PLP classrooms had teachers reporting both positive and negative techniques for discipline.

Overall, the Non-PLP and PLP classrooms were similar in terms of general student, teacher and classroom characteristics, providing for a good basis for comparison in the evaluation.

### **Professional Development Activities and Voicemail for Teachers**

Since one of the main goals in the PLP initiative is to provide professional development for teachers that specifically targets parent involvement and to install a voicemail system for their use, we were interested in how many third-grade teachers in the PLP and Non-PLP schools reported in the spring of 1999 that they participated in this type of professional development or used the voicemail system. Thus, all third-grade teachers from the 12 evaluation school sites were asked to report on the existence, topic, and location of the professional development in which they participated during the 1998-1999 school year, as well as on their access to and use of the school’s voicemail system.

As of spring 1999, 34.6% of Non-PLP students and 70.2% of the students in PLP schools had teachers that reported the existence of professional development geared toward parent involvement in their schools. Table 1 indicates the percentage of third-grade teachers who reported the existence, location, and topic of professional development targeting parent involvement for their schools in 1999. Of those that reported that professional development on parental involvement existed, approximately 72% of Non-PLP and 80% of PLP teachers reported participating in professional development on parent involvement. One quarter (24.9%) of the Non-PLP and half (56.2%) of the PLP third-grade students had teachers who actually participated in professional development on parent involvement. Thus, significantly more students in third-grade PLP classrooms had teachers who had professional development on parental involvement offered to them; and, more importantly, twice as many PLP students as compared to Non-PLP students had teachers who

Table 1

## Professional Development Targeting Parent Involvement (% said Yes)

	Non-PLP Spring 1999 (N = 426)	PLP Spring 1999 (N = 413)
Does Professional Development currently exist?		
Yes	34.6*	70.2*
No, But Planned	3.0	2.1
No, Not Planned	45.7*	21.4*
Of those who said professional development exists, percent who participated	72.0*	80.0*
Of those who said professional development exists, which parent involvement topics covered		
General parent involvement	2.1*	15.4*
Parents helping with homework	7.1	5.4
Parent classes	7.1	5.0
Volunteering	11.4	6.0
All of the above	59.3*	30.1*
Of those who said professional development exists, location it was held		
Staff meetings	90.0*	57.5*
Professional Development session	0.0*	25.2*

*Note.* Percentages are based on the number of students whose teachers responded to the survey.

\* Non-PLP is statistically different than PLP at  $p = 0.01$  level.

participated in this type of professional development. This is an important difference that is consistent with the School Family information reported by the schools during 1997/98, the PLP implementation year. In general, there has been very little formal professional development in the PLP schools, except in School Family C.

Of those teachers who participated in the professional development regarding parental involvement, approximately 60% of Non-PLP and PLP students had teachers that reported such topics as general parent involvement, parents helping in the classroom, parent classes, and parent volunteers. Moreover, 12.9% of the Non-PLP students and 19.7% of the PLP students had teachers that reported home-school communication as one of the target issues. In addition, of those teachers who reported participating in professional development, 90% of the Non-PLP students and 57.5% of the PLP students had teachers whose professional development was held in staff meetings, whereas an additional 25.2% of PLP students had teachers that reported formal professional development sessions.

To improve the communication between parents and teachers, schools in the PLP initiative installed voicemail systems for the use of teachers and parents. As part of the PLP evaluation, all Non-PLP and PLP third-grade teachers were asked to report on the potential existence of a voicemail system for parents and teachers as well as their use of the system. Table 2 indicates the percentage of teachers who reported the existence of voicemail at their school and their use of it during 1998-1999. In spring 1999, 13.6% of students in Non-PLP schools and 51.8% of students in PLP schools had teachers that reported the existence of a voicemail system in their school. Of those teachers that reported a voicemail system in their school, 72.2% of the PLP students had teachers who used the system, whereas none of the Non-PLP students had teachers who reported that they did use the voicemail system. It appears that in the handful of cases (roughly 20% of the Non-PLP schools) where Non-PLP schools have voicemail, none of the teachers used it. Furthermore, 71.8% of the teachers in the PLP schools reported its primary use was for them to leave messages for parents. Therefore, three fourths of students in PLP schools had teachers who used the voicemail system in their school as compared to students in Non-PLP schools, who had teachers who did not use their voicemail at all to assist in communicating with their students' parents.

### Third-Grade Teachers' Interactions With Their Students' Parents

Providing professional development to teachers and utilizing voicemail to ease the communication between parents and teachers have the potential to increase the quality and quantity of communication between parents and teachers as well as to

Table 2

Existence and Use of Voicemail in PLP and Non-PLP Schools (% said Yes)

	Non-PLP Spring 1999 (N = 426)	PLP Spring 1999 (N = 413)
Percent who said voicemail exists at their school	13.6*	51.8*
Percent who said they use voicemail	0*	72.2*
Of percent who said they use voicemail, percent used to leave parents messages	N/A	71.8

*Note.* Percentages are based on the number of students whose teachers responded to the survey.

\* Non-PLP is statistically different than PLP at  $p = 0.01$  level.

stimulate more parents to be involved at their child’s school and in their child’s classroom. The findings presented here concern parent-teacher interactions as reported by teachers and parents in Non-PLP and PLP schools.

For professional development activities to be successful in changing behaviors, a teacher’s beliefs must be aligned with the desired outcomes and practices. In this case, teachers must believe that parental involvement in the school and in the classroom are desirable goals before they spend the time contacting parents and engaging parents in discussions about the positive and negative progress of their children. Therefore, in the fall of 1998 and spring of 1999, third-grade teachers were asked to respond to statements about their parent involvement beliefs.

### Teacher Beliefs About Parent Involvement

When asked in the fall about the necessity of parent involvement in the learning process for children, PLP and Non-PLP teachers’ attitudes were similarly positive: 82.8% of Non-PLP and 72.2% of PLP students had teachers that believed “parent involvement is necessary for children to learn” (see Table 3). When asked if parent involvement is worth the effort, 60.0% of Non-PLP and 68.3% of PLP students had teachers that reported, “No matter what it takes, getting parents involved in their children’s education is worth the effort.” However, 36.5% of Non-PLP and 30.8% of PLP students had teachers that reported, “The time it takes to get parents involved in their children’s education is sometimes not worth the effort.”

Table 3  
Third-Grade Teachers’ Beliefs About Parent Involvement (% said Yes)

	Non PLP		PLP	
	Fall 1998 (N = 442)	Spring 1999 (N = 426)	Fall 1998 (N = 433)	Spring 1999 (N = 413)
Parent involvement is necessary for children to learn	82.8*	73.4	72.2*	79.3
No matter what it takes, getting parents involved in their children’s education is worth the effort	60.0*	60.5*	68.3*	69.0*
The time it takes to get parents involved in their children’s education is sometimes not worth the effort	36.5	2.7	30.8	3.3
The school is encouraging parental involvement, but is not preparing teachers on how to involve parents	74.3*	78.5*	53.4*	65.3*

\* Non-PLP is statistically different than PLP at  $p = 0.01$  level.

Thus it appears that nearly two thirds of PLP and Non-PLP teachers alike would be motivated to accomplish PLP goals, a strong base upon which to build.

However, when asked about their preparedness in fall 1998, 74.3% of Non-PLP and 53.4% of PLP teachers reported “their school was encouraging parent involvement, but not preparing them to involve parents.” The greater proportion of PLP teachers who felt that their schools were helping prepare them on how to involve parents is consistent with the greater frequencies of professional development in PLP schools noted above. These data also indicate that half of the teachers in PLP schools and practically all of the Non-PLP teachers who were motivated to involve parents did not feel their schools were preparing to do so.

When teachers were asked the same questions in the spring, there were positive changes in teachers’ beliefs about parental involvement. Fewer Non-PLP teacher responses (73.4%) and more PLP teacher responses (79.3%) indicated that “parent involvement is necessary for children to learn.” There was essentially no change in the number who responded that “no matter what it takes, parent involvement is worth the effort.” However, there was a dramatic decrease in students who had teachers who reported that “the time it takes to get parents involved in their children’s education is sometimes not worth the effort”: Only 2.7% of Non-PLP students and 3.3% of PLP students had teachers who selected this response. Additionally from fall to spring, there was also an increase in the number of both Non-PLP and PLP teachers who reported that “their school is encouraging parent involvement but not preparing teachers on how to involve parents”: 78.5% for Non-PLP teachers and 65.3% for PLP teachers.

Overall, the changes in teachers’ beliefs appear to be similar in direction and size across Non-PLP and PLP teachers. In general, by spring 1999, more PLP teachers as compared to Non-PLP teachers had a basic belief that parental involvement is an important element for children’s learning, and that this translates into greater belief that involving parents is worth the effort. In general, fewer PLP teachers felt their schools were encouraging parent involvement but not preparing them on how to involve parents.

### **Communication Between Teachers and Parents as Reported by Teachers**

If parents and teachers are to provide a supportive learning environment for their children and students, the communication between the parents and teachers needs to be interactive, two-way, and often enough to provide feedback about the

student’s needs, progress, and success. To investigate the type of relationship that parents and teachers have with each other, we asked the teachers in the fall and the spring of 1998/99, as well as the parents in the spring of 1999, several questions about their communication patterns. Table 4 reports the percent of students who had teachers who did not contact and did contact their parents regarding positive feedback or behavior problems, as well as the teachers’ evaluation of the quality or type of communication the teacher has with the parent.

First, 36.1% of the Non-PLP students and 37.3% of PLP students had teachers who never contacted their parents regarding positive feedback or behavior problems during the course of the year. But 42.9% of Non-PLP and 46.0% of PLP students had teachers that contacted their parents with positive feedback over the course of the year. Moreover, Non-PLP teachers reported relaying positive information about students to parents an average of 5 times per child, and PLP teachers reported an average of 7 times per child. Also, given that teachers reported that 17% of Non-PLP and PLP students were “disruptive in class,” 14.0% of Non-PLP students and 17.8% of PLP students had teachers who reported contacting their parents at least once regarding behavior problems. Non-PLP teachers on average reported a total of 3 parent contacts per child concerning behavior problems and PLP teachers reported a total of 5 parent contacts per child.

Furthermore, in terms of time spent communicating with parents, teachers in both PLP and Non-PLP schools reported spending an average of one hour per week outside of classroom time. Most commonly, teachers (48% for Non-PLP and 55.2%

Table 4  
Communication Between Third-Grade Teachers and Parents (% said Yes)

	Non PLP		PLP	
	Fall 1998 (N = 442)	Spring 1999 (N = 426)	Fall 1998 (N = 433)	Spring 1999 (N = 413)
Teacher did not contact parent with positive feedback or behavior problem	—	36.1	—	37.3
Contacted parent to give positive feedback about child	—	42.9	—	46.0
Contacted parent regarding behavior problem	—	14.0	—	17.8
Quality of communication teacher has with parent:				
Primarily for information purposes only	40.4	34.7	41.9	30.5
Interactive, two-way communication	24.7	13.0*	29.1	30.8*
Poor/no communication	21.6*	27.8	15.6*	23.9

\* Non-PLP is statistically different than PLP at  $p = 0.01$  level.

for PLP) spent this allotted time communicating repeatedly with a small group of similar parents, rather than with parents spread out over the entire class.

In terms of the quality of the communication teachers have with parents in the fall of 1998, teachers most commonly reported that their interaction with parents was primarily for information purposes only (40.4% of Non-PLP and 41.9% of PLP teachers). However, a significant minority of teachers reported an interactive, two-way communication pattern with their parents: 24.7% of Non-PLP and 29.1% of PLP teachers reported such communication patterns. Slightly fewer teachers reported a poor (or lack of) communication with parents: 21.6% of Non-PLP and 15.6% of PLP students had teachers that reported poor or no communication with parents. By the spring, there was a slight decrease in the percentage of both Non-PLP and PLP teachers who reported that their communication with parents was for information purposes only: 34.7% of Non-PLP and 30.5% of PLP students had teachers who reported that the communication between parents and teachers was predominately for information purposes only. A similar percentage of teachers as compared to the fall reported having an interactive, two-way form of communication with parents, with PLP teachers more likely to report such communications (23% of Non-PLP and 30.8% of PLP teachers).

Overall, teachers in both Non-PLP and PLP schools reported limited contact with parents. However, a large number of both Non-PLP and PLP teachers did report contact with their parents to relay positive feedback and behavior problems. The majority of contact as characterized by the teachers was for information purposes only, as opposed to two-way communication with parents. In general, PLP teachers reported a slightly better communication relationship with their parents as compared to the Non-PLP teachers.

### **Parent Involvement in the Classroom as Reported by the Teacher**

To increase the involvement of parents in the academic studies of their children in the school, classroom and at home, as PLP intends, effort must be made to improve the interactions between parents and teachers in terms of both quantity and quality. As described above, roughly half of the teachers believed in the importance of parental involvement and believed it is worth the effort that it takes, although most teachers classified their relationship with parents as one of providing information, not discussing or engaging in problem solving in a two-way manner

with parents. Table 5 shows the percentage of parents involved in the classroom as reported by the teacher.

In general, teachers reported that the level of involvement of parents in their classrooms was low. Non-PLP teachers reported that, overall, 28% of their parents had made no parent-initiated contact for the entire year, whereas PLP teachers reported that 20.6% of their parents had made no contact with them. Moreover, 22% of Non-PLP and 32.7% of PLP parents had never visited or helped in the classroom, as reported by the teachers. But of those parents who visited or helped, teachers reported that, overall, 26.5% of Non-PLP and 39% of PLP parents had also volunteered in the classroom (at least once).

Teachers also evaluated the parental involvement for each specific child in our sample (see Table 5). In general parental involvement was fairly low. In both Non-PLP and PLP classrooms teachers reported that only about 10% of their parents volunteered at least once over the course of the year. Also Non-PLP teachers reported that 43% of their parents had visited or helped in their classroom at least once during the year, and PLP teachers reported that 41.2% of their parents had visited or helped in the classroom. Similarly, according to the parent phone survey conducted in the spring of 1999, 39.0% of the parents in Non-PLP schools and 47% of parents in PLP schools reported that they had visited or helped in the classroom at their child’s school. Note that both estimates, however, show advantage for PLP schools. Furthermore, despite the teacher-reported low levels of involvement by parents, a large number of parents were rated as “somewhat involved” or “very involved” in the academic performance of their child.

Table 5  
Parent Involvement in the Classroom as Reported by the Teacher (% said Yes)

	Non PLP		PLP	
	Fall 1998 (N = 442)	Spring 1999 (N = 426)	Fall 1998 (N = 433)	Spring 1999 (N = 413)
Teacher evaluation of parents’ involvement with child:				
Parent is somewhat involved in their child’s academic performance	38.3	27.5*	35.5	35.9*
Parent is very involved in their child’s academic performance	27.4	21.5*	31.7	27.3*
Parent volunteered (at least once)	—	10.0	—	10.3
Parent visited or helped in classroom (at least once)	—	43.0	—	41.2

\* Non-PLP is statistically different than PLP at  $p = 0.01$  level.

Besides reporting the level and type of parent involvement, teachers also reported the types of activities they used to involve parents in their child's education. Roughly a third (36%) of both Non-PLP and PLP students had teachers who reported using a combination of methods including interactive homework, children reading to parents, requiring that homework be signed by parents, and contacting parents by phone calls or letters home. One quarter of Non-PLP and a third of PLP students had teachers who reported using only interactive homework as a parent involvement practice. Only 7.7% of Non-PLP and 3.6% of PLP students had teachers who responded that they did not use any practice to involve parents.

#### **4. RESULTS: WHAT IS THE IMPACT OF PLP ACTIVITIES ON PARENTS?**

Besides enhancing parent-teacher communication and parent involvement activities in the school and classroom, the Parents as Learning Partners program aims also to enhance the academic support parents provide their children at home. PLP efforts therefore also offered parent workshops on a variety of topics and developed lending libraries at the PLP school sites. We report for Non-PLP and PLP parents their access to and use of parent education workshops/activities, the school newsletter, and the parent center, as well as their reading habits with their child and the structure they provide at home.

##### **Access, Use, and Helpfulness of Parent Education and Other School Services**

###### **Participation by Parents**

Since one of the main goals of the PLP initiative is to provide parents with parent education workshops and classes that target how parents can be more involved in their child's academics, we were interested in how many parents in the PLP and Non-PLP schools reported that they have access to parent education workshops or a parent center, how many actually participated in these parent education workshops or visited the parent center, and their perceptions of satisfaction with these services and their helpfulness.

Most of the parents in the Non-PLP and PLP schools, as reported through the parent phone survey, knew that their schools provided parent education workshops, a newsletter/bulletin, and access to a parent center, although many fewer actually made use of these available services. Table 6 outlines the percentages of parents who

Table 6

Access and Use of Parent Education Workshops, School Newsletter, and Parent Center (% said Yes)

	Non PLP		PLP	
	1998 (N = 371)	1999 (N = 297)	1998 (N = 302)	1999 (N = 306)
<b>Access</b>				
School offers parent training/workshops	80*	—	91*	—
Have a school newsletter/bulletin	82*	92	91*	95
Have access to parent center	59*	58	72*	58
<b>Use</b>				
Attend parent training/workshop	32*	19	40*	23
Attend computer training	20	8*	19	12*
Visit parent center	44*	33	62*	33
<b>Workshop attendance by topic</b>				
Parent skills	—	24*	—	31*
Helping child with school work	—	18*	—	28*
Communicating with teacher and staff	—	16*	—	27*
Understanding what is expected of the child	—	17*	—	24*
Learning parent/child activities for the home	—	17*	—	26*
Introduction to school policies and programs	—	17*	—	27*

\* Non-PLP is statistically different than PLP at  $p = 0.01$  level.

knew about and utilized workshops and training sessions at the school, the newsletter, and the parent center. More parents knew about the availability of parent education workshops and the newsletter or bulletin in the spring of 1999 as compared to the spring of 1998. But despite more parents knowing about the availability of services, fewer parents overall participated in parent workshops, attended computer training, or visited the parent center in 1998/1999 than in 1997/1998. This also suggests decreasing parent involvement as children move from second to third grade.

As indicated in Table 6, there are statistical differences between PLP and Non-PLP parents' responses. On average, more PLP than Non-PLP parents were informed about their schools offering parent education or sending home a newsletter. However, parents at both Non-PLP and PLP schools were similarly informed about the existence of a parent center. One of the PLP evaluation sites did lose a parent center during 1998/1999 because of the demands of class size reduction in K-3 and space constraints. This is evidenced by the decline in the percent of PLP parents reporting access to a parent center from spring 1998 to 1999.

In terms of the usage of these services, similar percentages of Non-PLP and PLP parents attended at least one parent education workshop and visited their parent centers. Slightly more PLP parents attended computer training in 1998/1999: 8% of Non-PLP parents and 12% of PLP parents. Of those parents who reported attendance at least at one parent education workshop, PLP parents reported attending a larger number of workshops. The workshop attended most often by groups was one on parenting skills. PLP parents were more likely than Non-PLP parents to attend workshops on communicating with teachers and staff, helping their child with homework, introduction to school policies and programs, and learning parent/child activities for the home.

Of those parents who had used the services, both PLP and Non-PLP parents shared similarly high levels of satisfaction with their parent centers and their schools' newsletters or bulletins. Significantly more PLP parents were satisfied with the parent training and education workshops: 82% of PLP parents who attended the workshops believe that "parent training is helpful/worth my time" as compared to 64% of Non-PLP parents (see Table 7). Of the great majority of PLP and Non-PLP parents who attended the parenting skills workshop, 85% and 83% respectively indicated that the workshop was helpful. Significantly more PLP parents as

Table 7  
Satisfaction With Parent Education Workshops, School Newsletter, and Parent Center

	Non PLP		PLP	
	1998 (N = 371)	1999 (N = 297)	1998 (N = 302)	1999 (N = 306)
% of Those who used				
Satisfaction of those who use these services				
Parent training is helpful/worth my time	64*	—	82*	—
Parent center is valuable resource	92	—	96	—
Newsletter/bulletin keeps me informed	97	—	98	—
% of Those who attended				
Indicated as "helpful" to those who attended				
Parent skills	—	85	—	83
Helping child with school work	—	77*	—	91*
Communicating with teacher and staff	—	74*	—	91*
Understanding what is expected of the child	—	76*	—	95*
Learning parent/child activities for the home	—	76*	—	97*
Introduction to school policies and programs	—	84*	—	93*

\* Non-PLP is statistically different than PLP at  $p = 0.01$  level.

compared to Non-PLP parents reported that workshops on various topics were helpful, including those on helping children with school work, communicating with teachers and staff, understanding what is expected of the child, learning parent/child activities for the home, and introduction to school policies and programs. These are all areas of emphasis in the PLP initiative.

### Parents’ Beliefs About Parent Involvement

For teachers to be successful in engaging and involving parents, parents must also believe that they have a role in their child’s academic success. Therefore, in the spring of 1999, we asked parents about their beliefs about their role as a parent in their child’s education vis-à-vis the school and teachers.

Parents in general believed that it is “both the school and family’s job to make sure that a child gets a good education” (see Table 8). Significantly more PLP parents (59%) as compared to Non-PLP parents (45%) believed that it is an equal responsibility of both the school and family. Along the same line, significantly fewer PLP parents (16%) as compared to Non-PLP parents (28%) believed that it is “more the job of the school and teachers.” Overall, this indicates a higher acceptance of responsibility by PLP parents for their children getting a good education.

Table 8  
Third-Grade Parents’ Beliefs About Parent Involvement (% said Yes)

	Non PLP		PLP	
	1998 (N = 371)	1999 (N = 297)	1998 (N = 302)	1999 (N = 306)
Is mainly the school and teacher’s job to make sure child gets good education	—	7	—	9
Is mainly the family and home’s job to make sure child gets good education	—	7	—	7
Is both school and family’s job, to make sure child gets good education	—	45*	—	59*
Is both school and family’s job to make sure child gets good education, but it is more the job of the school and teachers	—	28*	—	16*
Is both school and family’s job to make sure child gets good education, but it is more the job of the parent	—	13*	—	9*

\* Non-PLP is statistically different than PLP at  $p = 0.01$  level.

## Parent Involvement in the Classroom as Reported by the Parents

Overall, parents of both Non-PLP and PLP third-grade students tended to visit or help out in their child's classroom less often than when their child was in second grade. As children moved from second to third grade, parents however did maintain a similar level of involvement in schoolwide events and maintained a similar number acquaintances (2.5) with school staff other than the child's teacher. Table 9 indicates the percentage of parents who reported visiting their child's classroom, attending parent conferences, open house or back-to-school night, or a student performance, sport event, or awards ceremony, as well as the average number of school staff parents were acquainted with other than their child's teacher. By the spring of 1999, 39% of third-grade parents in Non-PLP schools and 47% in PLP schools reported that they had either visited or helped in the classroom at their child's school; this difference is statistically different across Non-PLP and PLP parents. The decline from second to third grade in parents visiting or helping in the classroom was therefore significantly less for PLP parents. PLP parents are also more likely to attend performance and other special events at their children's schools.

## Barriers to Participation as Perceived by the Parents

With this decline in participation in the classroom, but not in schoolwide events, PLP and Non-PLP parents continued to report most commonly that being too busy was their primary barrier to more frequent parent participation (see Table 10). Needs related to child care and speaking a language other than English

Table 9

Parents' Involvement in the School and Classroom for PLP and Non-PLP Parents (% said Yes)

	Non PLP		PLP	
	1998 (N = 371)	1999 (N = 297)	1998 (N = 302)	1999 (N = 306)
Visit/Help in classroom	62	39*	62	47*
Parent conference	78*	91	83*	92
Open house/Back-to-school night	71	82*	69	78*
Student performance/sport event/awards ceremony	64*	73*	70*	76*
Number of school staff other than child's teacher with whom parents are acquainted	3.5	2.4	3.6	2.5

\* Non-PLP is statistically different than PLP at  $p = 0.01$  level.

Table 10

Barriers to Participation (% indicated as a major problem)

Percent indicated as a major problem	Non PLP		PLP	
	1998 (N = 371)	1999 (N = 297)	1998 (N = 302)	1999 (N = 306)
To what extent do any of the following prevent you from participating at your child's school more often?				
Need child care	20*	14*	11*	26*
Too busy	24*	29*	13*	33*
Speak language other than English	14*	9*	13*	23*
Don't feel comfortable at school	6*	2	2*	2
Don't receive timely information	9*	3	1*	2
Need transportation	11*	4	5*	7

\* Non-PLP is statistically different than PLP at  $p = 0.01$  level.

were indicated as the next two most commonly reported major problems by a large percentage of parents. However, the percentage of parents reporting these two barriers as major problems declined for Non-PLP schools, but increased for PLP schools, from spring 1998 to spring 1999.

In addition, only small percentages of both PLP and Non-PLP parents in 1998, when their children were in second grade, reported that other potential barriers such as needing transportation, not feeling comfortable at the school, and lacking timely information represented major problems. By 1999, when their children were in the third grade, these three barriers were again reported as a major problem, but by fewer numbers of parents.

### Communication Between Teachers and Parents as Reported by Parents

In general, parents reported being very satisfied with the communication they have with their child's teacher. PLP parents were slightly more positive about their communication with their child's teacher than Non-PLP parents. Table 11 indicates the percentage of parents who agreed with various statements about how teachers communicate with parents. Since the vast majority (over 90%) of both Non-PLP and PLP parents report that they feel comfortable talking with their child's teacher about the progress of their child, feel that their child's teacher lets them know what they can do to help their child, and feel that teachers value their contribution as a parent, it is difficult to see any changes or differences. Note that these very positive responses raise questions about the validity of these estimates.

Table 11

Parents' Communication With Child's Second-Grade and Third-Grade Teachers (% said Yes)

	Non PLP		PLP	
	1998 (N = 371)	1999 (N = 297)	1998 (N = 302)	1999 (N = 306)
Teachers let parents know what they can do to help their child	96	99	99	99
Teachers encourage parents to ask questions and express concerns	96	97	98	99
Teachers value contribution as a parent	95	99	99	99
Teachers treat parents as equals	96	99	99	99
Comfortable talking with teachers about child's progress	95	98	99	99
Gives positive feedback	—	73	—	77
Sends home child's work for review	—	87	—	87
Calls you on the phone/sends note	—	83	—	69
Contact child's teacher	74*	84*	84*	80*
Contact teacher by phone (including times left message)				
Every day <sup>a</sup>	—	12.9*	—	8.7*
Several times <sup>a</sup>	—	10.6*	—	3.5*
Call voice mail				
Every day	—	1	—	1
Several times	—	0	—	1
Call school/teacher for homework				
Every day	—	16*	—	6*
Several times	—	4*	—	12*

<sup>a</sup> 1 = Every day; 2 = Several times a week; 3 = Several times a month; 4 = Never/Hardly ever; 5 = Don't know.

\* Non-PLP is statistically different than PLP at  $p = 0.01$  level.

The majority of both Non-PLP and PLP parents also reported that their child's third-grade teacher gives them positive feedback and sends home their child's work for review. Fewer PLP parents (69%) as compared to Non-PLP parents (83%), however, reported that their child's third-grade teacher calls them on the phone or sends a note home. These data indicate that contact among parents and teachers in terms of work and feedback are similar across PLP and Non-PLP teachers, but that more Non-PLP teachers tend to contact their parents individually via the phone or a note. This pattern contrasts with that shown in the teacher data.

Parents also reported on contacts they initiated with teachers, as shown in Table 11. The data show that the majority of parents indicated in the spring of 1999 that they did contact their child's teacher at least once during the 1998/99 academic

year. Results also suggest that non-Non-PLP parents, as compared to PLP parents, contacted their child's teacher more often via the phone, which included leaving messages for the teacher, or calling the school or teacher for homework. Almost none of the parents, Non-PLP and PLP alike, used the voicemail system on a regular basis.

### **Parents' Habits and Structure at Home Regarding Reading and Homework**

To provide a supportive learning environment for a child, parents must interact with their child concerning school and learning, structure an environment conducive to completing homework, and encourage reading in every way. To investigate the type of home environment that parents and children have with each other, we asked parents in the spring of 1998 and 1999 several questions about their interactions with their child, the structure they provide at home regarding homework and reading, and their reading habits with their child.

### **Parents' Interactions With Their Child**

Parents' interactions with their child changed slightly from the time their child was in second grade to when their child was in third grade. Table 12 reports parents' interaction with their child concerning checking a child's backpack, talking about school, doing chores together, going to the library, and borrowing educational materials from the child's school. For both Non-PLP and PLP parents, more parents talked about school with their child every day in the third grade than in the second grade, and fewer parents did chores with their child every day. In the third grade, a similar number of Non-PLP and PLP parents spoke every day with their child about school (75% of Non-PLP and 77% of PLP parents) and did chores with their child every day (34% of Non-PLP and 32% of PLP parents). However, more Non-PLP parents, as compared to PLP parents, checked their child's backpack for notes: 53% of Non-PLP parents checked every day and 47% several times a week, whereas 18% of PLP parents checked every day and 26% several times a week.

Similarly small percentages of both Non-PLP and PLP parents reported going to the library every day or several times a week, 7% and 8% every day, respectively. Both Non-PLP and PLP parents also checked out on average three books from the library in a regular outing to the library with their child. But, significantly more PLP parents (73%) as compared to Non-PLP parents (67%) borrowed books or other educational materials from their child's school.

Table 12

Parents' Interactions With Their Child (% said Yes)

	Non PLP		PLP	
	1998 (N = 371)	1999 (N = 297)	1998 (N = 302)	1999 (N = 306)
Check child's back pack for notes				
Every day <sup>a</sup>	—	53*	—	18*
Several times a week <sup>a</sup>	—	47*	—	26*
Talk about school				
Every day	50*	75	65*	77
Several times a week	40*	20	30*	18
Do chores together				
Every day	38*	34	54*	32
Several times a week	45*	37	37*	30
Go to the library				
Every day	—	7	—	8
Several times a week	—	11	—	15
Number of library books checked out in regular outing	—	3 books	—	3 books
Borrow books or other educational materials from the school	—	67*	—	73*

<sup>a</sup> 1 = Every day; 2 = Several times a week; 3 = Several times a month; 4 = Never/ Hardly ever; 5 = Don't know.

\* Non-PLP is statistically different than PLP at  $p = 0.01$  level.

### Parents' Structure at Home Surrounding Homework

The structure that parents set up for their child surrounding homework and the assistance they provide is important for the child to learn. Table 13 reports the percentage of parents who limited TV hours or who had a specific time and place for their child to do homework, as well as how often the child actually did homework in the special time, how often parents reviewed their child's homework, helped the child with homework, signed and returned homework to the teacher, and how often the child's homework required parents' participation to complete it.

In second grade, significantly more PLP parents (86%) as compared to Non-PLP parents (72%) reported that they limited TV hours (see Table 13). However, a large number of PLP parents quit limiting TV hours, so that by third grade, significantly more Non-PLP parents (80%) as compared to PLP parents (57%) reported limiting TV hours. In either case, on average, both Non-PLP and PLP parents reported an average of 4 hours of TV that their children watched during the

Table 13

Parents' Structure at Home Surrounding Homework (% said Yes)

	Non PLP		PLP	
	1998 (N = 371)	1999 (N = 297)	1998 (N = 302)	1999 (N = 306)
Limit TV hours	72*	80*	86*	57*
Average TV hours during school week	—	4 hrs	—	4 hrs
Have time and place for homework	83*	92	89*	89
Actually does homework in special time				
Every day <sup>a</sup>	—	82	—	85
Several times <sup>a</sup>	—	15	—	13
How often review homework				
Every day	—	62*	—	70*
Several times	—	30*	—	24*
How often help child with homework				
Every day	58*	50	70*	51
Several times a week	31*	27	27*	28
How often sign and return homework to teacher				
Every day	—	39*	—	25*
Several times a week	—	27*	—	36*
How often child's homework requires participation to complete it				
Every day	—	39	—	45
Several times	—	36	—	32
Parents or other adults should				
Help with homework	63*	53*	73*	70*
Only check homework	29*	46*	25*	30*
Not interfere with homework	8*	0*	2*	0*

<sup>a</sup> 1 = Every day; 2 = Several times a week; 3 = Several times a month; 4 = Never/Hardly ever; 5 = Don't know.

\* Non-PLP is statistically different than PLP at  $p = 0.01$  level.

school week (this included TV and videos). Moreover, the majority of both Non-PLP and PLP parents (92% and 89% respectively) had a time and a place for their child to do homework. And nearly all of the Non-PLP and PLP parents reported that their child actually did homework in the special time established every day (82% and 85% respectively).

For parents to help their child with homework, they must first believe that that is the right strategy to take with their child. In the spring of 1998 and 1999, significantly more PLP parents as compared to Non-PLP parents believed that

“parents or other adults should help a child with homework”: 70% of PLP parents in spring 1999 as compared to 53% of Non-PLP parents, and 73% of PLP parents in spring 1998 as compared to 63% of Non-PLP parents. This belief, however, appears to have only slightly influenced parents’ behavior in terms of the frequency with which they either reviewed their child’s homework or helped their child with homework. Significantly more PLP parents (70%) as compared to Non-PLP parents (62%) reviewed their child’s homework every day in the third grade. But a similar number of both Non-PLP (50%) and PLP (51%) parents helped their child with homework every day in the third grade. Fewer parents among both the Non-PLP and PLP parents helped their child with homework every day in the third grade (spring 1999) as compared to in the second grade (spring 1998). The number of PLP parents who helped their child with homework every day dropped significantly from the second to the third grade: from 70% of parents to 51% of parents.

Furthermore, Non-PLP parents and PLP parents differed in the frequency with which they signed and returned their child’s homework to the teacher. More Non-PLP parents (39%) signed and returned homework to the child’s teacher every day as compared to PLP parents (25%), whereas more PLP parents (36%) signed and returned the homework to the child’s teacher several times a week as compared to Non-PLP parents (27%). But a similar number of Non-PLP and PLP parents had their child’s homework require their participation to complete it.

### **Parents’ Habits Regarding Reading With Their Child**

Parents’ reading habits with their child at home can greatly support the child’s learning in the classroom. Table 14 reports the percentage of parents who had books in the home in English, read to their child, had someone else read regularly to their child in the home, as well as the frequency with which the parent read with the child, read aloud with the child (in English or another language), and had the child tell the parent a story that he or she had read.

From second to third grade, more parents in both Non-PLP and PLP schools reported having books in the home in English and reading to their child in English. In both second and third grades, similar percentages of Non-PLP and PLP parents had books in the home in English and read to their child in English.

Reading habits of Non-PLP and PLP parents do not seem to differ in the third grade in terms of how often someone was available to help their child with reading, the parent reading aloud to the child in English, or having the child tell the parent a

Table 14

Parents' Habits Surrounding Reading With Their Child (% said Yes)

	Non PLP		PLP	
	1998 (N = 371)	1999 (N = 297)	1998 (N = 302)	1999 (N = 306)
Have books in home in English	80	98	84	94
Read to child in English	73	95	76	96
Someone reads regularly to child in home	80*	—	91*	—
Reading with your child				
Every day <sup>a</sup>	44*	29	53*	34
Several times a week <sup>a</sup>	40*	32*	38*	52*
Availability of someone to help child with reading				
Every day	—	30	—	34
Several times a week	—	32	—	34
Availability of someone to help child with reading or homework				
Every day	75*	—	83*	—
Several times a week	17	—	16	—
Reading aloud with your child in English				
Every day	—	74	—	70
Several times a week	—	13	—	18
Reading aloud with your child in language other than English				
Every day	—	29	—	34
Several times a week	—	32*	—	52*
Have your child tell you a story that he or she read				
Every day	—	23	—	26
Several times a week	—	29	—	30

<sup>a</sup> 1 = Every day; 2 = Several times a week; 3 = Several times a month; 4 = Never/ Hardly ever; 5 = Don't know.

\* Non-PLP is statistically different than PLP at  $p = 0.01$  level.

story that he or she had read. However the frequency in which parents read to their child or had them read aloud in a language other than English is different. The same number of Non-PLP and PLP parents read *every day* in third grade with their child and read *every day* aloud with their child in a language other than English. But more PLP parents as compared to Non-PLP parents read with their child and read aloud with their child in a language other than English *several times a week*. Overall, slightly more PLP parents read to their child more frequently as compared to Non-PLP

parents, despite the overall decline in parents reading every day with their child from second to third grade.

## **5. RESULTS: WHAT IS THE EFFECT OF PLP ON THIRD-GRADE ACHIEVEMENT?**

PLP espouses the concept that a child's learning is enhanced when the teachers and parents hold a shared responsibility for helping the child learn. Parents and teachers establish and share common expectations for the child. They also establish a two-way means of communicating, as well as assist each other in providing learning experiences for the child. The partnership formed between parents and teachers is based on shared knowledge, actions, and expectations. This type of partnership between the parents and teachers then results in a supportive and consistent learning environment for the child. Therefore, PLP can impact students through the change in behavior, perception, and attitude of parents and teachers. To assess the performance and behavior of the third-grade students, all the third-grade teachers in both the Non-PLP and the PLP schools were asked several questions in which they rated each individual student's performance and behavior as well as provided some information about their classrooms as a whole. These data and SAT9 test information provide a detailed picture of the third-grade performance of students in the PLP and Non-PLP schools by the spring of 1999.<sup>15</sup>

### **Student Performance and Behavior**

First, in the fall of 1998, 46% of both Non-PLP and PLP students were working "at or above grade level." Teachers in both PLP and Non-PLP schools also reported that half of their students (52.5% of Non-PLP students and 52.2% of PLP students) were working "at their ability." Both groups of teachers reported that about one third of their students (33.1 and 32.7% for PLP and Non-PLP respectively) were working "below their ability," whereas the remaining 14.9% of Non-PLP and 14.7% of PLP students were rated as working "above their ability." This is important to assess, considering that teachers primarily group students during reading instruction in terms of ability. During 1998/99 all third-grade teachers in both PLP and Non-PLP schools (100% of Non-PLP and 95.6% of PLP) incorporated guided

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<sup>15</sup> The teacher assessments on performance appear higher than the individual student SAT9 scores indicate. This overestimation however appears to be similar for PLP and Non-PLP students.

reading groups into their reading instruction, and the majority of the students (88.3%) in guided reading groups in both PLP and Non-PLP classrooms were grouped by their teachers according to their ability.

Besides the reading environment, reading performance levels for the third graders in the Non-PLP and PLP classrooms also appear similar over the course of the year. Almost half of both Non-PLP and PLP students, 46.1% and 45.4% respectively, were reading at a beginning third-grade level in the fall of 1998, and by the spring of 1999 half of Non-PLP and PLP third-grade students were reading at the end of third-grade level: 50.6% of Non-PLP and 49.8% of PLP students. The average classroom reading level for both Non-PLP and PLP students in the fall of 1998 was 2.7,<sup>16</sup> and by spring of 1999, it was 3.3<sup>17</sup> for both Non-PLP and PLP students. In fall 1998, the third-grade teachers evaluated the students in their classrooms in a range from 1.2 to 3.5 in both the Non-PLP and PLP schools. In spring 1999, the reading levels ranged from 2 to 3.8 for Non-PLP schools and from 0 (emergent English) to 4.2 for PLP schools.

Additionally, PLP and Non-PLP third graders had similar ratings by their teachers across several reading and math measures. Table 15 outlines Non-PLP and PLP third graders' standing in reading decoding in the fall and spring, standing in reading comprehension in the spring of 1999, regular completion of reading homework in the fall and spring, regular completion of math homework in the fall and spring, standing in reading homework performance in the fall and in the spring, and standing in math homework performance in the fall and in the spring, as evaluated by their teachers. The Non-PLP and PLP third graders have similar ratings across all the reading measures as evaluated by their teachers. In terms of math, PLP and Non-PLP students have similar standings in math and in math homework performance in the fall and the spring. But significantly more PLP students than Non-PLP students regularly completed their math homework "moderately well to very well" in the spring although they had similar completion rates in the fall. In summary, Non-PLP and PLP students were performing at similar math and reading levels.

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<sup>16</sup> Reading level was measured by teachers' running records. (2.7 indicates second year/seventh month).

<sup>17</sup> Two PLP teachers reported that the classroom reading level of their classes as emergent English, 0. When these two classes are included, the reading level for PLP students is 3.1.

Table 15

## Academic Standing of Third Graders in Sample (%)

	Non PLP		PLP	
	1998 (N = 371)	1999 (N = 297)	1998 (N = 302)	1999 (N = 306)
Standing in reading–Decoding				
Middle 20% or above	69.8	73.6	70.7	77.2
Bottom 20% or above	15.6	13.8	16.3	12.7
Standing in reading–Comprehension				
Middle 20% or above	—	73.5	—	75.4
Bottom 20% or above	—	13.4	—	11.4
Child regularly completes reading homework...				
Moderately well to very well	79.5	30.5	84.3	32.7
Not at all	5.3	46.8	3.9	48.4
Standing in reading–Homework performance				
Middle 20% or above	77.0	76.7	74.1	76.8
Bottom 20% or above	8.2	13.6	14.1	10.6
Standing in math–Overall				
Middle 20% or above	75.4	77.5	76.2	79.3
Bottom 20% or above	9.5	10.9	12.1	10.6
Child regularly completes math homework...				
Moderately well to very well	84.7	25.4*	83.7	31.7*
Not at all	3.3	47.0	5.0	48.9
Standing in math–Homework performance				
Middle 20% or above	77.6	78.5	77.2	78.5
Bottom 20% or above	8.2	11.4	12.1	10.6

*Note.* Percentages are based on the number of students whose teachers responded to the survey.

\* Non-PLP is statistically different than PLP at  $p = 0.01$  level.

Teachers also evaluated students on various behavior scales including behavior in class, achievement attitudes and motivation. Table 16 shows the percent of third graders in Non-PLP and PLP classrooms with disruptive behavior problems, poor work habits in reading and in math, and poor motivation to achieve in reading or in math. In spring 1999, 17% of both Non-PLP and PLP students were rated by their teachers as being disruptive in class. A similar percentage of students was reported to have poor work habits in math and reading as well as low motivation to achieve in either subject. Twenty percent of both Non-PLP and PLP students were reported to have poor work habits in math. Similarly, 25.7% of Non-PLP and 22.6% of PLP students were reported as having poor work habits in reading. Teachers also reported that very few students had a “moderate to very serious problem” in their

Table 16

Academic Behaviors of Third Graders in Sample (%)

	Non PLP		PLP	
	1998 (N = 371)	1999 (N = 297)	1998 (N = 302)	1999 (N = 306)
Disruptive behavior is a moderate to very serious problem	18.2	17.0	16.5	17.0
Disruptive behavior is not a problem	60.8	58.0	59.6	62.4
Poor work habits in reading	24.7*	20.0	18.0*	20.0
Poor work habits in math	20.7	25.7	17.4	25.7
Poorly motivated to achieve in reading is a moderate to serious problem	18.3	19.2	14.1	16.2
Poorly motivated to achieve in reading is not a problem	58.2*	57.8*	69.2*	61.7*
Poorly motivated to achieve in math is a moderate to serious problem	18.7	18.4	14.3	16.3
Poorly motivated to achieve in math is not a problem	59.0*	60.4	66.3*	62.7

*Note.* Percentages are based on the number of students whose teachers responded to the survey.

\* Non-PLP is statistically different than PLP at  $p = 0.01$  level.

motivation to achieve in math: 18.4% of Non-PLP students and 16.3% of PLP students. Similarly, in terms of reading motivation 19.2% of Non-PLP students and 16.2% of PLP students were reported as “poorly motivated” to achieve. The large proportion of students, however, were reported as “not having a problem at all” in terms of their motivation to achieve in math: 60.4% of Non-PLP and 62.7% of PLP students. Again, 57.8% of Non-PLP and 61.7% of PLP students were reported as “not having a problem at all” in terms of their motivation to achieve in reading. Overall, the majority of the students (roughly 60%) in both Non-PLP and PLP schools were rated by their teachers as not having problems in achievement-related behaviors.

More students, however, tended to complete their homework in both math or reading in the beginning of the year, but Non-PLP and PLP students completed their homework at similar rates. In the fall of 1998, 84% of Non-PLP and PLP students regularly completed their homework in math. Similarly, 79.5% of the Non-PLP and 83.7% of PLP students regularly completed their homework in reading. The number of students who completed their homework decreased significantly as reported by teachers in spring 1999: Only 25.5% of Non-PLP students and 31.7% of PLP students

regularly completed their homework in math. Similarly, 30.5% of Non-PLP students and 32.7% of PLP students regularly completed their homework in reading.

In summary, Non-PLP and PLP students were similar in their math and reading performance, motivation, and homework completion by the spring of 1999 as evaluated by their teachers.

In addition to the performance measures reported by the third-grade teachers in the fall and the spring, achievement data on students' test scores were obtained. School-level data were available for all 12 schools, whereas the individual test score information was available only for the 8 LAUSD schools, which could then be linked to student demographic information, the teacher survey data, and the parent phone survey data. This allowed for detailed analyses of the relationship between student achievement and parent involvement. Table 17 presents the percent at or above the 50th percentile in language arts, math, and reading for all third-grade students in the Non-PLP and PLP schools that took the SAT9 in 1998/99. Table 18 outlines these same data for only the third graders in the Non-PLP and PLP schools that were in the sample of LAUSD schools. Table 19 presents the mean percentile scores on the SAT9 for the third graders in the sample for LAUSD only.

Overall, a slightly higher percent of PLP as compared to Non-PLP third-grade students scored at or above the 50th NPR in language arts, math and reading on the SAT9 test in 1998/99. But there was only a significantly higher percent of PLP third graders scoring at or above the 50th NPR in math as compared to Non-PLP third graders. These data also are for *all* third-grade students who took the SAT9 in the 12 Non-PLP and PLP schools, not just the random sample of students who were tracked in these 12 evaluation sites. Table 18 reports data for only those students in the sample and in LAUSD. These data also show that there is only a significantly higher percent of PLP third graders scoring at or above the 50th NPR in math as compared to Non-PLP third graders, whereas for language arts and reading, the percent of PLP students is slightly lower but not statistically different than Non-PLP third graders scoring at or above the 50th NPR. Overall, the mean percentile scores in language arts, math and reading on the SAT9 are lower for PLP third graders than Non-PLP third-grade students.

To investigate the differences in performance on the SAT9 in language arts, reading and math one step further, we also ran regressions on these performance outcomes testing the differences between PLP and Non-PLP third graders

Table 17

Percent At or Above the 50th NPR on the SAT9 for Third Graders

1998/1999 school year	Non PLP		PLP	
	%	<i>N</i>	%	<i>N</i>
Percent at or above 50th NPR in language arts	17.9	645	22.9	661
Percent at or above 50th NPR in math	20.4*	656	26.1*	693
Percent at or above 50th NPR in reading	12.8	636	16.5	676

\* Non-PLP is statistically different than PLP at  $p = 0.01$  level.

Table 18

Percent At or Above the 50th NPR on the SAT9 for Third Graders in Sample for LAUSD Only

1998/1999 school year	Non PLP		PLP	
	%	<i>N</i>	%	<i>N</i>
Percent at or above 50th NPR in language arts	20.0	225	17.2	234
Percent at or above 50th NPR in math	20.6*	234	25.8*	257
Percent at or above 50th NPR in reading	17.0	234	12.9	243

\* Non-PLP is statistically different than PLP at  $p = 0.01$  level.

Table 19

Mean Percentile on SAT9 for Third Graders in Sample for LAUSD Only

1998/1999 SCHOOL year	Non PLP		PLP	
	Mean NPR	<i>N</i>	Mean NPR	<i>N</i>
Language arts	37.3	225	32.9	234
Math	28.8*	234	20.6*	257
Reading	33.8*	234	25.4*	243

\* Non-PLP is statistically different than PLP at  $p = 0.01$  level.

controlling for student ethnicity, low income status, Title I status, Limited English Proficient status, third-grade class size, number of years teacher taught third grade, teacher's emergency credential status, parent education, and employment status of the household. Table 20 provides the regression results of PLP's effect on SAT9 percentile scores in language arts, math, and reading. Primarily, third-grade students in the LAUSD PLP schools scored 4.5 percentile points higher in reading on

the SAT9 in 1998/99 than Non-PLP LAUSD students after controlling for student ethnicity, low income status, Title I status, Limited English Proficient status, third-grade class size, number of years teacher taught third grade, teacher’s emergency credential status, parent education, and employment status of the household. In addition, these analyses showed no differences for the math and language arts SAT9 scores between the PLP and Non-PLP LAUSD students.

In addition, we investigated the relationship between these SAT9 performance outcomes and parent activities that involved parents in their child’s school and academics. Parent involvement activities such as attending parent conferences, visiting the classroom, volunteering in the classroom, attending schoolwide events, and providing reading support or homework support to their child in the home had varying effects on students’ academic performance and achievement even when controlling for student and teacher characteristics (refer to Table 21 for regression results for SAT9 scores and Table 22 for regression results on teachers’ estimated outcomes). Controlling for student ethnicity, low income status, Title I status, Limited English Proficient status, third-grade class size, number of years teacher taught third grade, teacher’s emergency credential status, parent education, and employment status of the household, the evaluation found the following relationships. Reading support in the home had a positive effect on LAUSD math SAT9 scores. Parents visiting the classroom, volunteering in the classroom, and contacting the teacher was associated with increases in students’ reading comprehension (measured in spring 1999). Both reading support in the home and parents visiting the classroom, volunteering in the classroom, and contacting the

Table 20

Estimations of SAT9 Percentile Score in Language Arts, Math, and Reading for Third-Grade Sample (LAUSD Only) Controlling for Student and Teacher Characteristics, 1998/99 (N = 439)

	SAT9 score Language arts	SAT9 score Math	SAT9 score Reading
Coefficient on PLP dummy	3.6	0.06	4.5
T-statistic	(1.682)	(0.030)	(2.485)

*Note.* All regressions controlled for student ethnicity, low income status, Title I status, Limited English Proficient status, third-grade class size, number of years teacher taught third grade, teacher’s emergency credential status, parent education, and employment status of the household.

Table 21

Estimations of SAT9 Percentile Score in Language Arts, Math, and Reading for Third-Grade Sample (LAUSD Only) Controlling for Student and Teacher Characteristics, 1998/99 (N = 439)

	SAT9 score Language arts	SAT9 score Math	SAT9 score Reading
Coefficient on Parent-Teacher Conference Attendance	-0.88	2.48	-3.86
T-statistic	(-0.25)	(0.67)	(-1.29)
Coefficient on Parents' Presence at Schoolwide Events	0.20	0.41	0.21
T-statistic	(0.58)	(1.14)	(0.79)
Parents' Visiting, Volunteering, and Contacting Teacher	0.23	0.04	0.06
T-statistic	(1.96)	(0.33)	(0.68)
Coefficient on Reading Support	<b>0.98</b>	<b>1.21</b>	0.54
T-statistic	<b>(2.59)</b>	<b>(3.04)</b>	(1.77)
Coefficient on Home Support	0.64	0.43	0.47
T-statistic	(1.76)	(1.12)	(1.58)
Coefficient on Homework dummy	-0.20	0.09	0.22
T-statistic	(-0.34)	(0.14)	(0.76)

*Note.* All regressions controlled for student ethnicity, low income status, Title I status, Limited English Proficient status, third-grade class size, number of years teacher taught third grade, teacher's emergency credential status, parent education, and employment status of the household.

Table 22

Estimations of Student Performance for Third-Grade Sample (LAUSD Only) Controlling for Student and Teacher Characteristics, 1998/99 (N = 439)

	Math Standing Spring	Reading Level Spring	Reading Decoding Spring	Reading Compre- hension
Coefficient on Parent-Teacher Conference Attendance	-0.05	0.025	-0.04	0.18
T-statistic	(-0.54)	(0.31)	(-0.47)	(1.24)
Coefficient on Parents' Presence at Schoolwide Events	<b>-0.02</b>	-0.04	<b>-0.03</b>	-0.02
T-statistic	<b>(-2.05)</b>	(-0.43)	<b>(-2.41)</b>	(-0.99)
Parents' Visiting, Volunteering, & Contacting Teacher	-0.03	-0.02	0.01	<b>0.02</b>
T-statistic	(-0.87)	(-0.92)	(0.49)	<b>(2.47)</b>
Coefficient on Reading Support	0.01	<b>-0.02</b>	-0.08	0.04
T-statistic	(0.83)	<b>(-2.35)</b>	(-0.68)	(0.24)
Coefficient on Home Support	-0.07	-0.04	-0.01	-0.02
T-statistic	(-0.61)	(-0.43)	(-1.11)	(-0.15)
Coefficient on Homework dummy	-0.01	<b>-0.03</b>	<b>-0.04</b>	-0.04
T-statistic	(-0.58)	<b>(-2.23)</b>	<b>(-2.66)</b>	(-1.56)

*Note.* All regressions controlled for student ethnicity, low income status, Title I status, Limited English Proficient status, third-grade class size, number of years teacher taught third grade, teacher's emergency credential status, parent education, and employment status of the household.

teacher were positively related to LAUSD language arts SAT9 scores. Parents' presence at schoolwide events was negatively related to students' standing in math and students' standing in reading decoding skills (both were measured in spring 1999, and regressions also controlled for their standing in the fall). Homework support also was negatively related to students' standing in reading decoding skills and reading level on running records (both were measured in spring 1999, and regressions also control for their standing in the fall). However none of these differences is attributable specifically to PLP or Non-PLP participation. The PLP/Non-PLP dummy variable was insignificant when these regressions were re-run to include it. These are overall relationships found between parent involvement and third-grade achievement.

## **6. RECOMMENDATIONS AND CONCLUSIONS**

The evaluation results indicate positive changes in teachers and parents of third graders in PLP schools. Parents and teachers in PLP schools have a higher acceptance of their joint responsibility for children getting a good education. Overall, there is less of a decline in parent involvement and support by parents in PLP schools as their child moves from second to third grade than in Non-PLP schools. Moreover, results show higher reading achievement in PLP schools than in Non-PLP comparison schools, controlling for teacher and student characteristics. Math and language arts performance, disruptive behavior and academic habits, however, appeared unaffected by PLP. The links between specific PLP activities, positive changes in parents and teachers, and student performance are not clear and need further study.

In this section, we first describe the policy context in which PLP has operated. Then we summarize the findings and discuss recommendations for PLP policies and practices.

### **Brief Overview of Limitations and Barriers in the Current Policy Context**

PLP aims to impact teachers and parents in schools faced with many challenges and policy changes. In the last several years, schools across the state were required to reduce their class sizes in all grades K-3. By 1997-98, 91% of second-grade cohorts in Los Angeles county had experienced at least one year of reduced classes, as had 60% of third graders (Los Angeles County Office of Education, Vol. 6, No. 3, May

1999). This meant hiring many new and non-credentialed teachers to join current school staff. Moreover, less affluent schools were much more likely to have a high percentage of untrained teachers (Los Angeles County Office of Education, Vol. 6, No. 2, May 1999). Class size reduction also meant finding the space for new classrooms for these new teachers and classes, which particularly strained the facilities and efforts in the largest and poorest urban districts, including LAUSD and LBUSD (Los Angeles County Office of Education, Vol. 6, No. 3, May 1999). In addition, state funds were cut for professional development days from providing six days to one day. This left schools and principals with a limited ability to schedule formal professional development days for all teachers targeting parent involvement. Within this context of change, LAAMP and the PLP schools still worked to provide professional development time for teachers on parental involvement, establish lending libraries somewhere on the school campus, and not lose their parent center space where parent education is offered to parents. Other policy changes, such as Proposition 227 that ended bilingual education, also diverted schools', teachers' and parents' attention and efforts on reforming and improving children's learning environments.

Given these pressures and strains on schools and parents from other directions, PLP attempted to change the behavior of teachers and parents. PLP aimed to establish a solid groundwork of communication between parents and teachers. Many parents to whom PLP schools were trying to reach out and involve are very busy, have several children, work full-time, and speak a language other than English. PLP was attempting to change parents' interactions with their children at home. PLP schools were trying to engage teachers in conversations about the importance of parental involvement and change teachers' behavior and practice in the classroom. PLP was trying to reestablish parent involvement on the school campus and in the classroom as a higher priority for parents and for teachers. These are very ambitious and tough goals to achieve given the constraints and context.

### **Summary of Findings and Discussion**

PLP targeted both parents and teachers in the effort to increase the productive interaction between parents and teachers concerning academics and learning. The vehicles for these changes at the PLP schools were professional development targeting parent involvement for teachers, parent education workshops, lending libraries, and a voicemail system for homework and messages.

### **What Are the Effects of PLP on Third-Grade Teachers' Practices?**

PLP was able to engage more teachers in professional development activities targeting parental involvement. One quarter (24.9%) of the Non-PLP and half (56.2%) of the PLP third-grade students had teachers who participated in professional development on parent involvement. Thus, significantly more students in third-grade PLP classrooms had teachers who had professional development on parental involvement offered to them by their schools, and, more importantly, twice as many PLP students had teachers who participated in this type of professional development as compared to Non-PLP students. Of the teachers who participated, half reported the professional development taking place during staff meetings and one quarter reported it taking place during a formal professional development day. The formalized professional development day targeting parent involvement was concentrated in one School Family. Overall, reaching half of the PLP third-grade teachers is a good start. However, half of the third-grade teachers in PLP schools and practically all of the Non-PLP teachers who were motivated to involve parents in their classrooms felt that their schools were not preparing them on *how* to involve parents.

Secondly, half of PLP third-grade teachers reported that voicemail existed at their school. And of those who reported its existence, three fourths of them used the voicemail as compared to the Non-PLP teachers who did not use their voicemail at all to assist in communicating with their students' parents. Primarily, the voicemail was used by the parents as a device for leaving messages for teachers. This, however, is a very limited use of the capabilities of the voicemail system, particularly considering its expense and installation.

Overall, the changes in teachers' beliefs appear to be similar in direction and size across Non-PLP and PLP teachers, with small differences favoring the PLP group. In general, by spring 1999, more PLP teachers as compared to Non-PLP teachers had a basic belief that parental involvement is an important element for children's learning. Overall, there was a higher acceptance of responsibility by teachers at PLP schools to support and ensure that a child gets a good education. But this did not seem to translate into a belief that more effort should be devoted to involving parents.

PLP teachers reported a slightly better communication relationship with their parents as compared to the Non-PLP teachers. The majority of Non-PLP and PLP

teachers in the fall and spring reported that their communication with parents was for information purposes only. Moreover, a significant minority of teachers (23% of Non-PLP and 30.8% of PLP) reported an interactive, two-way communication pattern with their parents, with PLP teachers significantly more likely to report such communications. This indicates that the majority of teachers are taking the first step in involving parents by providing them with necessary information and that some are truly engaging parents in a two-way interactive manner that better supports academic achievement.

Fewer PLP parents (69%) as compared to Non-PLP parents (83%) reported that their child's third-grade teacher calls them on the phone or sends a note. These data indicate that contact among parents and teachers in terms of work and feedback is similar across PLP and Non-PLP teachers, although more Non-PLP teachers tend to contact their parents individually via the phone or a note. This pattern may be explained by the different methods that parents have available to them to contact teachers. With PLP parents leaving messages for teachers on the voicemail system, they do not have to call teachers as often.

Teachers also reported the types of activities they use to involve parents in their child's education. Roughly a third (36%) of both Non-PLP and PLP students had teachers who reported using a combination of methods including interactive homework, children reading to parents, requiring that homework be signed by parents and contacting parents by phone calls or letters home. One quarter of Non-PLP and a third of PLP students had teachers who reported using only interactive homework as a parent involvement practice. Only 7.7% of Non-PLP and 3.6% of PLP students had teachers who responded that they did not use *any* practices to involve parents.

Overall, PLP seems to have raised parent involvement as an issue of importance for most of the teachers and the PLP schools, rather than parent involvement being an idiosyncratic interest of a few teachers. The PLP teachers demonstrate this through their beliefs surrounding the involvement of parents and their behaviors in interacting with parents.

### **What Is the Impact of PLP Activities on Parents?**

Most of the parents in the Non-PLP and PLP schools, as reported through the parent phone survey, knew that their schools provided parent education workshops, a newsletter/bulletin, and access to a parent center, although many fewer actually

made use of these available services. More parents knew about the availability of parent education workshops and the newsletter or bulletin in the spring of 1999 as compared to the spring of 1998. But despite more parents knowing about the availability of services, fewer parents overall participated in parent workshops, attended computer training, or visited the parent center in 1998/1999 than in 1997/1998.

Of those parents who have used the services, both PLP and Non-PLP parents share similarly high levels of satisfaction with their parent centers and their school's newsletter or bulletin. However, significantly more PLP parents are satisfied with the parent training and education workshops: 82% of PLP parents who attended the workshops believe that "parent training is helpful/worth my time" as compared to 64% of Non-PLP parents. Significantly more PLP parents as compared to Non-PLP parents reported that workshops on various topics were helpful, including those on helping children with school work, communicating with teachers and staff, understanding what is expected of the child, learning parent/child activities for the home, and introduction to school policies and programs. These are all areas of emphasis in the PLP initiative.

Parents in general believed that it is "both the school and family's job to make sure that a child gets a good education." Significantly more PLP parents (59%) as compared to Non-PLP parents (45%) believed that it is an equal responsibility of both the school and family. Along the same line, significantly fewer PLP parents (16%) as compared to Non-PLP parents (28%) believed that it is the job of the school and teachers. Overall, this indicates a higher acceptance of responsibility by PLP parents for their children getting a good education. This higher level of responsibility was also seen with the PLP teachers. Combined, this indicates the beginnings of a supportive, interactive environment between teachers and parents.

In general, parental involvement was fairly low. In both Non-PLP and PLP classrooms teachers reported that only about 10% of their parents volunteered at least once over the course of the year. Also, Non-PLP teachers reported that 43% of their parents had visited or helped in the classroom at least once during the year, and PLP teachers reported that 41.2% of their parents had visited or helped in the classroom. Similarly, according to the parent phone survey conducted in the spring of 1999, 39.0% of the parents in Non-PLP schools and 47% of parents in PLP schools reported that they had visited or helped in the classroom at their child's school. Note that both estimates, however, show advantage for PLP schools. Furthermore

despite the teacher-reported low levels of involvement by parents, a large number of parents were rated as “somewhat involved” or “very involved” in the academic performance of their child.

Moreover, parents of both Non-PLP and PLP third-grade students tended to visit or help out in their child’s classroom less often than when their child was in second grade. However, the decline from second to third grade in parents visiting or helping in the classroom (at least once) was significantly less for PLP parents. In addition, Non-PLP and PLP parents did maintain a similar level of involvement in schoolwide events and maintained a similar number acquaintances (2.5) with school staff other than their child’s teacher as their children moved from second to third grade.

Additionally, we found that these types of parent behaviors of visiting the classroom, volunteering, and contacting teachers helped to improve students’ language arts performance, controlling for teacher and student characteristics. The specific links are not clear, but PLP was able to help maintain parent-teacher interactions of the type that help to improve academics.

In terms of interactions with their child at home, more Non-PLP and PLP parents talked about school with their child every day in the third grade than in the second grade, and fewer Non-PLP and PLP parents did chores with their child every day. Similarly small percentages of both Non-PLP and PLP parents went to the library every day or several times a week, 7% and 8% every day, respectively. Both Non-PLP and PLP parents also checked out, on average, three books from the library in a regular outing to the library with their child. But, significantly more PLP parents (73%) as compared to Non-PLP parents (67%) borrowed books or other educational materials from their child’s school. This could be a result of the lending libraries established at the schools by the PLP initiative.

In terms of parents’ behaviors surrounding homework, significantly more PLP parents (70%) as compared to Non-PLP parents (62%) reviewed their child’s homework every day in the third grade. But a similar number of both Non-PLP (50%) and PLP (51%) parents helped their child with homework every day in the third grade. Fewer parents in both the Non-PLP and PLP parent groups helped their child with homework every day in the third grade (spring 1999) as compared to in the second grade (spring 1998). The number of PLP parents who helped their child

with homework every day dropped significantly from the second to the third grade: from 70% of PLP parents to 51% of PLP parents.

Furthermore, Non-PLP parents and PLP parents differ in the frequency in which they signed and returned their child's homework to the teacher. More Non-PLP parents (39%) signed and returned homework to the child's teacher every day as compared to PLP parents (25%), whereas more PLP parents (36%) signed and returned homework to the child's teacher several times a week as compared to Non-PLP parents (27%). But a similar number of Non-PLP and PLP parents had their child's homework require their participation to complete it.

Reading habits of Non-PLP and PLP parents do not seem to differ in the third grade in terms of how often someone is available to help the child with reading, the parent reading aloud to the child in English, or having the child tell the parent a story that he or she has read. However, the frequency in which parents read to their child, or had their child read aloud, in a language other than English is different. The same number of Non-PLP and PLP parents read *every day* in third grade with their child and read *every day* aloud with their child in a language other than English. But more PLP parents as compared to Non-PLP parents read with their child and read aloud with their child in a language other than English *several times a week*. Overall, slightly more PLP parents read to their child more frequently as compared to Non-PLP parents, despite the overall decline in parents reading every day with their child from second to third grade.

From second to third grade, more parents in both Non-PLP and PLP schools reported having books in the home in English and reading to their child in English. In both second and third grade, similar percentages of Non-PLP and PLP parents had books in the home in English and read to their child in English.

Overall, PLP parents tended to provide slightly better homework support, although we also found that homework support controlling for teacher and student characteristics does not appear to improve student achievement on its own. Additionally, several of the decreasing trends of parent involvement and interactions in the home as students move from second to third grade were lessened in PLP schools.

### **What Is the Effect of PLP on Students' Third-Grade Achievement?**

PLP and Non-PLP third graders have similar ratings by their teachers across several reading measures: standing in reading decoding in the fall and spring,

standing in reading comprehension in the spring of 1999, completion of reading homework in the fall and spring, and standing in reading homework performance in the fall and in the spring. For math, PLP and Non-PLP students as evaluated by their teachers have similar standings in math and standing in math homework performance in the fall and the spring. However, significantly more PLP students than Non-PLP students regularly completed their math homework “moderately well to very well” in the spring although they had similar completion rates in the fall.

Overall, a higher percent of PLP as compared to Non-PLP third-grade students scored at or above the 50th NPR in language arts, math and reading on the SAT9 test in 1998/99. These data however are for *all* third-grade students who took the SAT9 in the 12 Non-PLP and PLP schools, not just the random sample of students who were tracked in these 12 evaluation sites, and does not control for differences across the entire student population. For the LAUSD schools, the evaluation was able to obtain individual SAT9 test score information, which could be linked to student demographic information, the teacher survey data, and the parent phone survey data. This allowed for detailed analyses of the relationship between student achievement and parent involvement.

Primarily, third-grade students in the LAUSD PLP schools scored 4.5 percentile points higher in reading on the SAT9 in 1998/99 than Non-PLP LAUSD students after controlling for student ethnicity, low income status, Title I status, Limited English Proficient status, third-grade class size, number of years teacher taught third grade, teacher’s emergency credential status, parent education, and employment status of the household. In addition, these analyses showed no differences for the math and language arts SAT9 scores between the PLP and Non-PLP LAUSD students.

Parent involvement in terms of attending parent conferences, visiting the classroom, volunteering in the classroom, attending schoolwide events, and providing reading support or homework support to their child in the home has varying effects on students’ academic performance and achievement even when controlling for student and teacher characteristics. Controlling for student ethnicity, low income status, Title I status, Limited English Proficient status, third-grade class size, number of years teacher taught third grade, teacher’s emergency credential status, parent education, and employment status of the household, the evaluation found the following relationships: Reading support in the home has a positive effect on LAUSD math SAT9 scores. Parents visiting the classroom, volunteering in the

classroom, and contacting the teacher is associated with increases in student reading comprehension (measured in the spring 1999). Both reading support in the home and parents visiting the classroom, volunteering in the classroom, and contacting the teacher are positively related to LAUSD language arts SAT9 scores. Parents' presence at schoolwide events is negatively related to a student's standing in math and a student's standing in reading decoding skills (both were measured in spring 1999, and regressions also control for their standing in the fall). Homework support also is negatively related to a student's standing in reading decoding skills and reading level on running records (both were measured in spring 1999, and regressions also control for their standing in the fall). However none of these differences are attributable specifically to PLP or Non-PLP participation. These are overall relationships found between parent involvement and third-grade achievement.

In the end, student performance or achievement in reading was positively affected by PLP activities at the school, whereas math and language arts performance, disruptive behavior, and academic habits were unaffected by PLP activities at the school.

### **Recommendations**

Given the goals of the School Families and their progress in implementing PLP, there are several recommendations for how LAAMP and the School Families could strengthen the impact of their efforts.

LAAMP and PLP are reaching some of the teachers and parents in some of their schools; but again, they need to reaffirm to their School Families the need for significant, coordinated learning opportunities for teachers and parents to increase meaningful parent involvement in schools to support students' learning. Professional development and parent education needs to reach *all* teachers and *all* parents if they are going to continue to influence and improve the quantity and quality of the communication between parents and teachers. Increased parental involvement appears to start with increased parent-teacher communication and parent-teacher interaction.

Moreover, half of the teachers in PLP schools who are motivated to involve parents in their classrooms felt that their schools were not preparing them on *how* to involve parents. This needs to be addressed in a concerted and consistent manner in the schools. Engaging teachers in the process of developing strategies for involving

parents could provide the necessary buy-in and sufficient detail by grade-level to prove successful.

PLP teachers are starting to use the voicemail system in their schools to communicate with their students' parents. But the voicemail is primarily being used by parents as a device to leave messages for teachers. This is a very limited use of the capabilities of the voicemail system, particularly considering its expense and installation. Teachers and staff in PLP schools may need additional training on the broad uses of voicemail.

With a restricted number of professional development days and limited resources, it is a tough choice for principals and districts to provide the necessary preparation for teachers regarding parent involvement. LAAMP and PLP need to re-iterate this need, particularly to principals and district leaders. Furthermore, specific strategies involving parents in their child's academics, engaging parents to visit or help in the classroom, and effectively communicating with parents need to be discussed and supported through informal processes at the school, especially if formal professional development time is limited. Equipping teachers with better strategies on how to encourage parents to visit the classroom and take an active role in understanding what their child is to be learning during the school year is a first big step. This is not to say that professional development needs to be separate from professional development on curriculum, instruction, and other important school reform topics; rather, it could be integrated as an important element within these other opportunities. Integrating parent involvement as a serious topic into professional development on curriculum and instructional issues could be another way to provide these types of strategies to teachers and reinforce the importance of such actions. The point is that teachers are not going to change their practices unless there is support for their learning and changes in expectations in these areas.

Some parents in the PLP schools are attending workshops and finding them valuable. However more parents still need to be reached. Parent education in PLP schools needs to be more than business as usual. Offering parent education is not sufficient to ensure effective communication with parents or parent participation in these opportunities. Contact with parents needs to be broadened from a small group of parents to *all* parents. Contact with parents also needs to be deepened by the schools and by the teachers. Schoolwide or School Family-wide strategies need to be developed to combat some of the barriers to parent participation at the schools and

in the classrooms, and to attending workshops. PLP and its schools also should design strategies on how to more effectively recruit parents.

School Families should recognize the large role teachers and other school staff can play in contacting parents and encouraging their participation on campus and in the classroom, as well as in strengthening parents' relationships to schools. Professional development for teachers and direct encouragement from school administration and staff will be necessary to increase parent presence at the schools and in the classroom. School staff and teachers need to take an active role and feel it is part of their responsibility to encourage parents to attend parent workshops and visit their children's classrooms if parental participation is going to increase at the schools.

Parent conferences are heavily attended across the School Families, and many parents are on campus for other schoolwide events, particularly as students move from second grade to third grade. This parent presence at the schools would be a good place for teachers particularly, but also for other school staff, to engage parents in discussions about the benefits of parent education workshops, reading practices at home, and communicating with teachers more frequently about the progress of their child. This dialogue between a parent and a teacher is key to eventually building a supportive learning environment and increasing student achievement.

In summary, PLP has made progress at various levels. Schools have raised their level of consciousness about the importance of parental involvement and have set firmer goals. More teachers are engaging in professional development targeted toward parent involvement. Parent education continues to be offered at the schools, and parent satisfaction with the workshops has increased. Parents are contacting and visiting their children's classrooms more often. More parents are supporting homework and reading regularly with their children at home. To take advantage of these changes and to improve student achievement, PLP schools need to translate these small changes into a more substantial increase in parental participation at the school and in the classroom. They also need to work to change the current one-way pattern of parent-teacher communication, with teachers passing on information, to a meaningful two-way communication about academics. Only these more dramatic changes will provide the type of supportive learning environment necessary to improve student performance and behavior. These changes will require a more concerted and intense effort to reach *all* teachers and *all* parents in LAAMP, PLP and the School Families.

**APPENDIX A**  
**STUDENT DEMOGRAPHICS AND SCHOOL CHARACTERISTICS**  
**BY SCHOOL FAMILY**

**School Family A**

The elementary schools in School Family A have a total student population of 2,155 students (California Basic Education Data System, Fall 1995). Seventy-five percent of the elementary school population is Hispanic, 21% Asian/Other, 2% African American, and 1% White. Of the elementary school population, 68% are Limited English Proficient, 47% are receiving AFDC, and almost all of the students (97%) receive free/reduced lunch. Overall, the schools re-designated 10.6% of their Limited English Proficient students in 1996-97, hired 26 emergency credentialed teachers, have a ratio of 18.2 students per computer, have no classrooms connected to the Internet, and have an average class size throughout the school of 24.1 students. Third-grade students' median percentile scores on the Stanford 9 for math, reading, and language were 29, 22, and 22, respectively. Refer to Table A.1 for student demographics and school characteristics for all elementary schools in School Family A, as well as the four individual evaluation sites.

The two schools chosen to represent School Family A for the evaluation are very similar to all the schools in the School Family in terms of ethnic enrollment, LEP, AFDC, receiving free lunch, number of classrooms connected to the Internet, and average schoolwide class size. However, the two PLP schools compared to all the schools in the School Family have lower re-designation rates and fewer emergency credentialed teachers. The schools' third-grade test scores are at the high and low ends of the School Family average—representing the range of test scores in the School Family as a whole. One of the PLP schools also has a higher ratio of students per computer than the School Family average. In general, then, the two PLP schools represent their School Family well.

Examining school characteristics, we notice that the Non-PLP schools, in contrast to the PLP schools, tend to have slightly lower percentages of children receiving free lunch and AFDC; lower percentages of LEP children and a higher re-designation rate; fewer emergency credentialed teachers but a similar schoolwide class size; and similar third-grade median percentile scores on the Stanford 9 in math, reading and language. Moreover, the Non-PLP schools, particularly School 4,

Table A.1

## Student Demographics and School Characteristics 1997-98: School Family A Elementary Schools and Four Evaluation Sites

	All elementary schools ( <i>N</i> = 2155)	Evaluation sites			
		PLP School 1 ( <i>N</i> = 457)	Non-PLP School 2 ( <i>N</i> = 611)	PLP School 3 ( <i>N</i> = 490)	Non-PLP School 4 ( <i>N</i> = 449)
<b>Ethnicity</b>					
Asian/Other	21 <sup>a</sup>	28.7	11.3	12.63	3.5
Hispanic	75 <sup>a</sup>	71.1	62.7	83.3	75.3
African American	2 <sup>a</sup>	0	10.8	2.9	12.5
White	1 <sup>a</sup>	0.2	15.2	2.0	8.7
LEP	68 <sup>a</sup>	83.6	38.5	67.8	26.5
% redesignated (96-97)	10.6	2.1	8.1	0.3	5.8
AFDC	47 <sup>a</sup>	51.9	24.2	38.4	37.6
Free/Reduced lunch	97 <sup>a</sup>	98.0	55.6	94.5	85.1
<b>Test scores: Stanford 9 3rd Grade—Median</b>					
Math	29	28	35	44	26
Reading	22	14	27	37.5	23
Language	22	16	38	34	24
Students per computer	18.2	15.2	22.6	44.5	8.6
Number of classrooms on the Internet	0	0	0	0	0
Emergency credential teachers (96-97)	26	7	0	3	1
Average class size (schoolwide) (96-97)	24.1	23.2	24.2	26	24.9

Sources. Data on ethnic enrollment, number of students per computer, number of classrooms on the Internet, emergency credential teachers, and average class size are from the California Basic Education Data Systems (CBEDS). Limited English Proficient student (LEP) data were provided by the Language Census. Aid to Families with Dependent Children (AFDC) and free/reduced lunch data are from the AFDC report. Test score data are provided by the district. All data are from 1997-98 unless otherwise indicated.

<sup>a</sup> These data are from California Basic Education Data Systems (CBEDS), fall 1995.

also have slightly fewer Asian/Other students and slightly more African American and White students. School 4 also has a lower ratio of students per computer. These data suggest that the Non-PLP schools compared to the PLP schools have fewer disadvantaged students. Also the Non-PLP schools have had enough experienced teachers on staff to maintain the same class sizes schoolwide as the PLP schools

without hiring as many emergency credentialed teachers. Despite these differences, the PLP and Non-PLP schools have similar test scores in third grade. In the end, the two selected Non-PLP schools were deemed the best available matches for the PLP schools in School Family A despite their differences. However, these differences in compositional factors of the teaching staff and the student population, as well as the similar test scores for third graders, should be noted in the text when the PLP schools in School Family A and the Non-PLP schools are contrasted.

### **School Family B**

The elementary schools in School Family B have a student population of 8,878 students (California Basic Education Data System, Fall 1995). Eighty-one percent of the elementary school population is Hispanic, 10% White, 7% Asian/Other, and 2% African American. Of the elementary school population, 68% of the students are Limited English Proficient, 26% are receiving AFDC, and 87% are receiving free/reduced lunch. Overall, the schools re-designated 8.5% of their LEP students in 1996-97, hired 67 emergency credentialed teachers, have a ratio of 15.5 students per computer, have 4 classrooms connected to the Internet, and have an average schoolwide class size of 25 students. Third-grade students' median percentile scores on the Stanford 9 for math, reading, and language were 32, 25, and 27, respectively. Refer to Table A.2 for the student demographics and school characteristics for all the elementary schools in School Family B, as well as the four individual evaluation sites.

The two PLP schools chosen to represent School Family B for the evaluation are very similar to all the schools in the School Family in terms of ethnic enrollment, LEP, AFDC, emergency credentialed teachers, average schoolwide class size, and median math, reading, and language test scores, with a few exceptions. One of the PLP schools has fewer White students, more Limited English Proficient students, a higher ratio of students per computer, and slightly lower median math scores for third graders; the other PLP school has slightly lower median reading scores for third graders compared to all of the schools in the School Family. Furthermore, both of the PLP schools compared to all the schools in the School Family have lower re-designation rates for LEP students, higher percentages of students receiving free lunch, and no classrooms connected to the Internet. In the end, the two PLP schools represent their School Family fairly well.

Table A.2

## Student Demographics and School Characteristics 1997-98: School Family B Elementary Schools and Four Evaluation Sites

	All elementary schools ( <i>N</i> = 8878)	Evaluation sites			
		PLP School 1 ( <i>N</i> = 1230)	Non-PLP School 2 ( <i>N</i> = 1282)	PLP School 3 ( <i>N</i> = 1037)	Non-PLP School 4 ( <i>N</i> = 897)
Ethnicity					
Asian/Other	7 <sup>a</sup>	5	3.1	2.6	1
Hispanic	81 <sup>a</sup>	79.8	87.6	92.1	89.3
African American	2 <sup>a</sup>	2.7	4.5	1.4	7.9
White	10 <sup>a</sup>	12.4	4.7	3.9	2.1
LEP	61 <sup>a</sup>	69.5	70.2	82.2	58.6
% redesignated (96-97)	8.5	3	11.4	5.1	6.3
AFDC	26 <sup>a</sup>	27	21.1	23.2	49.1
Free/Reduced lunch	87 <sup>a</sup>	90.6	90.3	93.8	94.5
Test scores: Stanford 9 3rd Grade—Median					
Math	32	31	31.5	22	18.5
Reading	25	18	26	25	16
Language	27	23	32	29	20
Students per computer	15.5	16.6	32.9	25.9	23
Number of classrooms on the Internet	4	0	0	0	0
Emergency credential teachers (96-97)	67	7	5	4	4
Average class size (schoolwide) (96-97)	25.0	24.3	28.9	25.0	24.3

Sources. Data on ethnic enrollment, number of students per computer, number of classrooms on the Internet, emergency credential teachers, and average class size are from the California Basic Education Data Systems (CBEDS). Limited English Proficient student (LEP) data were provided by the Language Census. Aid to Families with Dependent Children (AFDC) and free/reduced lunch data are from the AFDC report. Test score data are provided by the district. All data are from 1997-98 unless otherwise indicated.

<sup>a</sup> These data are from California Basic Education Data Systems (CBEDS), fall 1995.

Examining the characteristics of PLP and Non-PLP schools, we notice that the Non-PLP schools, in contrast to the PLP schools, tend to have slightly more African American students and fewer Asian/Other students. However they are similar across many characteristics: percentages of children receiving free/reduced lunch and AFDC; median test scores for math, reading and language; no classrooms connected to the Internet;

number of emergency credentialed teachers; and average schoolwide class size. In addition, one of the Non-PLP schools has remarkably fewer LEP students and more students receiving AFDC, whereas the other Non-PLP school has a much higher re-designation rate and a higher number of students per computer. These data suggest that the PLP and Non-PLP schools are very similar except for their slightly different ethnic populations. In the end, the two selected Non-PLP schools were deemed the best available matches for the PLP schools in School Family B despite their slight differences.

### **School Family C**

The elementary schools in School Family C have a total student population of 4,201 students (California Basic Education Data System, Fall 1995). Forty-one percent of the elementary school population are Hispanic, 27% are Asian/Other, 25% are African American, and 8% are White. Of the elementary population, 46% of the students are Limited English Proficient, 35% are receiving AFDC, and 89% receive free/reduced lunch. Overall, the schools redesignated 15% of the LEP students in 1996-97, hired 54 emergency credentialed teachers, have ratio of 9.1 students per computer, have 59 classrooms connected to the Internet, and have an average schoolwide class size of 25.2 students. Third-grade students' median scores on the SAT9 for math, reading, and language were 29, 18, and 24, respectively. Refer to Table A.3 for student demographics and school characteristics for all the elementary schools in the School Family, as well as the four individual evaluation sites.

The two PLP schools chosen to represent School Family C for the evaluation are very similar to all the schools in the School Family in terms of percentage of students receiving free lunch, number of emergency credentialed teachers, average schoolwide class size, and median third-grade math, reading, and language scores on the SAT9. However, one of the PLP schools differs from the other elementary schools in the School Family in terms of a much higher number of classrooms connected to the Internet. The other PLP school also differs slightly: It has more White and Asian/Other students and fewer Hispanic students; more LEP students and a lower redesignation rate; and a higher number of students receiving AFDC. Despite these small differences, particularly in the one PLP evaluation school, the two PLP schools do represent their School Family well, specifically in terms of schoolwide class size and test scores of third graders.

Table A.3

## Student Demographics and School Characteristics 1997-98: School Family C Elementary Schools and Four Evaluation Sites

	All elementary schools ( <i>N</i> = 4201)	Evaluation sites			
		PLP School 1 ( <i>N</i> = 1022)	Non-PLP School 2 ( <i>N</i> = 950)	PLP School 3 ( <i>N</i> = 890)	Non-PLP School 4 ( <i>N</i> = 1063)
Ethnicity					
Asian/Other	27 <sup>a</sup>	24	14.7	34	18.3
Hispanic	41 <sup>a</sup>	46	54.9	34	57.9
African American	25 <sup>a</sup>	27	25.7	20	22.8
White	8 <sup>a</sup>	3	4.6	12	1.1
LEP	46 <sup>a</sup>	51	52.0	60	67.8
% redesignated (96-97)	15	12	1	0	10
AFDC	35 <sup>a</sup>	29.5	48.5	45.1	55.4
Free/Reduced lunch	89 <sup>a</sup>	89	100	89	91.1
Test scores: Stanford 9 3rd Grade—Median					
Math	29	25	20	29	28
Reading	18	21	12	22	13
Language	24	28	20	32	20
Students per computer	9.1	6.6	21.1	7.8	10.4
Number of classrooms on the Internet	59	30	0	3	1
Emergency credential teachers (96-97)	54	6	15	8	17
Average class size (schoolwide) (96-97)	25.2	24.9	23.6	24.5	22

Sources. Data on ethnic enrollment, number of students per computer, number of classrooms on the Internet, emergency credential teachers, and average class size are from the California Basic Education Data Systems (CBEDS). Limited English Proficient student (LEP) data were provided by the Language Census. Aid to Families with Dependent Children (AFDC) and free/reduced lunch data are from the AFDC report. Test score data is provided by the district. All data is from 1997-98 unless otherwise indicated.

<sup>a</sup> These data are from California Basic Education Data Systems (CBEDS), fall 1995.

Examining the characteristics of PLP and Non-PLP schools, we notice that the Non-PLP schools, in contrast to the PLP schools, tend to have fewer Asian/Other students and more Hispanic students; slightly more students receiving both AFDC and free lunch; and more emergency credentialed teachers; but they are very similar

on performance measures: average schoolwide class size, redesignation rate, and median third-grade test scores in math, reading and language. One of the Non-PLP schools also has more students on average per computer. In the end, however, the two selected Non-PLP schools were deemed the best available matches for the PLP schools in School Family C, since the PLP and Non-PLP schools in School Family C have very few differences, which makes them very good comparison groups.

## APPENDIX B

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