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## RESEARCH-TO-PRACTICE SUMMARY

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### She is awesome and retains information like a sponge: Implications of the Learning Connections family involvement curriculum for Head Start programs

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Past research on family involvement suggests that home based forms of involvement are especially important in supporting learning in the early childhood years. Parents can be effective change agents, especially when they are given strategies for teaching particular content area skills. This study addressed the effects of family participation in the home component of an emergent literacy and mathematics curriculum. Participants were 321 Head Start children and their parents who were recruited over four consecutive school years. Families received weekly home learning activities to do with their children that closely matched the content of the classroom curriculum. Involvement in the home curriculum was significantly associated with children's language, literacy, and math outcomes, controlling for child age, dual language status, pretest performance, and classroom quality. When families completed more of the home activities, their children made greater progress during the school year. Families enjoyed doing the home activities and parents reported increased confidence in their teaching skills. Results suggest that given appropriate support, families can successfully address curriculum goals at home and provide an added value to learning that occurs in the Head Start classroom.

Family engagement is a cornerstone of the Head Start organizational philosophy and Program Performance Standards. As stated in the *Head Start Parent, Family, and Community Engagement Framework*: "When parent and family engagement activities are systemic and integrated across program foundations and program impact areas, family engagement outcomes are achieved, resulting in children who are healthy and ready for school" (U.S. Department of Health and Human Services, 2011, p. 1). The underlying expectation is that children benefit when their families are highly involved.

Family involvement includes both individual and organizational beliefs and practices. Forms of family involvement include: (a) basic parenting, (b) home-school communication, (c)

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supporting children's school-related learning at home, (d) direct school participation, (e) school leadership, (f) home-community partnerships, and (g) aspirations and expectations for children's academic success (Epstein, 1995; Fantuzzo, McWayne, Perry & Childs, 2004). In the early childhood period, the forms of family involvement most strongly associated with children's developmental skills are those involving direct parental teaching, stimulation, and modeling in the home (Fantuzzo et al., 2004; McWayne, Hampton, Fantuzzo, Cohen, & Sekino, 2004). School-based forms of involvement and parental expectations play a more prominent role as children mature (Fan & Chen, 2001; Hill & Tyson, 2009; Jeynes 2007).

Parents' provision of learning materials, rich stimulation, and informal instruction of their children in the context of everyday home and neighborhood life has a widespread influence on preschool children's language, cognitive, and early academic skills (Bus, van IJzendoorn, & Pelligrini, 1995; Hart & Risely, 1995; Saxe, Guberman, & Gearhart, 1987; Sénéchal & LeFevre, 2002). Home instruction is more effective, however, when parents receive training and practice in using specific teaching strategies (such as dialogic reading) and learning materials (such as home math kits) (Arnold, Lonigan, Whitehurst, & Epstein, 1994; Starkey & Klein, 2000; Whitehurst et al., 1988). These focused training studies demonstrate that parents can have a strong effect on their children's acquisition of language, literacy, and early math skills. In fact, parents have sometimes been found to be more effective change agents than teachers (Lonigan & Whitehurst, 1998; Sénéchal & Young, 2008). Thus, interventions in which parents are taught content-specific instructional skills are an enormous potential resource for Head Start programs.

In this paper we describe family involvement outcomes of the Learning Connections (LC) curriculum. LC is an emergent literacy and mathematics enrichment curriculum that has parallel classroom and home components. The home curriculum includes (a) parent education on developmental processes and teaching strategies, (b) structured weekly home learning activities, and (c) informal coaching and support for families.

## SUMMARY OF RESEARCH METHODS

### Participants

Participants were 321 Head Start children and their parents from ten classrooms in an Early Reading First project. Data were collected over a four year period. The average child age at pretest was 44.81 months (range 30 to 60 months). Four percent of children had an Individualized Education Plan, 53% were boys, 37% were dual language learners (DLL), and 89% were of Asian American/Pacific Islander heritage.

### Curriculum

Teachers implemented the Learning Connections (LC) curriculum (DeBaryshe & Gorecki, 2005, 2007; DeBaryshe, Gorecki, & Mishima-Young, 2009). LC is an enrichment curriculum that focuses on oral language, phonological and phonemic awareness, print concepts and alphabet knowledge, emergent writing, number sense and mathematical operations, geometry, and measurement. The home component of the curriculum consists of weekly home activities that extend content introduced in the classroom. Each activity is designed to take 10-15 minutes to

complete in the context of regular family routines. Examples include (a) taking a nature walk to collect objects, clapping the names of each object syllable-by-syllable and sorting the objects by the number of syllables in each name; (b) using a nonstandard measuring tool (a paper slipper) to measure and compare the heights of different family members; and (c) identifying the first sound heard in the names of different food items consumed at a family meal. Each week, families received a one-page instruction sheet as well as any needed materials not readily available at home. Families were also provided with age-appropriate books and were asked to read aloud on a regular basis. Multilingual families were encouraged to conduct the home activities in the language of their choice.

Support for families was provided through two mechanisms—coaching and family workshops. Every other week, a coach was present during pick-up or drop-off time. The coach posted samples of the upcoming home activities on a display board that remained in the classroom until the next demonstration session. The coach spent about five minutes with each parent, during which time she demonstrated the activity, discussed specific learning goals, provided tips on individualization based on her knowledge of the child’s language use and classroom performance, and encouraged parent-to-parent conversation and support. Three workshops were also offered each school year to provide more in-depth information about the developmental foundations of the home curriculum. Workshops lasted approximately one hour and were held in the classroom; each session included a research overview, hands-on activities, and discussion.

## Research Design

We used a mixed-method design. Quantitative data included (a) home activity participation (measured as the percentage of home activities completed and returned to the teacher), (b) an annual parent satisfaction survey, (c) classroom quality on the *Classroom Assessment Scoring System* (CLASS) (Pianta, La Paro, & Hamre, 2005), and (d) yearly pre- and posttest assessment of children’s academic skills in the areas of oral language (Dunn & Dunn, 1997), emergent reading (Reid, Hresko, & Hammill, 2001), alphabet knowledge and phonological awareness (Invernizzi, Sullivan, Meirer, & Swank, 2004), and emergent mathematics (CTB/McGraw-Hill, 1990). We also did a qualitative analysis of parents’ responses to open-ended survey items, home activity comment sheets, and focus group discussions. This allowed us to get a more detailed and personal understanding of parents’ experiences with the home curriculum.

## SUMMARY OF RESULTS

### Effects of Home Activity Participation on Children’s Learning

Average over the four years, parents completed 54% of the home activities. However, participation increased steadily over time, rising from 37% in Year 1 to 81% in Year 4. We used multilevel modeling to test whether home activity participation predicted children’s end-of-year academic skills. For all four academic assessments we found that when families completed a higher percentage of home activities, their children had higher posttest scores. The benefit of

doing the home activities was above and beyond the effects of pretest skill, age, DLL status, and classroom quality.

### Parents' Experiences

Survey data showed that parents were very enthusiastic about the home curriculum. Between 90% to 100% of parents (depending on the project year and the particular survey item) said that the LC home activities were clearly written, fun to do, contributed to their children's learning, and helped parents be more effective in supporting their children's learning at home. Satisfaction was slightly lower for the coaches' demonstrations, mostly because some parents were not able to attend.

The qualitative analysis identified three main themes. *Mutual enjoyment* was the first theme. Parents and children looked forward to the home activities because they "make learning fun" and provided "quality family time" that strengthened parent-child bonds. The second theme was *children's learning and motivation*. Children mastered the learning goals of the home activities and parents described how they progressed on a wide variety of skills. Children also showed enthusiasm and pride in learning; they were "excited" to share their knowledge with parent and siblings and made connections between home and school activities. The last theme was *parents' involvement*. Parents felt better prepared to help their children learn, were more aware of their children's potential, understood the content of the school curriculum, and saw themselves as contributing to its success. There were also challenges to being involved, mostly relating to time constraints and language barriers.

## DISCUSSION AND IMPLICATIONS FOR PRACTICE

Parents and other adult family members are an important resource that can and should be employed to enhance Head Start children's school readiness. The LC model may be useful to Head Start programs seeking to enhance family engagement. The LC home curriculum was highly successful in engaging families and supporting children's learning. Parents and children enjoyed the structure and shared routine that the home activities provided. Parents saw changes in their children's early academic skills as a result of the home curriculum and their perceptions were validated by objective assessment data. When parents did all or most of the home activities, their children had stronger language, literacy, and math skills, even when we took into account child age, pretest skills, and classroom quality. Implications for Head Start programs are as follows:

1. When parents are given enough support they can be highly effective teachers. Our approach was to provide parents with (a) a conceptual understanding of the relevant developmental processes, (b) clear step-by-step instructions that serve as a lesson plan for each home activity, (c) time to practice the activities, ask questions, and share observations about their child, and (d) encouragement and social support.
2. Home activities should be a regular and expected component of the curriculum. A frequent, predictable schedule helps families establish a routine. Home activities should be easy to follow, engaging, and feasible to fit into families' busy schedules.

3. Children and families benefit when the learning objectives and content of home activities are closely linked to the classroom curriculum. Parents gain a more sophisticated understanding of the teachers' work and become empowered by serving as co-instructors with the classroom staff. Children see that the same ideas are valued at home and at school and their learning is deepened when they apply the same knowledge in both settings.
4. Family involvement can be a self-reinforcing process. Parents saw the results of their efforts in their child's enthusiasm and progress. This success boosted parents' self-confidence and they found much satisfaction in working with their child. When parents did not already see themselves as teachers, the LC activities and training provided a clear message about the importance of home teaching and a set of strategies to use. Parents should be part of an educational team, working together with the teachers and schools to help children reach academic goals. It is too early to see whether family involvement efforts like LC have long-term effects on family engagement and children's academic achievement into elementary school. Based on the strength of the results presented here, we believe this question deserve to be answered.

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