

Testimony of
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Early Education: From Science to Practice
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Mr. Chairman and Members of the Committee:

It is indeed a privilege to be here representing the Parents as Teachers National Center, which serves more than 2,800 Parents as Teachers (PAT) sites in all 50 states and several other countries. I am Sharon Rhodes, Director of Program Development and Evaluation at the Parents as Teachers National Center. Thank you for your invitation to appear before the committee today to present on the importance of parental involvement in children's learning from the earliest years, and on Parents as Teachers, which is a parent support and education program founded on the principle that parents are the most important determinants of their children's success in school and in life. I have been involved in Parents as Teachers since 1985, when it was implemented statewide in Missouri, thanks to the vision and leadership of then Governor, now Senator, Kit Bond. In addition to my statement today, I have provided a written statement for the record.

Parents as Teachers National Center recognizes that the first years of life are a time of tremendous growth and learning. Research has clearly demonstrated this. We also recognize that the quality of a child's environment in these early years has a strong influence on that child's later development and success in school and life. Our experience has demonstrated the effectiveness of helping to engage families early in their child's development. Further, thirty years of research show that greater family involvement in children's learning is a critical link in the child's development of academic skills, including reading and writing. Parents as Teachers and other family support and parent education programs that emphasize the earliest years of life can be part of a broader effort to foster widespread parent involvement in their children's learning and education.

The Parents as Teachers Program

Parents as Teachers is a parent education and support program that helps parents give their child the best possible start in life. The program is designed to enhance child development and school achievement through parent education accessible to all families, beginning even before the child's birth. Acknowledging that all parents deserve support in laying a strong foundation for their child's success, Parents as Teachers is designed for the voluntary participation of all families. It is a universal access program, appropriate for and welcoming of families from all walks of life.

The work of Parents as Teachers is grounded in these guiding principles:

- The early years of a child's life are critical for optimal development and provide the foundation for success in school and in life; children are born to learn!
- Parents are their children's first and most influential teachers. Parents are the experts on their own children by virtue of the special knowledge and insight that comes from everyday family experiences and the attachment parents and their children share.
- All families have strengths, and all parents want to be good parents.
- Established and emerging research should be the foundation of parent education and family support curricula, training, materials and services.
- All young children and their families deserve the same opportunities to succeed, regardless of any demographic, geographic or economic considerations.

Among home visiting programs, Parents as Teachers is alone in offering a universal access model. For example, in Missouri and Kansas, PAT is available to all families with children in the appropriate age range. Recognizing that all families can benefit from support, Parents as Teachers families come in all configurations, from all socio-economic levels, and from both rural and urban communities. This universal access reduces the stigma that other programs addressing only high-risk families may carry. However, universal access does not mean that one size fits all. Parents as Teachers has been adapted to meet the needs of diverse families in different ways.

Parents as Teachers brings research-based information (grounded in both child development and neuroscience) to parents in a user-friendly format to help them understand how they can impact their child's development, starting prenatally. The Parents as Teachers Curriculum offers a holistic approach, covering 4 domains of development (cognitive, motor, social-emotional, and language), emphasizes increasing parents' knowledge of child development, and focuses on sharing parent-child activities that will foster that development and enrich parent-child interaction.

The Parents as Teachers Born to Learn™ Curriculum, developed in collaboration with neuroscientists from the Washington University School of Medicine in St. Louis and the University of Chicago Medical School, distinguishes Parents as Teachers from other parent support programs. The Born to Learn™ Curriculum is infused with neuroscience-based information for parents about their child's brain growth and development, translated into concrete "when", "what", "how" and "why" suggestions to enhance their children's learning and development. The goal is not to turn parents into neuroscientists; using the Born to Learn™ Curriculum, parent educators provide parents with the tools to use science in everyday ways. For example, language learning, which neuroscience research has shown begins in the first few months of life, is encouraged by sharing with parents the value of "parentese" and face-to-face talking with their infants. The value of play is underscored by connecting it with how the brain develops. For example, repetitive games and games that stimulate several senses are encouraged because they build and strengthen connections among brain cells.

The Curriculum also provides flexibility as to how the information is presented. Detailed personal visit plans are offered in weekly, bi-weekly and monthly formats to accommodate individual family and program needs. The parent materials are developed at two reading levels to meet the literacy needs of a variety of families. Curriculum and parent materials are now being made available in Spanish as well as English. The curriculum begins prenatally and is organized around children's developmental stages.

The Born to Learn™ Curriculum is the heart of Parents as Teachers. In addition to core Parents as Teachers programs, many other early childhood programs use the Born to Learn™ Curriculum and training to supplement their services to families. These programs, which include Even Start, Head Start, Family Resource Centers, child care centers, and Healthy Families America, have a variety of target areas: early literacy, child abuse prevention, health care, parent education and early childhood development, and yet the Born to Learn™ Curriculum is effective for each.

The Parents as Teachers model in its delivery has four components: 1) personal visits, 2) group meetings, 3) developmental, health, vision, and hearing screenings, and 4) a resource and referral network.

Personal Visits. To most families enrolled in Parents as Teachers, the personal visit stands out as the major service delivery component. Personal visits support parents in their parenting role in order to promote optimal child development and positive parent-child interaction. The Parents as Teachers National Center recommends personal visits be conducted at least monthly. (Families with greater needs might receive weekly or bi-weekly visits.)

A trained, certified Parents as Teachers parent educator conducts the personal visit. A typical visit begins with the parent educator's preparation, as she reviews the personal visit plan in the

Curriculum, collects the handouts to share with the parent, and assembles materials for the parent-child activity. As she plans the visit, she remembers interests, concerns or needs the parents have expressed, as well as observations she has made of the child's development. Using these, she can make this truly a personal visit, individualized for the family she will be seeing.

The personal visit typically lasts an hour, and is usually held in the family's home. The parent educator, parents or primary care providers, and child make themselves comfortable on the floor, the child's play space. Sometimes other people join in the visit, such as child care providers, grandparents, adult relatives or other children. Anyone living in the home or involved in the care of the child is a welcome participant. The parent educator begins by checking in with the parents. What new things has the child done since the last visit? How did the child and parent like the follow-up activity the parent educator suggested at the last visit? She will also pay attention to the child, talking to him, including him in the conversation, and making observations about his development. Throughout the visit the parent educator will be sensitive to the comments and concerns of the parents. While talking to the parents, the parent educator will incorporate discussion points on topics included in this visit plan. She may present a parent handout and focus the discussion by referring to it. She may show a short video segment that illustrates an aspect of brain development. The provision of information is conversational, and is woven into the interaction between parent, child and parent educator. Most often the parent educator will use an observation of the child to provide the context for the information and make it relevant to the parents.

The parent educator will also engage the parents and child in an activity that is based on the information presented in the plan. This provides for meaningful interaction between the parents and child, and gives the parents an opportunity to observe their child's development. What the parent and child will also remember, however, is that it was fun. The parent educator suggests a follow-up activity that extends the learning through the time between personal visits.

A literacy activity is an important part of each visit. The parent educator brings a book, often related to the parent-child activity, for the parent to read to the child. Book exploration skills are taught, including telling a story based on the pictures in the book, so that parents of varying literacy levels can successfully read to their child. Rhymes and songs are a part of many visit plans, and parent handouts support the development of the child's phonological awareness.

At the end of the visit the parent educator checks for any last questions or concerns the parents might have. She summarizes the visit by reviewing a significant developmental characteristic she was able to observe, reflecting on a strength she observed in the parents, and reminding the parents of the follow-up activity she has given them to do.

Programs typically offer visits in the evenings and on Saturdays to accommodate the schedules of working parents.

Group Meetings. A Parents as Teachers parent group meeting is an opportunity to enhance parents' knowledge of child development and parenting issues through group experiences. Group meetings provide opportunities for parents to broaden their knowledge, learn from each other, observe their children with other children, and learn and practice parenting skills. Topics may include early brain development, fostering the child's interest in books, choosing developmentally appropriate toys, to name a few.

Developmental and Health Screenings. Parents as Teachers provides periodic screening for early identification of developmental delays or health problems. Research-based screening instruments are used and parent educators receive training in their administration. Screening provides regular review of each child's developmental progress, identifies strengths and abilities as well as areas of concern that require referral for follow-up services, and increases the parent's understanding of his or her child's development.

Resource and Referral Network. Families may have needs for services that are outside the scope of Parents as Teachers. Parent educators help families identify interests and needs, connect with needed resources, and overcome barriers to accessing services. Referrals to pediatricians, child diagnostic or therapy programs that are indicated as a result of screening are prime examples of this service. Other examples include helping families provide for basic needs such as housing or utilities, connecting families to child care, and making sure that adequate medical care is accessible and affordable for the family. Each local Parents as Teachers program develops a resource network within its own community that it can use to locate services for families. Each Parents as Teachers program also has a Community Council made up of representatives from local agencies, and that also provides links to service providers in the community.

Success of the Parents as Teachers Program

Parents as Teacher began with four pilot sites in 1981, was implemented statewide in Missouri in 1985, and currently has more than 2,800 sites in 50 states as well as foreign countries and U.S. territories. The Parents as Teachers National Center has trained and certified over 10,000 parent educators. Several hundred thousand families have participated in Parents as Teachers. Nationwide, Parents as Teachers is successfully blended with many existing programs for families of young children. These existing programs for families of young children often have a home visitation component delivered by family service workers or family educators, but without a research-based child development curriculum. They incorporate the Parents as Teachers model to add parent education through home visiting or to enhance the quality of their services to families. The tremendous growth of Parents as Teachers can be attributed to the adaptability of the program, research-based curriculum and training, flexibility of the program, universal access approach, relatively low cost of implementation, and documentation of program effectiveness.

PAT has a long history of independent evaluations demonstrating positive outcomes for young children and their families. The evaluations have focused on three main areas: (1) child development; (2) parent knowledge, attitudes, and behavior; and (3) parent-child interaction.

Child Development: Results of the evaluations show that Parents as Teachers prepares children to enter kindergarten ready to succeed. Parents as Teachers children are more likely to be on-track developmentally and to have developmental delays identified early and remediated. An evaluation of the statewide implementation of the Parents as Teachers program in Missouri found that more than one half of the children with observed developmental delays overcame them by age three. Parents as Teachers children at age 3 are significantly more advanced in language, social development, and problem solving and other cognitive abilities than comparison children. The positive impact on Parents as Teachers children carries over into the elementary school years. Parents as Teachers children score higher on kindergarten readiness tests and on standardized measures of reading, math and language in first through fourth grades.

Parent Knowledge, Attitudes, and Behavior: Parents as Teachers parents gain knowledge of child development, good parenting practices, and confidence in their parenting skills. They show increased understanding of how to promote optimal child development. Parents as Teachers parents are also more involved in their child's schooling and support their children's learning in the home. In a follow-up evaluation with families that participated in the Parents as Teachers pilot programs, a significantly higher proportion of Parents as Teachers parents initiated contacts with teachers and took an active role in their child's schooling. For example, 63% of Parents as Teachers parents compared with 37% of parents who had not participated in Parents as Teachers requested parent-teacher conferences. In a follow-up evaluation with families that participated in Parents as Teachers when it was first implemented statewide in Missouri, family members of almost 95% of Parents as Teachers children attended special events in their schools and classrooms and almost two-thirds of the children had family members work as volunteers in their children's school. Teachers reported that 75% of Parents as Teachers parents always assisted with home activities related to schoolwork, and another 20% sometimes provided such assistance.

Parent-Child Interaction: Parents as Teachers parents are more likely to read aloud, promote literacy and numeracy, and interact positively with their children.

These outcomes can be attributed to the quality of the parent educator-parent relationship, level of parental engagement, flexibility to tailor information to meet family needs, strengths-based model, and the research-based curriculum and training.

We are submitting for the record a brief summary of evaluations of the Parents as Teachers program (see Appendix A).

Parents as Teachers and Parental Involvement

Parents as Teachers believes that changes in children's outcomes are fostered through changes in parents' knowledge, attitudes and behaviors. Supporting and educating parents to become involved in their child's development and learning results in lasting impacts on the children.

We use the term parental involvement to refer to parents' participation in their child's learning and education. This involvement potentially begins at birth, or even prenatally, and is certainly well under way in the first three years of life. One value of fostering parental involvement starting from birth is that this sets parents' expectations about their continuing role in the child's education once he or she starts school. When parents are involved early, they stay involved, and this involvement improves children's performance in school.

Parents as Teachers contributes to increased parental involvement on both a day-to-day basis and at a broader level. During the course of the personal visits, parent educators foster and support parental involvement as they:

- help parents learn to observe their child and read their child's cues
- help parents understand typical development, including brain development
- help parents know what developmental milestones to expect next and empower them to act when they have concerns about their child's development
- affirm parents' skills and strengths and encourage parental involvement
- emphasize the child's emerging literacy skills by bringing books to every visit from infancy on and showing parents how to read to their child
- show parents how to capitalize on opportunities to enhance their child's learning and development by using everyday resources and contexts
- help parents recognize teachable moments and how to use them with their child.

More broadly, Parents as Teachers enhances parental involvement in that it:

- helps parents be in a position to make better and more informed choices for their child's care
- empowers families to advocate for their child
- builds parental feelings of competence and confidence

- enhances the parent-child relationship
- increases the child's school readiness
- helps parents learn to access services and supports for their child

The Parents as Teachers National Center recognizes that in addition to parents, there are frequently many other adults that influence children's lives in the earliest years – relatives, care providers, early childhood teachers, and other caregivers. It is particularly important that those working with children at this critical time also recognize the importance of parental involvement.

How parents become involved in Parents as Teachers and how they remain involved

Parents are recruited for Parents as Teachers primarily through partnerships in the communities where the program is located; in many cases with the schools. Missouri is a case in point. There is a Parents as Teachers site in every school district in Missouri. This partnership with the schools in Missouri and other states creates a home-school connection many years before the children actually start school. In essence, Missouri schools are setting the expectation that the parental involvement that begins with the Parents as Teachers program will continue once the children start school. Studies show that school practices that encourage parents to participate in their children's education are more important than family characteristics like parental education, family size, marital status, socioeconomic level, or student grade level in determining whether parents get involved. Partnering with Parents as Teachers is one such practice.

Parents remain involved because Parents as Teachers can be individualized to meet the differing needs of families, and is adaptable to communities and special populations, including teen parents, families of children with special needs, families living on Indian reservations. An example of the program's adaptability is the current initiative to translate Parents as Teachers curriculum materials into Spanish to meet the needs of the many Spanish-speaking families in Parents as Teachers. What we like to say is that while Parents as Teachers is a national model, it's a local program. The program's adaptability makes a difference for families.

Conclusion

Since learning starts right from birth, it is important to begin working with parents at that time or just before it. Research demonstrates, and our experience with Parents as Teachers confirms that when parents are involved in their child's learning from early on, they stay involved, and that this on-going involvement improves children's performance in school. The Parents as Teachers National Center recommends that every parent in America have access to parent education and family support that highlights for them the critical importance of being involved in their child's learning as early as possible.

The 8th National Education Goal of the Educate America Act recognizes the critical role of parents and the importance of parental involvement in children's education once they are in school. The Parents as Teachers National Center recommends that Congress also increase support for programs and policies that emphasize parents and parental involvement as key components of all early childhood initiatives. We also recommend that any comprehensive education reform must include a home visitation program such as Parents as Teachers for all children in those early years prior to kindergarten entry.

Appendix A: Parents as Teachers Evaluation Highlights

Program evaluation has been integral in the evolution of the PAT program since its inception. The first evaluation of PAT was funded through a contract from the Missouri Department of Elementary and Secondary Education. Subsequent studies have been supported by the State of Missouri and other states, independent school districts, and private foundations. A few studies have been carried out by individual researchers. Independent evaluations continue to confirm the positive impact of PAT on parents and children:

Parent and Family Outcomes:

- PAT parents are more involved in their children's schooling – parental involvement is key to a child's success in school.
- PAT parents are more confident in their parenting skills and knowledge.
- PAT parents read more to their children.

Child Outcomes:

- PAT children at age 3 are significantly more advanced in language, problem solving and other cognitive abilities, and social development than comparison children.
- The positive impact on PAT children carries into elementary school.
- PAT children score higher on kindergarten readiness tests and on standardized measures of reading, math and language in first through fourth grades.

Missouri PAT Pilot Project: Outcomes at Age Three and in Early Elementary School

75 project families were randomly selected from the 380 first-time parents who had participated in PAT for three years. The pilot project families and a matched comparison group represented Missouri's urban, rural and suburban communities. Posttest assessments of children's abilities and parents' knowledge and perceptions showed that PAT children at age three were significantly more advanced in language, problem-solving and other intellectual abilities, and social development than comparison children. PAT parents were more knowledgeable about child-rearing practices and child development. Participating parents were more likely to regard their school district as responsive to their children's needs than were parents of comparison group children. 53% of PAT parents rated their district as "very responsive," versus 29% of comparison group parents.

[Pfannenstiel, J., and Seltzer, D. Evaluation Report: New Parents as Teachers Project Overland Park, KS: Research & Training Associates, 1985; Pfannenstiel, J., and Seltzer, D. New Parents as Teachers: Evaluation of an Early Parent Education Program. Early Childhood Research Quarterly, 4, 1-18, 1989.]

A follow-up evaluation of the pilot program was undertaken to determine if gains made during participation in PAT would have a lasting effect on the children and their parents. PAT children scored significantly higher on standardized measures of reading and math at the end of first grade than did comparison children. A significantly higher proportion of PAT parents initiated contacts with teachers and took an active role in their child's schooling. For example, 63% of parents of PAT children versus 37% of parents of comparison children requested parent-teacher conferences. Thus, PAT parents continue to play an active role in their child's education into elementary school.

[Pfannenstiel, J. New Parents as Teachers Project: A Follow-Up Investigation. Overland Park, KS: Research & Training Associates, 1989.]

Statewide Implementation of PAT in Missouri: Outcomes at Age Three and in Early Elementary School

The "Second Wave" study examined how well the PAT model program would transfer statewide. This study determined the impact of PAT on 400 randomly-selected families enrolled in 37 diverse school districts across Missouri. At age three, PAT children performed significantly above the national norms on a measure of school-related achievement, despite the fact that the Second Wave sample was over-represented on all traditional characteristics of risk. More than one-half of the children with observed developmental delays overcame them by age three. There were only two documented cases of abuse and neglect among the 400 families over a three year period—significantly fewer than the state average. Parent knowledge of child development and parenting practices significantly increased for all types of families.

[Pfannenstiel, J., Lambson, T., and Yarnell, V. Second Wave Study of the Parents as Teachers Program. Overland Park, KS: Research & Training Associates, 1991.]

A follow up of the Second Wave study assessed the longer-term impacts of program participation. This study focused on the first- and second-grade school experiences and performance of the Second Wave PAT children, and PAT parents' involvement in their children's learning and schooling. PAT children were rated by their teachers as performing at high levels of proficiency in all areas assessed. When compared to their grade-level peers, 91% of PAT children were rated by their teachers as equal to or better than average. Overall, the relative level of achievement children demonstrated at age three on completion of the PAT program was maintained at the end of the first/second grade. PAT parents demonstrated high levels of school involvement, which they frequently initiated, and supported their children's learning in the home.

[Pfannenstiel, J., Lambson, T., and Yarnell, V. The Parents as Teachers Program: Longitudinal follow-up to the second wave study. Overland Park, KS: Research & Training Associates, 1996.]

Evaluations of PAT Child Outcomes: Kindergarten Readiness and Beyond

The Missouri School Entry Assessment Project is a comprehensive early childhood assessment effort designed to gather information about what young children who enter Missouri's public kindergartens know and can do and to relate this information to their pre-kindergarten school experiences. Findings from the 1998 school readiness assessment project involving 3,500 kindergarteners in Missouri show that Parents as Teachers achieves its goal of preparing children for success in school. Among children whose care and education were solely home-based, those whose families participated in PAT scored significantly higher on the School Entry Profile. However, the highest performing children were those who participated in PAT combined with preschool, center-based child care, or both. Children from high-poverty schools scored above average on all areas of development when they entered kindergarten with a combination of PAT and any other pre-kindergarten experience (preschool, center-based care, and/or home-based care).

[Barr, S. and Pfannenstiel, J. Missouri School Entry Assessment Project Summary. Presentation made at the 8th International Born to Learn Conference, St. Louis, MO, June, 1999]. The full Missouri School Entry Assessment Project is available at <http://www.dese.state.mo.us/divinstr/fedprog/earlychild/>

Parkway School District, a large metropolitan school district in St. Louis County, Missouri, demonstrated the long-term positive impact of PAT on school achievement. Third graders who had received PAT services with screening services from birth to age three scored significantly higher on standardized measures of achievement than their non-participating counterparts. PAT children had a national percentile rank of 81, while non-participating students had a rank of 63 on the Stanford Achievement Test. PAT graduates were less likely to receive remedial reading

assistance or to be held back a grade in school. In fourth grade, PAT graduates still scored significantly higher overall and on all Stanford Achievement subtests (reading, math, language, science, social studies) than did non-PAT fourth-graders.

[Coates, D. Early childhood evaluation. Missouri: A Report to the Parkway Board of Education, 1994; Coates, D. Memo on one-year update on Stanford scores of students – early childhood evaluation study group; Parents as Teachers program leads to elementary school success, Parkway School District News, Spring, 1997.]

A series of studies of PAT program participation and school readiness were conducted in the Binghamton, New York, School District, beginning in 1992. A pilot study focused on a sample of poor, high-needs children. Pre-kindergarten assessments showed that compared to matched comparisons, PAT children had better language skills and were twice as likely to be reading-ready by kindergarten.

[Drazen, S. and Haust, M. Raising reading readiness in low-income children by parent education. Paper presented at the annual meeting of the American Psychological Association, August 1993]

A second study compared the school readiness of children who participated in PAT with all kindergartners in the Binghamton School District. PAT children showed better school readiness at the start of kindergarten, higher reading and math readiness at the end of kindergarten, higher kindergarten grades, and fewer remedial education placements in first grade.

[Drazen, S., and Haust, M. The effects of the Parents and Children Together (PACT) Program on school achievement. Binghamton, NY: Community Resource Center, 1995]

A longitudinal follow-up of these same Binghamton children found that PAT children continued to perform better than non-PAT children on standardized tests of reading and math achievement in second grade. Compared to non-PAT children, PAT children required half the rate of remedial and special education placements in third grade.

[Drazen, S. and Haust, M. Lasting academic gains from an early home visitation program. Paper presented at the annual meeting of the American Psychological Association, August, 1996.]

In this North Carolina study, children who participated in PAT were tracked into kindergarten. A study of the long-term educational impact of the Rutherford County Schools PAT program compared families who participated in PAT for three years to families who either received no services or who received a quarterly newsletter during the first year of their child's life. Upon entry to kindergarten, PAT children scored significantly higher than children from the comparison groups on measures of language and self-help/social skills.

[Coleman, M., Rowland, B. & Hutchins, B. Parents as Teachers: Policy implications for early school intervention. Paper presented at the 1997 annual meeting of the National Council on Family Relations, Crystal City, VA, November, 1997; Parents as Teachers: Kindergarten screening final report. Rutherford County, VA: Rutherford County Schools, May 1998.]

Immediate Child and Parent Outcomes

In a series of studies, SRI International examined the impact of PAT with high needs families in California. The pilot evaluation looked at the effects of PAT on predominantly Hispanic families in Salinas, California, 67 of whom were randomly assigned to PAT and 46 to a control group. Assessments of parent and child outcomes at or near the children's first birthdays showed a consistent pattern of positive outcomes for parents and children. PAT parents had more knowledge of infant development and consistently scored higher on measures of parenting behavior and attitudes. Although not statistically significant, PAT children scored consistently

higher on developmental measures showing physical, self-help, social and academic/cognitive skills.

[Wagner, M. and McElroy, M. Home, the first classroom: a pilot evaluation of the northern California Parents as Teachers project. Menlo Park, CA: SRI International, 1992]

A second SRI study focused on the parents and three-year old children of PAT "graduates" in National City, California. These families were predominantly Hispanic, unemployed, with low education levels. PAT children scored higher than comparison children on developmental measures of physical, self-help, social, cognitive, and communication skills. PAT parents showed significant increases in parenting knowledge, attitudes, and behaviors. PAT participation was the only factor significantly related to child development outcomes.

[Wagner, M. Evaluation of the National City Parent as Teachers Program. Menlo Park, CA: SRI International, 1993.]

Evaluations of the Effectiveness of the Born to Learn™ Curriculum

Parents as Teachers' new Born to Learn™ Curriculum was field-tested with families in St. Louis and Chicago for whom parenting is a special challenge. The project demonstrated that neuroscience information could be successfully incorporated into the Parents as Teachers educational intervention program, and could produce meaningful changes in the knowledge, attitudes, and behaviors of parents for whom parenting typically is a greater challenge.

[McGilly, K., Winter, M., & Strube, M. (2000). Linking neuroscience and education to improve parenting of young children. St. Louis, MO: Parents as Teachers National Center, Inc.; McGilly, K. (2000) Chicago Born to Learn™ Neuroscience Project: Final report to Robert R. McCormick Tribune Foundation. St. Louis, MO: Parents as Teachers National Center, Inc.]

A multi-site evaluation by SRI International was recently conducted with 667 low-income families in three metropolitan areas. Families with infants up to 8 months of age were randomly assigned to either a treatment group receiving PAT services or a no-treatment control group. Outcomes from the first two years of this evaluation were reported in summer 2001. The results indicated that participation in PAT is as effective for the lowest-income families as for those with more moderate incomes. Of particular note were the positive effects on parenting behavior and the impacts on language- and literacy-promoting behaviors for families with very low income. In families with very low income, those who participated in PAT were more likely to read aloud to their child and to tell stories, say nursery rhymes, and sing with their child.

[Wagner, M. and Spiker, D. Multisite Parents as Teachers Evaluation: Experiences and Outcomes for Children and Families, 2001. <http://www.sri.com/policy/cehs/early/pat.html>]