

early developments

Spring 2006 | Vol. 10, No. 1



UNC
FPG CHILD DEVELOPMENT INSTITUTE

Celebrating 40 Years

news

Partnerships for Inclusion Recognized for Public Service

Partnerships for Inclusion (PFI) of the FPG Child Development Institute recently received a 2006 Office of the Provost Award for its extraordinary public service. The award acknowledged how PFI excels in bridging practice and research.

The mission of PFI, a statewide technical assistance project, is to promote the inclusion of young children with disabilities (ages birth–5 years) and their families in all aspects of community life. In 15 years of service, the project has engaged 75,000 people.

PFI's staff includes Pat Wesley, Brenda Coleman, Brenda Dennis, Rhodus Riggins, Jr., Allen Ryan, Sabrina Tyndall, Susan Deans, Sandy Steele, and Libby Wilson.

Bailey Caps FPG Career with Major Award

Don Bailey, director of the FPG Child Development Institute and W.R. Kenan, Jr., Distinguished Professor, has received the Research Career Scientist Award from the Academy on Mental Retardation.



The organization recognizes a distinguished person whose professional career has significantly advanced the field of developmental disabilities. Bailey's work has focused on early intervention for young children with disabilities and their families. In the past decade, he has studied children and families with fragile X syndrome, the most common inherited cause of intellectual disability. He is currently planning a large study of newborn screening for conditions such as fragile X.

On the Cover... Page from a Family Album

Four decades of
happy, nurtured
children in the
FPG Family
& Child Care
Program.

FPG ... Advancing knowledge. Enhancing lives.

ISSN 1536-4739

Editors

Pam Winton, Virginia Buysse,
Catherine Hamrick

Designer

Gina Harrison

Photographers

Don Trull
John Cotter

Assistant Editor

Jay Hargrove

www.fpg.unc.edu

Early Developments is published three times a year by the FPG Child Development Institute at The University of North Carolina at Chapel Hill. FPG is one of the nation's oldest multidisciplinary centers devoted to the study of children and families. Our mission is to cultivate and share knowledge that enhances child development and family well being.

**To subscribe or
to change your address**

contact Jay Hargrove
CB #8185, UNC-CH
Chapel Hill, NC 27599-8185
919.966.0888
hargrove@mail.fpg.unc.edu

To order additional copies

contact FPG Publications Office
919.966.4221
FPGPublications@unc.edu

Periodicals postage paid at
Chapel Hill, NC

Total design, production, and printing costs of this issue of *Early Developments* were \$8617; 10,000 copies of this document were printed at a cost of \$6000 or 60¢ each.

Director's Notes

Don Bailey reflects on FPG's 40-year mission to generate new knowledge in service of a higher goal—the well-being of children and their families

4

**How FPG
Got Its Groove**

The Abecedarian Project shows how at-risk children can thrive thanks to high-quality educational intervention

5

**Measuring &
Improving Quality**

FPG scientists employ different methods to ensure high standards apply to early childhood practices

11

**FPG—A Place for
All Children**

Learn about FPG's history of serving children who have special needs as well as those who are ethnically and linguistically diverse

16

**FirstSchool**

The case for a new early childhood education framework

21

Recent Publications

26

Don Bailey's Legacy

The retiring director is celebrated for his strong leadership, personable style, & tireless dedication

27

Reflecting on FPG's 40 Years of Advancing Knowledge, Enhancing Lives

I N 1977 I had the privilege of taking a class on developmental theory at the University of Washington with Hal Robinson, founding director of the FPG Child Development Institute. He said something that really stuck with me: "No developmental theorist can be fully understood without also understanding what was going on at the time she or he lived." Likewise, the FPG cannot be fully understood without knowledge of the events that led to its birth and those that have occurred during its 40-year lifetime.

What was going on when FPG started? First, the devastating effects of poverty, juxtaposed with the prosperity enjoyed by a number of Americans, led many to believe that America had a moral obligation to eliminate poverty, or at least reduce its occurrence. Many felt that the only way to break the cycle of poverty was to start with the children. FPG launched research that led to innovative curricula, focused on the core elements of quality, and provided full-day interventions for children beginning at birth. We are about to complete a study of 30-year-old adults who participated in these early programs—a remarkable testament to the enduring nature of both the question of whether early intervention is effective and our persistence in providing an answer.

Second, women were entering work at record levels, including mothers of very young children. This sparked a dramatic increase in the need for child care. Many of these mothers were well-educated and from middle or upper income families, so the question of what to do with young children quickly became one that was not limited to low-income families. Many people were concerned that the proliferation of child care would lead to the end of the family as we know it. Thus FPG began a program of research, still active today, on the institutions that care for young children and the effects of varying quality of care on their development and relationships with their families.

Third, the outrageous treatment of individuals with disabilities in residential institutions was made real in books such as *Christmas in Purgatory*. The anger of parents and advocates



was felt in the courts and in the schools, where the inclusion of children with disabilities had been resisted. The National Institutes of Health established a national network of mental retardation research centers. Based on the assumption that the early years are also important for children with disabilities, FPG, along with the Division for Development and Learning and the Biological Sciences Research Center, submitted a successful application and The University of North Carolina became one of the first 12 centers funded in 1966. Thus began a 40-year tradition of research on children with disabilities, their families, and the programs designed to serve them.

Although our primary mission is to generate new knowledge, this research is in the service of a higher goal: child and family well being. We stated it well in our mission statement a few years ago: "to cultivate and share the knowledge necessary to enhance child development and family well being." We distilled this further in our tag line: "Advancing knowledge, enhancing lives."

But this phrase is not just a tag line—it encapsulates 40 years of striving to be an objective, knowledgeable force for social change in the service of our youngest citizens.

Serving as FPG's director has been the greatest honor of my professional career. As I complete my final year of service, I look back with tremendous gratitude for the commitment, passion, and integrity that have characterized our founders, the person for whom we are named, and the hundreds of dedicated employees who have made FPG what it is today. A commitment to doing high-quality, timely research on important issues of the day, paired with a commitment to using this information to appropriately influence social change, will sustain this organization for many years to come.

But much remains to be accomplished. Convincing policy makers and the public that we must invest new resources to ensure the well being of every young child will continue to be a challenge. We must do the research and provide

the outreach needed to accomplish this goal. The children are waiting.

—Don Bailey



UNC

FPG CHILD DEVELOPMENT INSTITUTE

How FPG Got Its Groove

Photo: FPG Archives

The Abecedarian Story



The 1960s^{marked an era of soul-searching on economic and social issues.}

The civil rights movement gathered momentum. More women were entering the workforce at younger ages. A high rate of intergenerational poverty existed, profoundly affecting African American children. These issues as well as research on the importance of very early experience to later learning precipitated the belief that high-quality child care during the earliest years might prevent school failure and break the poverty cycle. This climate also gave rise to the belief that early intervention for children with disabilities could help them succeed in their families, schools, and communities. Under President John F. Kennedy, the federal government became involved in raising awareness of and developing policy for mental retardation.

In 1966 at The University of North Carolina at Chapel Hill, a small group of scientists founded a multidisciplinary center committed to improving the lives of young children and their families through research, teaching, and service. Initially called the Frank Porter Graham Child Development Center, later renamed the FPG Child Development Institute.

The National Institutes of Health awarded 12 grants to establish centers across the nation to study and treat mental retardation, but the Frank Porter Graham Child Development Center was the only one of these centers to focus on prevention of mental retardation. Drs. Hal Robinson and Nancy Robinson, husband and wife team, set out to determine whether quality child care made a difference in intellectual deficits in children of at-risk families. They also raised questions about the effects of group care for infants and how groups of different races and socioeconomic backgrounds could blend in a positive way.

By 1967 an ambitious plan took root: to create an educational complex for at-risk children from birth to age 12. The complex would include an elementary school and a medical facility geared to addressing the causes, prevention, and treatment of mild mental retardation. In addition to conducting an intervention program for children at risk, the plan would endeavor to establish a real world community of children and families from diverse backgrounds. However, the plan fell apart when the research funding limited services only to children directly at risk. The Robinsons moved on, but the child development program continued, with a tighter focus on at-risk children.

“In the 1960s there was talk about the ‘cycle of poverty’ and how generation after generation had problems in school and life,” recalls Dr. Joseph Sparling, currently an FPG fellow and formerly the FPG associate director who was recruited to help design and administer the intervention program. “There was an optimistic feeling at the time that we could solve this social problem. There was a sense of concern, because of the civil rights movement, that there needed to be more equity in society and that universities needed to respond. Educators and psychologists saw a social role for themselves. Until then they primarily viewed their role as creating knowledge. There was a sweeping vision that we were not only going to do research in the

field of mental retardation but also to produce a program that had practical value to society.”

The Abecedarian Project—A Living Legacy

Jim Gallagher became director of FPG in 1970. Dr. Craig T. Ramey, now the director of the Center for Health and Education at Georgetown University, took over the child care research project, which grew into the Abecedarian Early Childhood Intervention Project, one of the premier longitudinal child care intervention studies in the country.

Derived from Middle English and Latin, the word Abecedarian means one who teaches or studies the alphabet or one who is just learning, a beginner. This project was a carefully controlled ongoing scientific study of the potential benefits of early childhood education for disadvantaged children.

“By the 1960s and 1970s, the first round of intervention projects had started. Abecedarian was in that forefront nationally,” says Sparling. It differed from other childhood intervention projects because: 1) it began in early infancy instead of age 3 or older and 2) the treated children were exposed to a high-quality child care setting for five years instead of a

shorter duration typical of other projects.

Following an experimental design, the Abecedarian Project at first involved 111 at-risk children from low-income families recruited through prenatal clinics and departments of family services in Chapel Hill and Orange County. Most were African American and born between 1972 and 1977.

Infants between the ages of 6 and 12 weeks were randomly assigned to two groups. Fifty-seven children accepted assignments to a full-time child care setting at FPG, which emphasized high-quality educational intervention from infancy through age 5. Fifty-four children in the control group were cared for at home or attended other full-time child care centers. Eventually the study design permitted a comparison of outcomes in four groups of students who had preschool treatment (infancy–5 years) plus early elementary school treatment (5–8 years), preschool treatment alone (infancy–5 years), early elementary school treatment alone (5–8 years), and untreated controls.

Dr. Frances Campbell, who was recruited to evaluate the children, recalls how the study differed from child care practices of the day: “There was nowhere near the amount

There was a sweeping vision that we were not only going to do research in the field of mental retardation but also to produce a program that had practical value to society.

of infant child care that was needed. There were few good, safe, supportive places for little children. Most child care, if available at all, wanted children who were toilet trained. The idea of starting with young infants was very unusual.

“Some theorists said that the variance in children’s intellect was already set by age 4. Other models implied that learning was most malleable in very early periods of life. But nobody had done the randomized trials that Craig Ramey envisioned here. He was a developmental psychologist who believed that infants begin to learn immediately and that they develop optimally in a responsive environment. He wanted to know what would happen if we started with infants. He was very lucky that society’s imperative need for infant child care offered the chance to learn something important.”

A few early intervention programs targeting disadvantaged children were underway in other parts of the country. For example, the Perry Preschool program enrolled 123 African American children (ages 3 and 4) in Ypsilanti, Michigan, in the mid-1960s. The children were randomly divided into a program group who benefited from a high-quality preschool program and a comparison group who did not receive a preschool program. Interviewed at age 40, the subjects who participated in the preschool program had higher earnings, tended to hold jobs, committed fewer crimes, and were more likely to have attended high school. But unlike almost all programs of the time, the Abecedarian intervention targeted infants.

Abecedarian researchers used a high-risk index to assess risk for retarded intellectual development. Selected background factors included household income, parental occupations, parental education, parent intellectual development, school histories of family members, and welfare status.

Carrie Bynum, who had worked at UNC Hospital, initially joined the team as one of the child caregivers, then became head of the infant program and eventually the study’s family coordinator. From the outset, she recruited families and infants to participate in the program. “I identified young mothers who were about to deliver,” she says. “I knew the social workers at the hospital nursery. It was not hard to locate families. Once we got going, the grapevine started in the community.

“No other programs took infants, so they [parents] wanted to know about ours. I had people calling me day and night. So most referrals happened in the community.

“I would do a screening at their [expectant mothers’] homes and tell them about the program. Of course, everybody wanted to be in the daycare program. I explained to them that they could participate in the

program, but they could not choose which group [intervention or control] their child would be in. Families in the control group received formula for 15 months and diapers for three years. The reason for the formula was to ensure that control group children had adequate nutrition during their first year.”

FPG’s center-based preschool program ran from 7:30 AM to 5:30 PM every weekday for 50 weeks yearly. Transportation was free. Teacher-child ratios ranged from 1 to 3 for infants and toddlers and from 1 to 6 for older children.

A Breakthrough Curriculum

In 1978 Joseph Sparling and colleague Isabelle Lewis published the Abecedarian curriculum as a book, the culmination of years of research and testing. “In the 1970s a focused individual approach to teaching and ongoing assessment was not part of child care,” says Sparling. “Most parents and child development professionals thought [early] child care should be safe and loving, nothing more. The notion of really teaching young children anything else was not often accepted.” Nonetheless, FPG researchers forged ahead.

The Abecedarian curriculum stressed language development while serving all developmental needs of the children in the preschool program. In creating the curriculum, researchers equated developmental activities with games because they occur in a playful back-and-forth exchange between adult and child.

This idea of play as a learning tool was not original. “The educator Friedrich Fröbel wrote a whole book on play in the 1800s,” says Sparling. “It had games and songs that mothers could play with children to help them become aware of various occupations and experiences. I picked up on the game idea and decided it was a good way to make a curriculum.”

Sparling and Lewis took a building block approach in developing the curriculum. In addition to taking into account the milestones of child development and the findings of developmental research, they also asked parents coming to the center as well as their neighbors some practical questions: What do you want your child to achieve in the first year? What do you want your child to achieve by age 2? They incorporated the parents’ ideas into some of the games.

The intent was to make the games effective throughout the day. Sometimes they integrated traditional activities such as peek-a-boo but added variations. “You can do more than hide behind a cloth and peek at the child,” says Sparling. “You can use a newspaper or get behind the couch and pop up.”

During the 1970s, Joseph Sparling and Isabelle Lewis devised 100 “games” for children from infancy to 3 years to stimulate development.

A compilation was published in 1978. Each self-contained game included pictures and descriptions. Over time Sparling and Lewis came up with 300 games that were published as popular books for parents, caregivers, and teachers in the *LearningGames* series: *Birth to 12 Months*, *12 to 24 Months*, *24 to 36 Months*, *36 to 48 Months*, and *48 to 60 Months*.



Sparling and Lewis purposely kept the games short. “We made ourselves write each game on one sheet of paper. If the game was longer, we shortened it or got rid of it. That was part of our idea—to make the games simple enough so that the user would grasp them quickly. We also tried to make the games fun so that the adults would keep using them.”

Researchers took the games into the nursery or classroom for formative evaluation. “We gave the teacher a sheet explaining the game and asked them to try it out for two weeks,” says Sparling. Each child had an individualized prescription of educational activities, or “games,” that were incorporated into his or her day. Activities focused on social, emotional, cognitive, and physical areas of development but gave particular emphasis to language.

“We told the teachers that every game is a language game,” says Sparling. “Even if the activity focused mostly on motor skills, the teachers still needed to talk to the children and be aware of their own language. They needed to keep feeding language to the children and making sure that they understood. Early on children are not verbal but rather point and make little sounds. But soon they respond with words. It was important to be putting language in children and getting language out all the time.”

Sparling and Lewis encouraged teachers to focus on individuals. “Teachers thought systematically about each child, did some planning, and wrote down the activities they were going to do per the individual child,” says Sparling. “That was part of our philosophy—that teachers needed to get planning down to the individual child as opposed to just planning for the general classroom.

“A research assistant took data on each game, such as the number of times the child wanted to play the game,” says Sparling. “The research assistant also timed how long

it took for the child to respond as well as the number of correct and incorrect responses. We tossed out the games that didn’t work.”

This testing of the curriculum involved over 300 “small” experiments, with about 200 producing a successful game. In 1978 the curriculum was published as the *LearningGames* book series. This breakthrough product was the first infant and toddler curriculum to be scientifically validated. Today the *LearningGames* series, which still comprises 200 games, is published in five volumes. It is in wide use and published in English, French, and Spanish editions.

The format makes *LearningGames* readily adaptable to modes of intervention such as preschool, group daycare, family daycare homes, parent groups, and home visitation. On one side of each page is a picture with brief text explaining how to do the activity and why. On the back of the page, there is a more detailed description of the game including different ways to play it, what to expect from the child, and more detail on why it is important to the child’s development.

Assessments over Time

Children who participated in the early intervention were monitored over time. They had higher cognitive test scores starting in toddler years and continuing to age 21. The cognitive and academic benefits from this program are stronger than those from most other early childhood programs. It is the only early childhood program that has statistically significant cognitive benefits extending into young adulthood. Enhanced language development appears to have been instrumental in raising cognitive test scores.

Participants were assessed at the treatment endpoint, 8 years, and followed up at 12 and 15 years. At all these times, IQ scores for the children who received the birth-to-age-5 Abecedarian intervention were higher than those of the randomly assigned control group. The treated children also scored higher on achievement tests in math and reading during elementary and secondary school years. They also had lower levels of grade retention and placements in special education classes—a long-term cost savings to their families and schools.

Measures of intelligence and achievement at age 21 demonstrated a similar pattern. Remarkably, 104 of the original 111 children were still participating in the study, thanks to Carrie Bynum, who managed to track down participants. “I’ve been in Chapel Hill for 53 years,” she says. “I knew them in church, Girl Scouts, and other groups. My path crossed theirs. I can find them. My hardest job was locating the control group children. But their families helped me out, and I found all of them.”

The young adult data showed that the children in the experimental group were more likely to have attended a four-year college than the children in the control group.

They were more likely to have a skilled job. They were older on average when their first child was born.

“A bigger percentage of the kids in the daycare program went to college,” says Bynum. “Their parents have commented to me about the good beginning their children got here [with the Abecedarian project]. They are successful. One college graduate has gotten two teacher-of-the-year awards, each at a different school.”

The Abecedarian Project also positively affected the teenage mothers who had children in the study. By the time their children were 4½, these mothers were more likely to have finished high school and undergone post-secondary training. They were more likely to be self-supporting and less likely to have more offspring. Additional training, employment experience, and education led to increased earnings and decreased reliance on social assistance.

Investigators are now concluding the age 30 follow-up of this sample.

The Payoff

A cost analysis of the Abecedarian Project indicated that benefits are worth the five-year investment (about \$13,900 per child per year) in small class sizes, well-trained and paid teachers, and an innovative curriculum. Comparing the FPG preschool and control groups, researchers observed that:

- Children who were enrolled in the Abecedarian programs are projected to make \$145,000 more than control children over their lifetimes.
- Mothers of children who were enrolled can expect to earn about \$135,000 more than mothers of control children over their lifetimes.
- School districts can project saving on average more than \$11,000 per child because participants are less likely than control children to require special or remedial education.
- Participants were slightly less likely than control children to smoke, indicating better health benefits and longer lives, with cost benefits estimated at \$167,700 per person.



Carrie Bynum plays with FPG friends in the 1970s. As the study's family coordinator, she played a pivotal role in the Abecedarian Project. Her mix of warmth and professionalism was critical in keeping up with the children as they grew up. Bynum received the C. Knox Massey Distinguished Service Award in recognition of “unusual, meritorious, or superior contribution” to the UNC-Chapel Hill. Bynum clearly demonstrated all three qualities in her dedication to the Abecedarian project.



Even after 20 years, Abecedarian researchers continue to see positive effects in terms of education and earning potential. Participants tended to be older when their first child was born.

Impact on Policy

The Abecedarian Project has far-reaching implications, particularly for policy makers who want to affect the lives of children from low-income families as well as for administrators of child care programs. In the U.S. children are more likely to live in poverty than any other age group. And poverty rates are climbing. Minority children are three times more likely to grow up in poverty, which has a negative impact on cognitive development and academic performance. When these children do not fulfill their highest potential, society loses valuable human resources. Several major policy challenges include the following:

- A high-quality educational environment from early infancy is critical, as this is the age when learning begins and upon which all later learning is built. Every child deserves a start in an environment that is safe, healthy, emotionally supportive, and cognitively stimulating.

- With welfare reform moving more parents into the workforce, more children at poverty level will require care outside the home. They need access to high-standard, affordable child care.
- Quality care requires sufficient well-trained staff to ensure that every child receives the kind of appropriate, individualized attention provided by the Abecedarian model.
- Child care officials should be aware of the importance of quality care from the very first months of life.

The Abecedarian Project represents a revolutionary idea in early childhood education. Its findings have been instrumental in demonstrating that very early education for at-risk children is possible and that it can have a positive and long-lasting effect on the course of development. The future will reveal the degree to which the general public and national, state, and local leaders agree that very early education is valuable and worth funding. |ed|

To Learn More

- Burchinal, M. R., Campbell, F. A., Bryant, D. M., Wasik, B. H., & Ramey, C. T. (1997). Early intervention and mediating processes in cognitive performance of children of low-income African American families. *Child Development*, 68, 935-954.
- Campbell, F. A., Pungello, E. P., Miller-Johnson, S., Burchinal, M., & Ramey, C. T. (2001). The development of cognitive and academic abilities: Growth curves from an early childhood educational experiment. *Developmental Psychology*, 37, 231-242.
- Campbell, F. A., & Ramey, C. T. (1995). Cognitive and school outcomes for high-risk African-American students at middle adolescence: Positive effects of early intervention. *American Educational Research Journal*, 32, 743-772.
- Campbell, F. A. & Ramey, C. T. (1994). Effects of early intervention on intellectual and academic achievement: A follow-up study of children from low-income families. *Child Development*, 65, 684-698.
- Campbell, F. A., Ramey, C. T., Pungello, E. P., Sparling, J., & Miller-Johnson, S. (2002). Early childhood education: Young adult outcomes from the Abecedarian project. *Applied Developmental Science*, 6, 42-57.
- Ramey, C. T. & Campbell, F. A. (1991). Poverty, early childhood education, and academic competence: The Abecedarian experiment. In A. Huston (Ed.), *Children reared in poverty* (pp. 190-221). New York: Cambridge University Press.
- Ramey, C. T., & Campbell, F. A. (1984). Preventive education for high-risk children: Cognitive consequences of the Carolina Abecedarian Project. *American Journal of Mental Deficiency*, 88, 515-523.
- Ramey, C. T., Campbell, F. A., Burchinal, M., Skinner, M. L., Gardner, D. M., & Ramey, S. L. (2000). Persistent effects of early intervention on high-risk children and their mothers. *Applied Developmental Science*, 4, 2-14.

Website

www.fpg.unc.edu/~abc/

Measuring & Improving Quality

Improving the quality of early care and education services has been at the forefront of research in the early childhood field for some time. Employing various approaches, FPG scientists have helped to ensure that high, exacting standards apply to early childhood practices. This section of *Early Developments* highlights several significant ways in which FPG scientists have measured and improved quality and advanced the field's understanding of this issue.



Rating Scales that Measure Up

WHEN FPG scientists began working with curriculum development in the mid-1970s, they soon realized the need for a systematic, reliable way to assess the quality of early childhood programs. Dr. Thelma Harms, director of curriculum development, and FPG researcher Dr. Richard M. Clifford devised a practical measurement tool—*Early Childhood Environment Rating Scale* (ECERS). This measure would be used to help improve the quality of child care in North Carolina, nationwide, and abroad.

The ECERS came into being as a result of hands-on work at FPG. “Child care was growing rapidly in the 1970s, and North Carolina was at the forefront,” says Clifford. “I directed a project that trained day care coordinators in county social services. Thelma Harms did a daylong session on what the coordinators should look for in child care. People asked her to put it in writing, so she and Lee Cross, the FPG

Child Care Program director, authored *Environmental Provisions in Day Care*. It contained a checklist of questions for teachers to use in determining whether they were meeting the needs of the children in their care.”

“Based on my 15 years of experience as head teacher at the laboratory preschool at the University of California at Berkeley and involvement in teacher education,” says Harms, “I felt that a good early childhood environment had to meet the basic needs of children for protection of health and safety, support for social-emotional development and cognitive/language stimulation through appropriate activities.”

Clifford was convinced that the checklist, which noted the characteristics crucial for a quality learning environment, could be developed in a way that would allow child care coordinators to observe programs and get reliable results.

“We developed an item and asked the child care coordinators to try it,” says Clifford. “The coordinators gave us feedback, and we would revise.”

They sent the draft of the scale to nationally known early childhood experts for review. A field test version of the ECERS was finalized in 1978. Teacher’s College Press published ECERS in 1980.

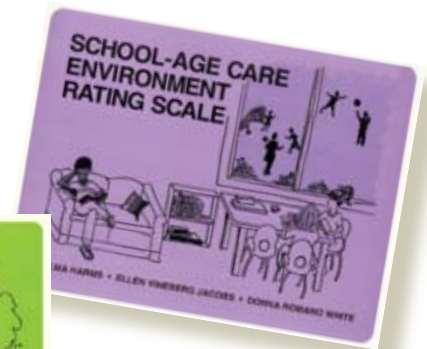
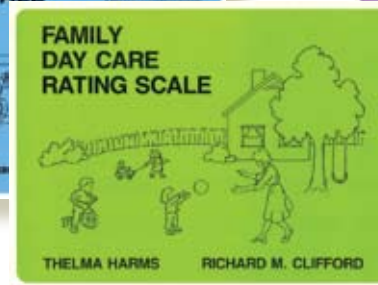
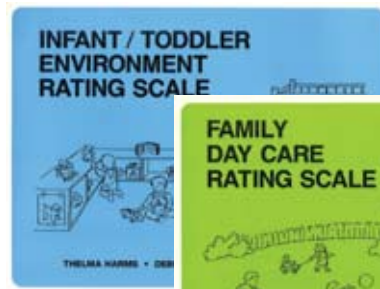
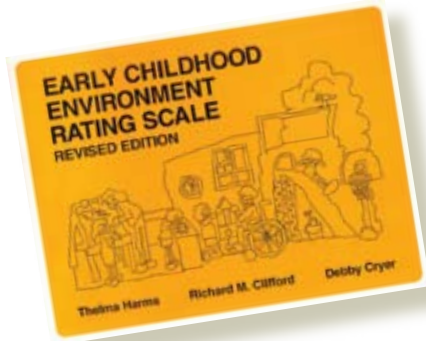
Designed to capture an accurate picture of the complete classroom environment, the ECERS assesses process quality in an early childhood classroom. Process quality refers to the various interactions that go on in a classroom between staff and children; among staff, parents, and other adults; among children; and interactions children have with the many materials and activities in the environment, as well as features such as space, schedule, and materials that support these interactions. Process quality is assessed primarily through observation

and has been found to be more predictive of child outcomes than structural indicators such as staff-to-child ratio and group size.

The ECERS consisted of a 43-item scale covering seven categories, or subscales: Space and Furnishings, Personal Care Routines, Language-Reasoning, Activities, Interaction,

toddler care, and care for school-age children during out-of-school time. There are four environment rating scales, each using the same format and scoring system: for preschool and kindergarten children, the Revised ECERS [ECERS-R]; for infants and toddlers, the ITERS-R (revised 2003, updated 2006); for family and child

This research offered evidence that most children in child care centers in the U.S. were receiving poor to mediocre care. As a result, policy changes occurred that included strengthening standards and



Program Structure, and Parents and Staff. Within each area were specific items that are scored according to their level of quality. Each item was ranked from 1 to 7. A ranking of 1 described inadequate conditions, while a ranking of 7 described excellent conditions. Assessors calculated subscale scores as well as a total scale score to arrive at a numerical profile of the environment.

The people first interested in using the ECERS were consultants, trainers, directors, and teachers. However, because the scale was field tested for reliability and validity, researchers interested in the quality of child care soon started using the scales.

Awareness of the scales grew. Instructors of teacher education courses were using the scales in college and university classes. The scales were included in inservice training and were being used in research, program evaluations, and related studies. As use of the ECERS spread, requests increased for similar instruments to measure the quality of family child care homes, infant/

care homes, the FCCERS-R [Revised FDCRS (in press 2006)]; and for school age care programs, the SACERS (1996).

The ECERS Impacts Standards

The ECERS gained national attention when used in the Cost, Quality, and Child Outcomes Study, which began in 1993. The study assessed quality in more than 400 child care centers in California, Colorado, Connecticut, and North Carolina.

“The level of quality was not good,” says Dr. Debby Cryer. Only 8% of infant classrooms and 24% of preschool classrooms were of good or excellent quality. Ten percent of preschool programs and 40% of infant programs were rated as poor quality.

“There were serious issues, especially for infant and toddler care,” says Cryer. “Practices were not meeting basic health and safety needs. For example, diapering arrangements were not safe, as in the case of diapering tables without rails that children could fall from, and procedures such as hand washing were not followed.”

regulations for child care programs; requiring initial and ongoing training for staff; and recruiting and retaining more highly educated staff. “The study had an impact on standards,” says Clifford. “It got tremendous publicity, and motivated states to act.”

Scales Used in Setting Standards for States

“States started to explore approaches to licensing,” says Clifford. “They recognized that they needed to set standards for higher levels of quality.”

For example, in 1999 a five-star rating system was approved in North Carolina. Centers could be licensed at the one-star level but could voluntarily elect to be licensed at higher quality levels. Each quality level carried with it a small increase in reimbursement. Smart Start (a statewide initiative to make child care affordable, accessible, and of good quality) conducted a study to determine whether the new rating system reflected child care quality differences when measured by independent data collectors. As

part of this evaluation, FPG teams collected data on over 200 randomly selected child care centers just before the five-star license system went into effect. Observers used the ECERS when looking at daily routines, activities, classroom materials, and interactions between the teaching staff and children. They interviewed center directors about education,

teacher compensation, and turnover. The overall quality practices scores of ECERS related to license level. Centers with higher scores were licensed at higher levels. The study concluded that the five-star licensing system accurately reflected the overall quality of child care centers.

Today these scales are at work in hundreds of programs and studies

around the world. They are suitable for research and program evaluation, as well as program improvement efforts. Child care program directors, supervisory personnel, classroom teachers, state licensing staff, program evaluators, college instructors, and researchers use the rating scales.

Substantial revisions were made to update the current editions of

Consultation Model Improves Child Care Programs

Partnerships for Inclusion (PFI) uses the rating scales in a consultation model aimed at raising the level of quality in child care programs.

PFI, a technical assistance project in North Carolina, provides a range of services to early childhood professionals to facilitate inclusion of children with disabilities, birth through 5 years, and their families in all aspects of community life. Improving program quality is an important first step for child care programs in serving young children with special needs. PFI teaches early childhood technical assistance (TA) providers an intensive on-site consultation model developed and field tested by the project. Rather than acting as experts during sporadic visits, TA providers cultivate strong relationships with child care staff and collaborate with them over time to accomplish distinct program goals.

The child care teacher's active participation is at the heart of the consultation's success. With rapport established, the TA provider and child care teacher together assess needs by each completing their own environment rating scale (FDCRS, ECERS-R, ITERS-R). They meet to share scores and come to consensus about priorities for change, which they then incorporate into an action plan. As the teacher implements the plan, he or she receives support from the consultant who may provide training, volunteer help in the classroom, and other resources. The consultant and the provider then assess how

effective the consultation process was in accomplishing their desired goals. They also discuss aspects of their relationship that strengthened or weakened the consultation. Overall, the consultant may make 14 or more visits over 6–10 months.

This collaborative approach differs from the typical expert model in which the consultant stops by and shares knowledge. Without meaningful interaction between the consultant and teacher, change is likely to be short term. The PFI consultation model precipitates positive changes that have long-term effects on quality.


To Learn More

- Buyse, V., & Wesley, P. W. (2005). *Consultation in early childhood settings*. Baltimore, MD: Paul H. Brookes.
- Wesley, P. W. (2000). *Improving the quality of early childhood programs: The PFI model of consultation*. Chapel Hill: The University of North Carolina, FPG Child Development Institute.
- Palsha, S., & Wesley, P. W. (1998). Improving the quality of early childhood environments through on-site consultation. *Topics in Early Childhood Special Education*. 18(4), 243-253.

the ECERS-R and the ITERS-R. New indicators to measure disabilities and sensitivity to cultural diversity were added. The revision of the FDCRS, renamed the *Family Child Care Environment Rating Scale* (FCCERS-R),

which is now being field tested, also required substantial changes.

ECERS and ECERS-R have sold more than 3.5 million copies; ITERS and ITERS-R, more than 2 million copies; FDCRS, more than 1 million copies;

and SACERS, more than 600,000 copies. Given the widespread use of these instruments, FPG has had a global influence on how children are cared for and educated. 

Preschool Inclusion Quality, Outcomes, and Cost

From 2002-2005 Samuel L. Odom of Indiana University and Virginia Buysse of FPG undertook a study of inclusive preschool programs in Indiana and North Carolina. The goals of the study were to examine the cost of various types of inclusive early childhood models, the quality of the preschool learning environments in these settings, and the developmental outcomes for children with disabilities. The study also examined the relationships among these factors.

A total of 143 4- and 5-year-old children with disabilities participated in the study. The children were enrolled in four types of inclusive settings: public prekindergarten, Head Start, community-based child care centers, and blended programs that integrated funding and eligibility requirements from multiple programs.

Cost

The researchers calculated the cost to public schools that provided special education and related services to children with disabilities enrolled in various types of settings. The primary costs were the salaries of itinerant teachers and specialists who worked directly with children and consulted with their classroom teachers. Other direct instructional costs included expenses related to classroom materials and special equipment. Transportation and building costs were not calculated in this study. Differences in cost across programs were related to whether programs were full-day or half-day and

the level of severity of children's disabilities. For example, the study found lower costs for children with mild disabilities than for children with moderate to severe disabilities.

Quality

The researchers used three measures to determine the quality of inclusive prekindergarten programs. The ECERS-R was used to assess the general quality of each early childhood setting. The overall mean score on the ECERS-R was not significantly different across different types of inclusive settings. In general, programs scored slightly below or above 5.0, indicating moderately good program quality.

The *Quality of Inclusive Experiences Measure* (QIEM; Wolery, Pauca, Brashers, & Grant, 2000) assessed accessibility and adequacy of the physical environment, individualization, adult-child interactions, and child-child interactions. The study found that the child-child interaction scores were higher in the blended classrooms and in the community-based child care centers, indicating more social integration occurring in these programs than in the Head Start and public school classes.

An observational measure called the CASPER-II (Brown, Favazza, & Odom, 1995) was used to assess children's engagement in learning across different types of settings. Overall, the study found that children with disabilities were

To Learn More

Burchinal, M. R., Roberts, J. E., Nabors, L. A., & Bryant, D. M. (1996). Quality of center child care and infant cognitive and language development. *Child Development*, 67, 602-620.

Cost Quality, and Child Outcomes Study Team. (1995). *Cost, quality, and child outcomes in child care centers: Public report*. Denver: Economics Department, University of Colorado-Denver.

Peisner-Feinberg, E. S., Burchinal, M. R., Clifford, R. M., Culkin, M., Howes, C., Kagan, S. L., & Yazjian, N. (2001). The relation of preschool child care quality to children's cognitive and social developmental trajectories through second grade. *Child Development*, 72(5), 602-620.

Tietze, W., & Cryer, D. (2004). Comparisons of observed process quality in German and American infant/toddler programs. *International Journal of Early Years Education*, 12(1), 43-62.

One of the assessments used, *Playmates & Friends*, was also developed by researchers at FPG.



engaged slightly more than 60% of the time, a finding that is consistent with previous studies. However, the levels of engagement were not statistically different across various types of inclusive settings.

Child Outcomes

Child outcomes were assessed using the *Battelle Developmental Inventory* (BDI), the *Playmates & Friends Questionnaire for Teachers* (Goldman & Buysse, 2005), and peer ratings. Findings from the BDI total score suggested a positive rate of developmental growth for children enrolled in all types of inclusive settings. The study did not find a statistically significant difference in the rate of development across program types. However, the study found that scores on the individualization subscale of the QIEM were positively correlated with the cognitive, communication, and motor subscales of the BDI. In addition, the child-child contact scores of the QIEM were positively associated with the BDI motor subscale scores. These findings suggest that there may be developmental benefits for young children with disabilities enrolled in programs in which teachers and specialists address their individual goals and promote positive social relationships with peers. As a group, and across all types of programs, the study found that children with disabilities were not socially rejected by their peers and that they were able to form and slightly increase the number of friendships with peers throughout the course of the school year.

To Learn More

Brown, W. H., Favazza, P. C., & Odom, S. L. (1995). *Code for active student participation and engagement—Revised (CASPER II): A training manual for observers*. Nashville: Vanderbilt University, Early Childhood Research Institute on Inclusion.

Buysse, V., Wesley, P. W., Bryant, D., & Gardner, D. M. (1999). Quality of early childhood programs in inclusive and noninclusive settings. *Exceptional Children*, 65, 301-314.

Goldman, B. D., & Buysse, V. (2005). *Playmates & Friends Questionnaire for Teachers, 3rd Edition*. Chapel Hill: The University of North Carolina, FPG Child Development Institute.

Odom, S. L., Hanson, M. J., Lieber, J., Marquart, J., Sandall, S., Wolery, R., Horn, E., Schwartz, E., Beckman, P., Hikido, C., & Chambers, J. (2001). The costs of preschool inclusion. *Topics in Early Childhood Special Education*, 21, 46-55.

Odom, S. L., Parrish, T., & Hikido, C. (2001). The costs of inclusion and noninclusive special education preschool programs. *Journal of Special Education Leadership*, 14, 33-41.

Wolery, M., Pauca, T., Brashers, M., & Grant, S. (2000). *Quality of Inclusive Experiences Measure*. Unpublished assessment instrument. Chapel Hill: The University of North Carolina, FPG Child Development Center.

FPG—A Place for All Children



CHILDREN WITH DISABILITIES and their families—long neglected—experienced positive attention toward the end of the 20TH century. Through legislation children with disabilities gained access to education available to other children. New laws also accorded families primary roles in their children’s treatment, especially as intervention became more family centered.

Making a sound education accessible to all children broadened as demographics changed. In the 1990s, the foreign-born population of the United States nearly doubled, according to the 2000 U.S. Census. Early education and intervention professionals began to interact with children and families from linguistically and culturally diverse backgrounds. Latinos became the largest minority group in the country, according to the 2003 U.S. Census.

Over the years, FPG programs have addressed the needs of children with disabilities. In addition, FPG has focused on interventions that address ethnic, linguistic, and cultural differences intersecting with disabilities. These programs have varied, as new needs and policies have emerged. They have included research, training, outreach, and technical assistance. But the constant is FPG’s dedication to creating quality in the early learning experiences of all children while supporting and collaborating with their families, agencies, and service providers as well as preparing personnel to teach and to serve.

This section highlights projects (examples of FPG’s numerous endeavors) that serve children with special needs. It is noteworthy that even before some laws passed, FPG was committed to the development and well-being of all children.

1960s

John F. Kennedy had an interest in persons with disabilities because his sister, Rosemary, had mental retardation. In 1961, he asked a panel of experts to develop “A National Plan to Combat Mental Retardation.” In response to the panel’s findings in 1963, Congress passed the Maternal and Child Health and Mental Retardation Planning Act and the Mental Retardation Facilities and Community Mental Health Construction Act.

Along with 12 centers across the nation, FPG received a grant from the National Institute of Child Health and Human Development to set up a Mental Retardation Research Center. FPG was the only center to focus on prevention of mental retardation. (See page 6.)

1970s

In 1975 Public Law 94-142 (Education for All Handicapped Children Act, or EHA), which became the Individuals with Disabilities Education Act, or IDEA, in 1997 ensured a free, appropriate public education for children with disabilities ages 3–21.

Dr. James Gallagher became director of FPG. He brought a wealth of experience and contacts, having conducted long-term studies of gifted children and children with brain injuries. As the first director of the Bureau of Education for the Handicapped and Assistant Secretary for Planning, Research, and Evaluation, he was instrumental in driving a national agenda to grant special educational rights to children with disabilities. With his political savvy, Gallagher knew how to obtain funding and showed how research could affect policy. During his tenure, the **Abecedarian Early Childhood Intervention Project** developed.

FPG's work on technical assistance and research gained momentum. Two projects representative of these efforts are the **National Early Childhood Technical Assistance Center (NECTAC)** and the **Carolina Institute on Research and Early Education for the Handicapped (CIREEH)**.

In 1971 FPG received a grant to create the Technical Assistance Development System, now called NECTAC. Along with Jim Gallagher, Dr. Donald Stedman helped establish the center. Funded for 35 years and directed by Dr. Pascal Trohanis, NECTAC helps implement the early childhood provisions of IDEA. NECTAC supports service systems to ensure that children with disabilities ages birth–5 and their families benefit from high quality, culturally appropriate, and family-centered supports and services.

For 10 years, CIREEH studied family participation in programs for preschool children with disabilities. The findings showed that families can cope with the birth of a child with disabilities, particularly when receiving early assistance from professionals. The institute's programs encouraged specialists to focus on families as well as children with disabilities.

1980s

In 1986 PL 99-457 (amendments to EHA) provided incentives for states to offer services to children with disabilities ages birth–2 and reinforced the emphasis on the inclusion of children with disabilities in community-based programs.

The **Partners for Inclusion (PFI)**, began in 1985 and has been a driving force in North Carolina in ensuring that the programs for young children with disabilities are of high quality and in inclusive settings. Directed by Pat Wesley, PFI is a technical assistance project with offices in three North Carolina regions. PFI's staff members work with public schools, child care and preschool programs, early intervention agencies, child care resource and referral agencies, local Smart Start partnerships, and other organizations. Services include consultation, training, and product development that support inclusive early childhood experiences for all children. PFI raises awareness through community forums on inclusion.

"PFI has been instrumental in changing attitudes about children with disabilities and has assisted preschool programs in providing inclusive settings with blended funding," says Kathy Baars of the North Carolina Department of Instruction.

FPG also became interested in the training of early intervention

professionals. The 1986 legislation specified that children with disabilities receive family-centered, interdisciplinary services. FPG researchers wanted to know whether these professionals had been trained in this new approach. They also asked whether colleges and universities were adequately preparing students to be effective service providers. In 1987 the **Carolina Institute for Research on Personnel Preparation (CIRIPP)**, directed by Drs. Don Bailey and Rune Simeonsson, explored these issues.

CIRIPP surveyed college and university programs in 11 disciplines to figure out how students were being prepared to work with infants and toddlers with disabilities and their families. The results were not encouraging. Faculty lacked expertise, and direct service providers required training about new regulations. Families and professionals were not making decisions together about changing practices.

CIRIPP faculty devised new curricula, examined instruction strategies, encouraged family-centered attitudes among providers, came up with inservice training approaches, and tested family-centered systems for service coordination.

1990s

CIRIPP ended in 1992, but it influenced subsequent research. Changing personnel training was a challenge. State and local agencies, universities, and community colleges prepared personnel but did not coordinate their efforts. Information about best practices sometimes conflicted. One solution was an integrated early intervention personnel development system that would serve state agencies and universities.

Led by investigators Dr. Pamela J. Winton and Camille Catlett, the

Child Care Program Opens Arms to All

The FPG Child Care Program welcomed children with disabilities in 1984 and remains firmly committed to this part of its mission. "Currently of the 83 children enrolled, 30% have disabilities and are included in all classrooms. They receive specialized therapies and interventions in the classrooms and on the playground during the regular routines and activities of the day," says Maggie Connolly, director.



In addition to the teaching staff, there is a team of specialists consisting of a special services coordinator, a speech therapist, and a part-time physical therapist and occupational therapist. "In this model of inclusion, intervention strategies for individual children are incorporated in a group setting and may involve other children that want to participate," says Connolly. "When a child is getting physical therapy on a piece of equipment, the other children might watch and assist. Or they may want to try it out for themselves and model for other children."

"This is a collaborative, consultative model that uses a team approach; and the child's family is very much a part of the team," says Ruth Miller, coordinator of special services. The classroom teachers meet biweekly with the specialist's team to discuss strategies and adapt activities to support the children with disabilities.

"This empowers our teachers to provide interventions throughout the child's day at school," explains Miller. "We adapt equipment so all children can do the same things in similar ways. For example, a child with cerebral palsy can use a stander to paint at an easel or have a special chair to position them to sit like their peers at circle time. For a child with Down syndrome who is not using language, the teachers will use picture boards as communication aides so the child can make choices of activities or foods at meal times."

Over the years, working with the Child Care Program, FPG scientists have studied the effects of inclusion on families, developed guidelines for individualizing inclusion, and field tested curriculum materials.

Connolly says that inclusion really works, especially when starting early and including everyone. "Children see their peers with disabilities as more the same than different," says Connolly.

"Much of the communication in early childhood is nonverbal. Teachers facilitate group interactions and foster friendships between children using a variety of communication supports. Simple sign language is taught to all children, starting with infants. We see lifelong friendships formed among children from very diverse backgrounds. They learn to love and accept other children as they are."



Southeastern Institute for Faculty Training (SIFT) was one of four federally funded institutes focused on system reform in universities and colleges. Its success led to four federally funded projects: **Southeastern Institute for Faculty Training Outreach (SIFT-OUT)**, **Supporting Change and Reform in Interprofessional Preservice Training (SCRIPT)**, **New Scripts**, and **Natural Allies**.

These systems change in personnel preparation projects promoted improvements in the training of teachers and specialists serving young children with disabilities and their families. The projects provided support and brought personnel preparation reform to a total of 30 states. Through a facilitated sequence of planning, training, follow-up, and evaluation activities, teams of faculty members, family members, practitioners, and state agency representatives worked to create changes on how teachers and specialists were prepared at a systemic level and at a program/practice level.

The dual emphasis on content and instructional process is seen in the innovative instructional approaches still in use to this day (e.g., family-faculty co-teaching, case method of instruction, family practica, and interdisciplinary coursework).

Like CIRIPP, which laid the groundwork for more programs in personnel preparation, other FPG projects have spun off more research in certain areas. One example is the study of fragile X syndrome (FXS), the most common inherited form of intellectual disability.

In 1993 FPG began a longitudinal study of the early development of boys with FXS and their families. Dr. Don Bailey, Dr. Deborah Hatton, and a multidisciplinary team of colleagues have followed the development of these boys through the preschool years and elementary and middle

school. Investigators have examined a wide range of developmental and behavioral functioning in children with FXS, beginning with initial studies of developmental trajectories, expanding to studies examining behavior, temperament, and autism status, and most recently concluding with studies of neurocognitive function and school achievement. Collaborators include Dr. Penny Mirrett, Dr. Jane Roberts, Dr. Jenni Schaaf, Dr. Steve Hooper, and Dr. Peter Ornstein. Dr. Joanne Roberts leads the **Carolina Communication Project**, which studies the speech and language skills of young males with FXS, Down syndrome, and typically developing children.

In 2003 the team was funded to expand their work to include a detailed look at family adaptation to fragile X syndrome. Bailey, Hatton, and colleagues (Dr. Debra Skinner, Dr. Jane Roberts, Dr. Joanne Roberts, and Dr. Steve Reznick), in partnership with researchers at the University of Kansas, are examining family adaptation to genetic information, their child's behavior challenges, and need for specialized learning experiences.

FPG scientists often have several research interests. For instance, Deborah Hatton studies children with visual impairments as well as those with FXS. Some of her work has targeted personnel preparation. **The Early Intervention Training Center for Infants and Toddlers with Visual Impairments** created interdisciplinary training resources to help colleges and universities to prepare personnel to serve infants and toddlers with visual impairments/blindness. For **Project Emerge**, Hatton and Dr. Karen Erikson investigated issues and promising practices in the development of early literacy learning in young children (birth–6) who have visual impairments, including blindness.

2000s

In 2000, 28.4 million foreign-born people resided in the U.S., according to the government's National Institute for Literacy. Of these individuals, 51% were born in Latin America. Among all children of foreign-born people, 6.7 million spoke another language at home, and 2.4 million children had difficulty speaking English.

In early 2000 the six-year project **Latino Families of Children with Mental Retardation** was ending. It examined how families of Puerto Rican and Mexican heritage adapt to a child with mental retardation in terms of beliefs, values, causes, treatment options, and expectations for the child. Don Bailey and Debra Skinner, principal investigators, studied 250 parents on the U.S. mainland. The study provided narratives of parents' understanding of and experiences with disability, supports, and services. More projects dealing with disability and diversity—with a particular emphasis on supporting teachers and specialists who were serving diverse children and families—were soon underway, including **Walking the Walk** and **Crosswalks**.

Increasing numbers of children in the U.S. come from linguistically and culturally diverse backgrounds, but teachers, specialists, and administrators are often white and female. With **Walking the Walk**, principal investigators Pam Winton and Camille Catlett began exploring strategies for increasing both the diversity and the cultural competence of future practitioners.

Walking the Walk worked with campus and community partners in six North Carolina communities. The project involved families, individuals with disabilities, administrators, students, and faculty members from diverse disciplines at community

colleges, universities, and Historically Black Colleges and Universities. Participants identified needs and priorities, while the project provided models, resources, and experiences, including an institute addressing diversity priorities. Both individual and community action plans for increasing the emphasis on diversity were developed by participants, which resulted in increased course offerings in Spanish, shifts in instructional materials, and methods and campus events focused on the importance of culture and language.

“Preparing professionals to be sensitive to cultural diversity is a major contemporary challenge in our state and across the nation,” says one faculty participant. “[Through this project I discovered] activities, resources, self-inventories, and questions related to bias to use in my teaching.”

Camille Catlett directs Crosswalks, which is conducting research on a process to help college and university programs to systematically address diversity as part of coursework, field experiences, and program practices. Two North Carolina institutions of higher education—each preparing students to work with children 0–5 with and without disabilities and their families—are participating for two years as experimental sites. Each site receives training, technical assistance, and resources to support changes in what, how, where, and with whom they teach in order to be responsive to and reflective of diversity. The Crosswalks Toolbox, a valuable online database with hundreds of diversity resources, has also been developed.

Begun in 2001, **New Voices/**

Nuevas Voces was designed for service providers working with children from culturally, linguistically, and ability diverse

backgrounds. Directed by Dr. Dina Castro and Betsy Ayankoya, the project focused on Latino children with special needs and their families. Early childhood professionals received support materials and technical assistance.

The **Nuestros Niños Early Language and Literacy Project** is developing and testing an intervention to improve the quality of teaching practices related to literacy and language learning among Latino children enrolled in North Carolina’s More at Four Prekindergarten program for at-risk children. The professional development of teachers includes acquiring knowledge through training institutes and ongoing support from a bilingual consultant to help teachers implement new instructional strategies. Content for the professional development activities is based on *LiteracyGames*, which is adapted for use with Latino children who are English language learners. (*LiteracyGames* contains a set of 50 games for 3- and 4-year-olds that teachers use to engage them in learning activities.) Drs. Virginia Buyse and Dina Castro are the principal investigators.

In addition to studies related to Latino children, FPG’s diversity-related projects study other groups. For example, Dr. Joanne Roberts and Dr. Margaret Burchinal direct **Predicting African American Adolescents’ School Success**. The study tracks 73 adolescents, mostly from low-income families, whose development, family, and school environments have been documented since infancy. Study findings will have implications for the sociocultural factors that affect the

school success of African American adolescents and will influence intervention efforts to promote success in their school competence.

In 2004 FPG established initiative groups on crosscutting topical issues. These included the FPG Disability Initiative and the Multicultural Initiative. The **FPG Disability Initiative** brings together key people from FPG to identify linkages across various disability activities. It also finds ways to coordinate these efforts and respond to emerging problems. The **Multicultural Initiative** has four broad goals: to build a climate conducive to recruiting and supporting diversity in FPG staff and in FPG leadership ranks; to enhance FPG’s overall research and ability to generate new knowledge related to diversity and multicultural issues; to strengthen community partnerships; and to extend FPG’s outreach, training, and technical assistance capacity related to multicultural issues with multiple audiences. The initiative also sponsors ongoing discussions and professional development opportunities for FPG staff on diversity topics.

It is impossible to summarize in several pages all FPG projects focused on disability and diversity—as well as their far-reaching effects on the lives of all children and their families, early childhood teachers, college and university faculty, intervention professionals, legislators, and agencies. Projects and professionals mentioned in this section are representative of the many FPG scientists and staff who develop innovative projects and contribute significantly to knowledge in their fields while working to

improve education and quality of life for children with special needs and their families. ■



First School

The Case for a New Early Education Framework



In 2001 Congress passed George W. Bush's No Child Left Behind plan for comprehensive education reform. By 2005 almost 40 states established prekindergarten programs and a million 4-year-olds were attending preschool in classrooms under the auspices of public schools. A new vision emerged at FPG—FirstSchool, a national framework for early schooling of children ages 3 to 8.

The Impetus for Change

The idea of FirstSchool did not occur overnight. Years of research demonstrated that children benefit from high quality early education experiences before they enter kindergarten. The long-term advantages of those early experiences include higher academic achievement, lower rates of placement in special education and grade retention, and improved high school graduation rates.

However, current research indicates that many state-funded prekindergarten (pre-K) programs need improvement. Two studies initiated by the National Center for Early Development & Learning (NCEDL)—a national early childhood research project directed by Drs. Donna Bryant and Richard M. Clifford—presented a sobering picture. The Multistate Study of Prekindergarten and the Statewide Early Education Programs Study together offered the most comprehensive descriptive picture of publicly

funded prekindergarten teachers, children, and classrooms in 11 states. (The preliminary descriptive report was released in 2005.) The studies shared two common goals: to understand variations among prekindergarten programs and to determine how these variations relate to child outcomes at the end of prekindergarten and in kindergarten.

Many of the programs studied met professional guidelines for structural features of quality (such as class size, child-to-teacher ratio, teacher education and experience, length of day and year, and use of standard curriculum). But process quality (the quality of interactions and activities provided to children on a day-to-day basis) was lower than expected. Although the classrooms were deemed friendly and warm, the findings related to how children spent their time were discouraging. A high percentage of the prekindergarten day was spent eating meals and performing routines such as hand-washing or standing in line. Children experienced

few meaningful interactions with adults. Instructional quality in terms of helping children learn new concepts and providing useful feedback was poor.

The time seemed right for a new vision. “At least 38 states offer prekindergarten to 4-year-olds,” says Dr. Kelly Maxwell, FPG scientist and FirstSchool co-director. “Many primarily serve children at risk for school failure, but there is a move toward offering pre-K to all children. In most states pre-K programs are governed by state departments of education. We believe public schools will be more and more involved in offering services for 4-year-olds. With the recent research suggesting that it’s hard for pre-K programs to provide the high quality educational experiences we would like for all young children, we thought it was important to take a step back and rethink early schooling experiences for young children.”

In considering an effective pre-K framework for the 21st century, FirstSchool leaders took into account what happened when kindergarten became part of the American education system a generation earlier. “When kindergarten was moving to become universally available in most states, a common complaint heard from kindergarten teachers was that the school tended to expect that the content and methods used in the first through sixth grades would simply be adopted by kindergarten teachers and children,” says Dr. Richard M. Clifford, FPG senior scientist and FirstSchool co-director. “In a study of kindergartens in the first half of the 20th century, the researcher quoted kindergarten teachers as referring to the ‘tyranny’ of the first grade teachers. They felt that the upper grade teachers were simply expecting the kindergarten teachers to teach the subject matter they had been using and for these younger children to act just as older elementary children. This push down of practices and expectations is just what we are now hearing from pre-K teachers.”

“Currently there is preschool and then there is the K-12 system, with too few significant links between them,” adds Dr. Sharon Ritchie, senior scientist and FirstSchool



co-director. Smooth transitions from prekindergarten to kindergarten occur when teaching philosophies, curriculum, and assessment practices align to support children and their families. But such approaches are not uniformly practiced. “We look toward a developmental continuum for 3- to 8-year-olds that brings the systems into alignment,” says Ritchie.

A Call for Action and Partnership

Developing and implementing a new framework require strong collaborative relationships with all those involved in the education and care of young children. A steering committee of representatives from FPG and the School of Education at The University of North Carolina at Chapel Hill began the planning process in 2004. By 2006 eight planning committees were formed. They included key stakeholders such as parents, teachers of young children both in and out of public school, administrators and directors, child care community representatives, teacher educators, researchers, and other community leaders.

“What we want is for thinking and planning to be a concert with many more voices, ideas, and perceptions than those more ordinarily found in such work,” says Ritchie. “We need to listen to and utilize the ideas of teachers, family and community members, teacher educators, and service providers.”

Listening to a Diverse Community

In June 2005 a full-day Readiness Symposium was co-sponsored by FPG and the National Center for Family and Community Connections with Schools. (Located in Austin, Texas, the center links people with research-based information and resources that they can use to connect schools, families, and communities.) The symposium set primary goals:

- To share research-based information on issues associated with school readiness.



- To present the status of public pre-K programs based on nationally representative data.
- To identify the key components or elements of a new model for public education of children ages 3 to 8 through focus groups with symposium participants.

“The symposium was an opportunity to launch FirstSchool with parents, teachers, administrators, and the broad community,” said Dr. Pamela J. Winton, FPG senior scientist and a member of the steering committee. “We took a grassroots approach by asking the community to share their vision for a new model of schooling for young children.”

A planning committee for the symposium consisted of public school and child care community representatives from Durham, Orange, and Chatham counties. Eighty participants representing five key groups were recruited: family members, teachers, local administrators in early childhood programs, administrators in state-level agencies, and community representatives. The participants were also chosen based on other characteristics such as diversity, flexible thinking, and a passion for best practices.

On the afternoon of the symposium, the participants divided into focus groups to discuss their perspectives on a new framework of early schooling for children ages 3 to 8.

They responded to seven broad questions.

- What is your reaction to educating children ages 3 to 8 in one setting?
- How can we ensure that children make smooth transitions in and out of FirstSchool?
- What advice do you have about curricula?
- What are effective ways of recognizing and responding to young children who are struggling learners?
- What are effective ways of providing high quality experiences for children from diverse backgrounds and linguistic groups?
- What are effective ways of engaging families in all aspects of their children’s education?
- Who are the key partners and connections that FirstSchool should develop within the community?
- What kinds of results should be measured to show the effectiveness of FirstSchool?

FirstSchool Committees

Each of the eight committees addresses a specific area essential to establishing and operating the FirstSchool framework.

Common to all is establishing a research agenda for identifying, comparing, and validating the most promising practices.

- **The Business Committee** is charged with developing a plan for operating the FirstSchool model, determining ways to obtain funding, and coming up with a model plan to help local and state agencies in other communities implement FirstSchool.
- **The Curriculum and Instruction Committee** will address curriculum and instruction design issues to ensure a seamless, cumulative learning experience for children ages 3 to 8. To accomplish this goal, the committee will specify learning objectives and devise a method to track individual progress through these objectives. In addition, they will identify a set of published curricula resources compatible with FirstSchool learning objectives and develop instructional strategies.
- **The Diversity Committee** will contribute to the implementation of the FirstSchool initiative in two major areas: responsiveness to cultural and linguistic diversity in early childhood education and inclusion of young learners with developmental disabilities, those at risk for learning and behavioral challenges, and those with exceptional potential.
- **The Research/Evaluation Committee** will develop a research and evaluation plan to document the planning and implementation process and to determine the effectiveness of FirstSchool.
- **The Facilities Committee** will plan, design, and oversee the building of a state-of-the-art facility for the education and care of children.
- **The Families, Communities, and Outreach Committee** will build strong partnerships with families and other community members and effectively communicate the FirstSchool framework.
- To support the growth of all staff, the **Professional Development Committee** will develop preservice and in-service models in concert with FirstSchool’s vision and guiding principles, as well as pilot a professional development model to prepare novice and veteran teachers to work at FirstSchool.
- **The School Transition Committee** will examine practices and relationships that enhance the early childhood transition process and lead to positive school outcomes for children ages 3 to 8.



Comments from the focus groups were frank as participants discussed a myriad of issues. For example, participants generally agreed that starting at age 3 would permit the school to work with children at a crucial time in brain development. However, some participants voiced concern about the potential consequences, especially the impact on the parent-child relationship. Administrators asked whether FirstSchool would accept students based on their age instead of their developmental readiness.

Children's age of exit sparked dialogue as well. Some teachers and administrators said that it would be prudent for students to exit FirstSchool at the end of second grade. There would be fewer distractions in preparing for end-of-grade testing, and they would have more in common with students in other grades. (North Carolina end-of-grade testing occurs in grades 3 to 8 and 10.) A state agency



representative advocated including third grade in the school, because end-of-grade tests for that group would enable an assessment of how well the FirstSchool framework delivers.

Teachers debated whether to use traditional grade promotion criteria. They raised thought-provoking questions: Should promotion be based on skills instead of age and a set calendar? Should a child who is cognitively but not developmentally ready be held back? What about children not meeting the standards determined for those who enter the fourth grade?

Mixed-age classrooms received a nod from parents, teachers, community representatives, and state agency representatives. Grouping children in an age range of more than one year allows them to move at their own pace, follow their interests, and learn from others. For example, older children may help younger ones by reading a story aloud and

Five Reasons for FirstSchool

The steering committee, co-directors, and committees contributed to crafting the description of FirstSchool and its significance: FirstSchool is a learning community in which development and education of 3- to 8-year-old children is at the heart of everything we do. Every child has a right to a successful, enjoyable, high quality FirstSchool experience that fosters intellectual, physical, emotional, and social well-being, and optimizes learning and development. In partnership with families and communities, FirstSchool accepts responsibility for preparing each child for a lifetime of learning—in school and beyond.

- **Children's experiences during the early years provide the foundation for later school success.** Parents are children's first teachers. Many children also spend large amounts of time in early care and education settings outside their home. Whatever their setting, children who have high quality experiences before they enter kindergarten are more successful in school. Yet many children do not receive the quality early experiences they need.
- **America is becoming more diverse.** About 45% of children under 5 are ethnically or linguistically diverse, according to the 2004 U.S. Census. This percentage is expected to grow over the next decade. Public schools must adapt to meet the needs of this increasingly diverse population of children.
- **Public school involvement with young children is increasing.** More than a million children—almost one-fourth of all 4-year-olds—are in a public school program today. Some public schools serve 3-year-olds as well. Very likely in the next 10 to 20 years, public schools will become a prevalent choice for families in educating and caring for young children.
- **A smooth, coordinated learning experience from ages 3 to 8 is important to children and families.** Many children in this age range are served by multiple programs, which make it difficult to provide a continuum of learning. Even when children are served within a single setting such as a public school, continuity from grade to grade may be lacking.
- **A variety of federal, state, and local agencies are responsible for the education and care of 3- and 4-year-olds.** We need a more coordinated, systematic approach to serving young children and their families. The experiences of children and families often vary dramatically depending on the particular program they use. These agencies often have no formal mechanisms for communicating about the care and educational needs of individual children or the community as a whole.

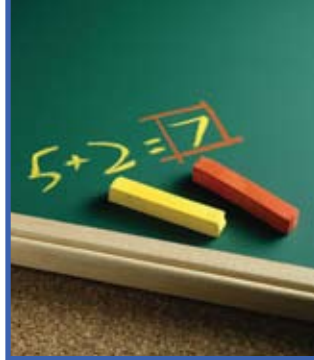
pointing out letters. The younger children develop listening and early reading skills.

Many symposium participants had positive opinions on teacher looping (when a teacher moves with his or her students to the next grade level rather than sending them to another teacher at the end of the school year). Some teachers observed that looping can cause issues if a teacher holds a bias against certain students. Another teacher suggested the compromise of having a primary teacher loop with the class while other teachers rotate in to work with the students. Then children and parents could cultivate a close relationship with the primary teacher, even as contact with additional teachers would offer children multiple opportunities to thrive.

The focus groups also examined curricula, which precipitated debate as to whether early reading is developmentally appropriate or to be avoided at age 3. The groups also discussed how to involve parents and to what extent they should be considered in curriculum planning, child assessments, and evaluation.

These discussions informed FirstSchool steering committee members of critical issues and concerns that must be considered as they move toward transforming the framework into a reality. The discussions also served as a way of introducing initial ideas about FirstSchool to the broader community.

The steering committee welcomed the input. “We are dedicated to getting all the ideas on the table, to engaging in conversation, and putting in the time and thought it takes to develop the trust and confidence required for the genuine exchange of ideas,” says Ritchie.



Funding to Support the Planning Process


Planning FirstSchool is a carefully paced three-year process. The W. K. Kellogg Foundation, the Foundation for Child Development, the University of North Carolina at Chapel Hill, FPG Child Development Institute, and private donors have contributed over \$2 million for this

stage of development.

The FirstSchool directors view this planning period as a *necessity* rather than a luxury of time. The challenges in providing high quality education and care to an increasingly diverse group of children ages 3 to 8 are great—and they deserve careful consideration.

“While \$2 million may seem like a lot to plan for such an expansion, we think it is a minimal investment when we are already spending billions each year on prekindergarten programs alone,” says Clifford. “We expect this planning to pay off in terms of helping schools, school districts and state agencies all across the U.S. as they are planning

expanded programs for young children in schools.”

With its initial site projected to open by 2010 and work with schools and states across the country already beginning, FirstSchool is poised to develop a philosophy and practice of early childhood education in collaboration with partners across the community. In doing so, FirstSchool perpetuates the FPG legacy of advancing knowledge and enhancing the lives of all children and families. 

To Learn More

Barbarin, O., Barnett, W. S., Bryant, D., Burchinal, M., Chang, F., Clifford, R.M., Crawford, G., Earley, D.M., Howes, C., Kraft-Sayre, M., Pianta, R., Ritchie, S., & Weaver, W. (2005). *Prekindergarten in Eleven States: NCEDL's Multistate Study of Prekindergarten & Study of State-Wide Early Education Programs (SWEEP)*. Retrieved March 13, 2006, from http://www.fpg.unc.edu/ncedl/pdfs/SWEEP_MS_summary_final.pdf

Barbarin, O., Bryant, D., Burchinal, M., Chang, F., Clifford, R. M., Early, D. M., Howes, C., & Pianta, R. (2005). What is prekindergarten? Characteristics of public prekindergarten programs. *Applied Developmental Science*, 9(3), 126-143.

Barbarin, O., Bryant, D., Burchinal, M., Clifford, R. M., Early, D. M., & Howes, C., & Pianta, R., (2005). Features of prekindergarten programs, classrooms, and teachers: Prediction of observed classroom quality and teacher-child interactions. *Applied Developmental Science*, 9(3), 144-159.

Bryant, D. M., Clifford, R. M., & Early, D. M. (2005). What we know about pre-K programs. *Principal*, 85(1), 20-24.

Bryant, D., Buysse, V., Clifford, R. M., Earley, D. M., Little, L., & Winton, P. (2005). NCEDL prekindergarten study. *Early Developments* 9(1).

Website

www.fpg.unc.edu/~firstschool/

Bailey, D., Hebbeler, K. M., Spiker, D., Scarborough, A., Mallik, S., & Nelson, L. (2005). 36-month outcomes for families of children with disabilities participating in early intervention. *Pediatrics*, 116, 1346-1352.

Bailey, D., Skinner, D., & Warren, S. (2005). Newborn screening for developmental disabilities: Reframing presumptive benefit. *American Journal of Public Health*, 95, 1889-1893.

Baranek, G. T., Barnett, C. R., Adams, E. M., Wolcott, N. A., Watson, L. R., & Crais, E. R. (2005). Object play in infants with autism: Methodological issues in retrospective video analysis. *American Journal of Occupational Therapy*, 59, 20-30.

Baranek, G. T., Danko, C. D., Skinner, M. L., Bailey, D., Hatton, D. D., Roberts, J. E., & Mirrett, P. L. (2005). Video analysis of sensory-motor features in infants with fragile X syndrome at 9-12 months of age. *Journal of Autism and Developmental Disorders*, 35(5), 645-656.

Buysse, V., Castro, D. C., West, T., & Skinner, M. (2005). Addressing the needs of Latino children: A national survey of state administrators of early childhood programs. *Early Childhood Research Quarterly*, 20, 146-163.

Buysse, V., & Wesley, P. W. (2006). *Evidence-based practice in the early childhood field*. Washington, DC: Zero to Three.

Clifford, R. M., Barbarin, O., Chang, F., Early, D., Bryant, D., Howes, C., Burchinal, M., & Pianta, R. (2005). What is prekindergarten? Characteristics of public prekindergarten programs. *Applied Developmental Science*, 9(3), 126-143.

Clifford, R. M., Bryant, D., & Early, D. M. (2005). What we know about pre-kindergarten programs. *Principal*, 85(1), 20-24.

Campbell, F. (2006). Early childhood interventions: The Abecedarian project. In P. C. Kyllonen, R. D. Roberts, & L. Stankov (Eds.), *Extending intelligence: Enhancement and new constructs*. Hillsdale, NJ: Erlbaum.

Curran, P. J., Bauer, D. J., & Willoughby, M. T. (2006). Testing and probing interactions in hierarchical linear growth models. In C. S. Bergeman & S. M. Boker (Eds.), *The Notre Dame series on quantitative methodology, Volume 1: Methodological issues in aging research*. Mahwah, NJ: Lawrence Erlbaum Associates.

Epstein, J. N., Willoughby, M. T., Valencia, E. Y., Tonev, S. T., Abikoff, H. B., Arnold, L. E., & Hinshaw, S. P. (2005). The role of children's ethnicity in the relationship between teacher ratings of ADHD and observed classroom behavior. *Journal of Consulting & Clinical Psychology*, 73(3), 424-434.

Gallagher, J. (2006). *Driving change in special education*. Baltimore: Brookes.

Kirk, S., Gallagher, J., & Anastasiow, N., Nicholas, J., & Coleman, M. R. (2005). *Educating exceptional children* (11th ed.). Boston: Houghton Mifflin.

Gottlieb, G., & Willoughby, M. T. (2006). Probabilistic epigenesis of psychopathology. In D. Cicchetti & D. Cohen (Eds.), *Developmental psychopathology: Theory and method, Volume 1, 2nd Edition*. New York: Wiley.

recent publications

fpg

Hazlett H. C., Poe M. D., Gerig G., Smith R. G., Provenzale J., Ross A., Gilmore, J.H., & Piven J. (2006). Magnetic resonance imaging and head circumference study of brain size in autism: Birth through age 2 years. *Archives of General Psychiatry*, 62(12), 1366-1376.

Hazlett, H., Poe, M. D., Gerig, G., Smith, R. G., & Piven, J. (2006). Cortical gray and white brain tissue volume in adolescents and adults with autism. *Biological Psychiatry*, 59(1), 1-6.

Harbin, G. (2005). Designing an integrated point of access in the early intervention system. In M. Guralnick (Ed.), *A developmental systems model for early intervention*. Baltimore: Brookes.

Jung, T., Roberts, J. E., Wallace, I., & Paradise, J. (2005). Complications and sequelae: Speech, language, and academic achievement. Recent advances in otitis media: Report of the eighth research conference. *Annals of Otolaryngology, Rhinology, and Laryngology*, 114(1) pt. 2, 140-160.

Maxwell, K. L., Feild, C. C., & Clifford, R. M. (2005). Defining and measuring professional development in early childhood research. In M. Zaslow & I. Martinez-Beck (Eds.), *Critical issues in early childhood professional development* (pp. 21-44). Baltimore: Brookes.

Peart, N. A., Pungello, E. P., Campbell, F. A., & Richey, T. G. (2006). Faces of fatherhood: African American young adults view the parental role. *Families in Society*, 87(1), 71-84.

Pianta, R., Howes, C., Burchinal, M., Bryant, D., Clifford, R. M., Early, D. M., & Barbarin, O. (2005). Features of prekindergarten programs, classrooms, and teachers: Prediction of observed classroom quality and teacher-child interactions. *Applied Developmental Science*, 9(3), 144-159.

Scarborough, A. A., Hebbeler, K. M., & Spiker, D. (2006). Eligibility characteristics of infants and toddlers entering early intervention services. *U.S. Journal of Policy and Practice in Intellectual Disabilities*, 3, 57-64.

Simeonsson, R. J., Scarborough, A. A., & Hebbeler, K. M. (2006). ICF and ICD codes provide a standard language of disability in young children. *Journal of Clinical Epidemiology*, 59, 364-372.

Skinner, D., & Schaffer, R. (2006). Families and genetic diagnoses in the genomic and Internet age. *Infants & Young Children* 19(1), 16-24.

Roberts, J. E., Long, S. H., Malkin, C., Barnes, E. F., Skinner, M., Hennon, E. A., & Anderson, K. (2005). A comparison of phonological skills of young males with fragile X syndrome and Down syndrome. *Journal of Speech, Language, and Hearing Research*, 48, 980-995.

for more information
about FPG publications,
see the FPG website at
www.fpg.unc.edu
or contact the
FPG Publications Office at
919 • 966 • 4221 or
FPGpublications@unc.edu

Roberts, J. E., Symons, F. I., Johnson A. M., Hatton, D. D., & Boccia M. L. (2005). Blink rate in boys with fragile X syndrome: preliminary evidence for altered dopamine function. *Journal of Intellectual Disability Research*, (49)9, 647-656.

Skinner, M., Hooper, S., Hatton, D. D., Roberts, J. E., Mirrett, P., Schaaf, J., Sullivan, K., Wheeler, A., & Bailey, D. (2005). Mapping nonverbal IQ in young boys with fragile X syndrome. *American Journal of Medical Genetics*, 132(1), 25-32.

Skinner, D. (2005). Cultural perspectives on developmental disabilities and early intervention. In P. Accardo, M. O'Connor-Leppert, P. Lipkin, & B. Rogers, (Eds.), *Early intervention: Biomedical and social perspectives* (pp. 71-87). Baltimore: York Press.

Skinner, D., Matthews, S., & Burton, L. (2005). Combining ethnography and GIS to examine constructions of developmental opportunities in contexts of poverty and disability. In T. Weisner (Ed.), *Discovering successful pathways in children's development: New methods in the study of childhood and family life* (pp. 223-239). Chicago: University of Chicago Press.

Winton, P., & Winton, R. (2005). Family systems. In J. Solomon (Ed.), *Pediatric skills for occupational therapy assistants* (2nd ed., pp. 11-22). St. Louis, MO: Mosby.

Winton, P., Catlett, C., & James, A. C. (2005). Resources to help teachers and other adults to discover the evidence base for early childhood and early intervention practices. *Young Exceptional Children* 9(1), 30-32.

Don Bailey's FPG Legacy

"THE TIMES, THEY ARE A-CHANGIN'" at FPG, as we were reminded by our Dylan-loving, limerick-writing, much-beloved, and soon to exit director.

Fourteen years ago, Don Bailey became director of FPG. His brand of leadership was considered unusual by some—quiet and unassuming most of the time with outbursts of wild and crazy skits several times a year, much to the delight of FPG faculty and staff. But his style proved to be effective. The number of grants had declined in the few years of transition prior to Don's assuming the directorship. Don championed and supported the work of researchers already at FPG, and recruited and mentored new researchers. He pulled together teams of researchers in successful applications for major new projects to study early childhood and services for special needs children.

Don guided the professional staff through an intensive self-study phase to better focus a mission for FPG and projects that would help achieve the center's goals. His efforts proved successful: FPG's total grant support increased from \$6 million in 1992 to over \$30 million in 2005, staff increased from about 150 to almost 350, and today FPG is considered to be one of the leading, if not the premier, child development institute in the country.

Don takes to heart the message that if UNC is a "university of the people," FPG Child Development Institute, as an arm of the university, is going to make a difference in the lives of children and families across North Carolina and the country. FPG's new FirstSchool Initiative, a school for children ages 3–8 and a model of education for that age range, was initiated by Don. Knowing that the country needed a better model of education and care for young children, he thought that FPG had much to contribute.

Another example is Don's involvement in the movement toward newborn screening for Fragile X syndrome. Don and his research team conducted the basic research on the family stressors associated with having children with Fragile X and worked with key stakeholder groups in developing solutions to the stressors. He is actively involved in

making policy and practice changes, including establishing procedures for newborn screening.

Rigorous, high quality research and scholarly publication are the foundation for what we do; however, our job does not end there. Don, by example, has shown us that our responsibility extends to the people who are the beneficiaries of that research (such as children, parents, teachers, administrators, and policymakers).

Don has continued his own line of research and watched it flourish, too. He has served as the principal investigator or co-principal investigator on over \$34 million in federal grants and almost \$2 million in state or foundation grants. Don has received numerous awards for his scholarship: 2002 Research Award, American Association on Mental Retardation; 2004 Rosen Research Award, National Fragile X Foundation; and 2006 Research Career Scientist Award, Academy on Mental Retardation. In 2002, UNC named Don the W. R. Kenan, Jr. Distinguished Professor of Education.

In our 40TH year, FPG stands at the brink of our most successful point in history. Don modestly credits others for FPG's successes. This spirit of generosity has permeated FPG. Collaboration is the heart of our work and makes us uniquely successful in our interdisciplinary work. Don leaves behind a rich legacy that will guide FPG's future—a vision for excellence in scholarship and service implemented through teamwork and partnerships operating at the highest level of collegiality.

As Don embraces his role as a distinguished fellow in early child development at RTI International, we wonder what he might do at their annual meeting or holiday lunch. A reprise of his Mr. Rogers impersonation? Maybe his John Travolta *Saturday Night Fever* walk? It may take a while before the folks at RTI realize the star power they have on board. We know that our lights have dimmed with Don's departure, but we take heart in the fact that he will keep one foot in UNC and that he will find ways to collaborate with his FPG colleagues. We wish him all the best.

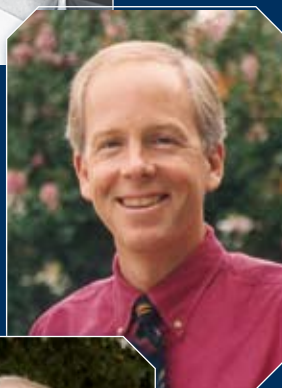
—The Editors



Photo Courtesy Bailey Family



Photo: FPG Archives





The FPG Child Care Program
celebrates FPG's
40th anniversary with a
birthday party during the
Week of the Young Child.

ed

early developments

FPG Child Development Institute
CB 8185, UNC-CH
Chapel Hill, NC 27599-8185

ISSN 1536-4739

Visit us online
www.fpg.unc.edu

www.ncedl.org

Non-Profit Org
US Postage Paid
Permit 177
Chapel Hill, NC

Address Service
Requested