

FPG
Child
Development
Institute
The University of North Carolina
at Chapel Hill

early developments



Fall 2004 | Volume 8 #3

Program Evaluation

news



Bailey Receives National Rosen Award

DR. DON BAILEY, director of the FPG Child Development Institute (FPG) at The University of North Carolina at Chapel Hill has received the William Rosen Research Award for “significant contributions to the field of fragile X research.”

The award, given every two years, was presented by the National Fragile X Foundation during its recent 9TH International Fragile X Conference in Washington, DC.

Fragile X syndrome is a gene disorder and the most common known cause of mental retardation and developmental disabilities. Fragile X is found in one in 4,000 births. The disorder is on the X chromosome that is in both males and females, but males are typically affected more severely.

Bailey is also director of the Fragile X Research Center, a collaborative endeavor between FPG and the University of Kansas.



Coleman Recognized for ‘Dedicated Service’

DR. MARY RUTH COLEMAN, Senior Scientist at FPG, has received an award “in appreciation of her dedicated service to children.”

The National Association for Gifted Children presented the award during its annual meeting earlier this month in Salt Lake City. Coleman’s research focuses on, among other topics, early literacy and cognitive development, children with disabilities, learning disabilities and the recognition of academic potential and talents among diverse learners.

The National Association for Gifted Children, based in Washington, DC, is an organization of parents, teachers, educators, other professionals and community leaders who address the needs of children with demonstrated gifts and talents, as well as children who may be able to develop their talent potential with appropriate educational experiences.

Coming Next in *Early Developments*

The National Center for Early Development & Learning
(NCEDL) Study of Pre-kindergarten Programs



contents

early developments

Fall 2004 | Volume 8 #3

ISSN 1536-4739

Editors

Pam Winton, Virginia Buysse

Writer

John Manuel

Designer

Gina Harrison

Photographers

Don Trull

John Cotter

Assistant Editor

Satsuki Scoville

www.fpg.unc.edu

www.ncedl.org

Early Developments is published three times a year by the FPG Child Development Institute at The University of North Carolina at Chapel Hill.

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, & printing costs of this issue of *Early Developments* were \$7658.

10,000 copies of this document were printed at a cost of \$5500, or 55¢ each.

Program Evaluation at FPG

4



How Smart a Start?

6



Much More at Four

10



Making the Literacy Connection

15



Can Song & Dance Improve Kids' Chances?

17



Center Illuminates Early Childhood Outcomes

19

FPG Publications

22

Program Evaluation at FPG

by Donna Bryant



Donna Bryant is a
Senior Scientist and the
Associate Director of FPG

This issue of *Early Developments* is devoted to program evaluation, a type of work that many of us at FPG are engaged in, either conducting evaluations ourselves or helping agencies and states conduct evaluations. Many readers know FPG for its research in prevention, early intervention, child care, and child and family development, but in the past several years, we have become more involved with evaluation of early childhood programs and initiatives.

The lines between evaluation and research are not clear-cut. They are alike in that evaluation and research are processes involving systematic data collection and rigorous design to gain knowledge about social and educational programs. They are different in that evaluation is inherently political. Evaluations are conducted to make decisions about the merit of an initiative—whether to continue, expand, or eliminate a program. Evaluations are also conducted to determine whether a program is operating as intended and to learn how to improve it. Research can answer questions about

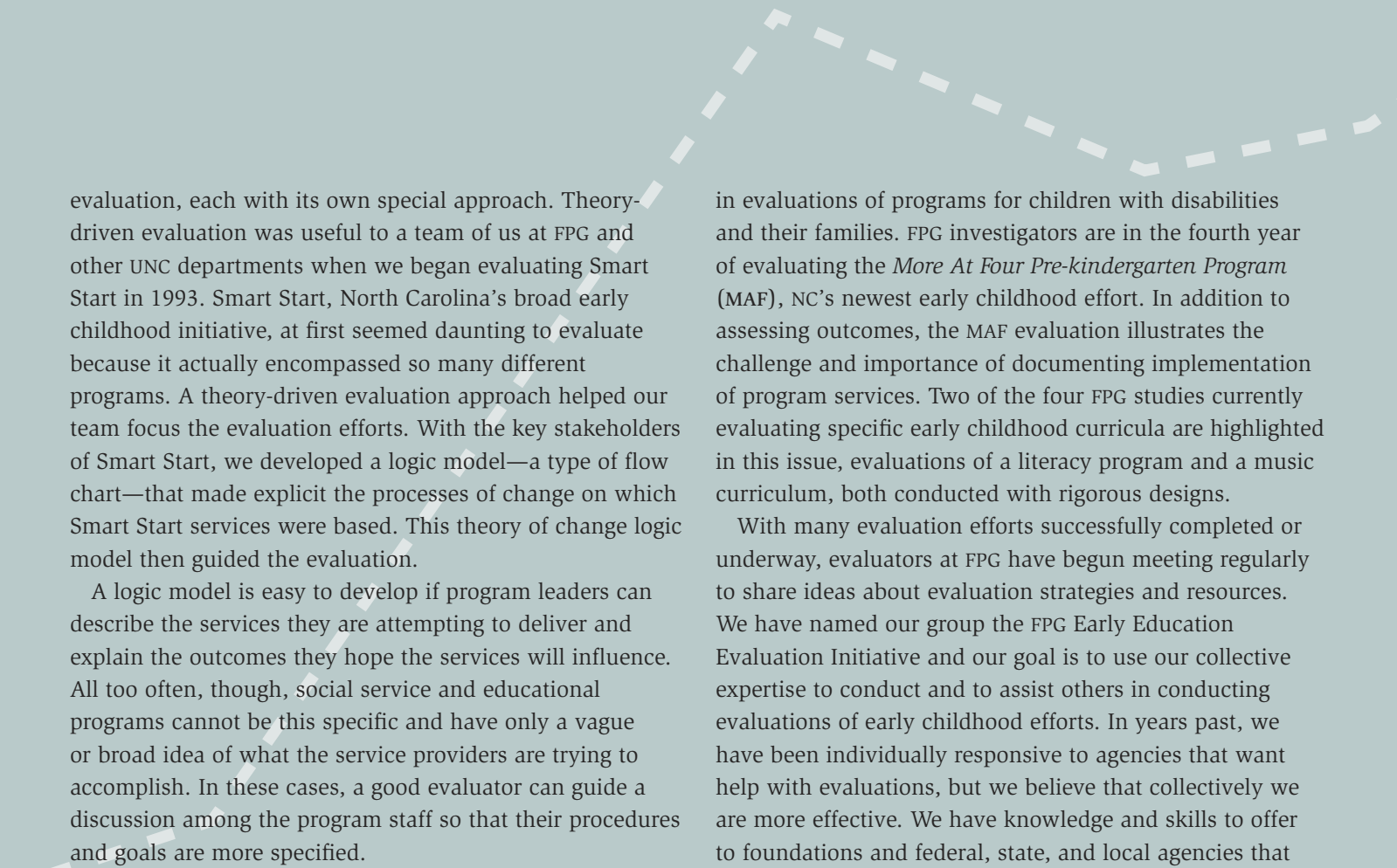
the effectiveness of a treatment, but an evaluation of the effectiveness of a program may well result in more or less funding for a project.

Because important decisions are made based on evaluations, FPG evaluators usually include several strategies to conduct the best evaluation possible. Obtaining input into the evaluation process from the key stakeholders—program directors, service providers, policymakers—can increase the reliability and validity of the results. In the best circumstances, it will also increase the likelihood that the results will be used in a program improvement process.

Including a needs and resources assessment in the evaluation can help a program judge how well its services are responding to the needs of its clients or community. Collecting contextual data helps to understand the social, economic and political conditions in which an initiative is implemented. Qualitative methods of collecting information can be very useful in assessing context, as well as other dimensions of an evaluation.

Evaluation is a relatively young field. Prisons, hospitals, and orphanages were evaluated back in the 1800s, but the modern history of evaluation began in the 1960s. The legislation that launched many programs as part of President Johnson's Great Society also required evaluation of these new programs. Nowadays, "accountability" is a common buzzword among federal, state, and local policymakers.

Even though relatively new, several branches of evaluation have developed, for example empowerment evaluation, responsive evaluation, and participatory



evaluation, each with its own special approach. Theory-driven evaluation was useful to a team of us at FPG and other UNC departments when we began evaluating Smart Start in 1993. Smart Start, North Carolina's broad early childhood initiative, at first seemed daunting to evaluate because it actually encompassed so many different programs. A theory-driven evaluation approach helped our team focus the evaluation efforts. With the key stakeholders of Smart Start, we developed a logic model—a type of flow chart—that made explicit the processes of change on which Smart Start services were based. This theory of change logic model then guided the evaluation.

A logic model is easy to develop if program leaders can describe the services they are attempting to deliver and explain the outcomes they hope the services will influence. All too often, though, social service and educational programs cannot be this specific and have only a vague or broad idea of what the service providers are trying to accomplish. In these cases, a good evaluator can guide a discussion among the program staff so that their procedures and goals are more specified.

Challenges in conducting an evaluation are numerous—policymakers often want a report very quickly or may fail to provide enough funds for an adequate evaluation. Worse still, policymakers or program leaders may already know how they want the results to turn out and there can be pressure on the evaluator to do this. Most often, though, an evaluator's challenge is conducting a valid evaluation in real world settings where randomized designs are hard to implement and where families and children may receive other kinds of services, in addition to the one being evaluated. These conditions make it hard to attribute outcomes to the program, although evaluators have strategies to try to account for or rule out other possible influences on the outcomes of interest.

The articles in this issue are about five evaluation projects at FPG. The Smart Start evaluation has ended, but was an exciting and rewarding project. The work of the Early Childhood Outcomes Center is increasing our knowledge about appropriate and feasible outcomes to use

in evaluations of programs for children with disabilities and their families. FPG investigators are in the fourth year of evaluating the *More At Four Pre-kindergarten Program* (MAF), NC's newest early childhood effort. In addition to assessing outcomes, the MAF evaluation illustrates the challenge and importance of documenting implementation of program services. Two of the four FPG studies currently evaluating specific early childhood curricula are highlighted in this issue, evaluations of a literacy program and a music curriculum, both conducted with rigorous designs.


With many evaluation efforts successfully completed or underway, evaluators at FPG have begun meeting regularly to share ideas about evaluation strategies and resources. We have named our group the FPG Early Education Evaluation Initiative and our goal is to use our collective expertise to conduct and to assist others in conducting evaluations of early childhood efforts. In years past, we have been individually responsive to agencies that want help with evaluations, but we believe that collectively we are more effective. We have knowledge and skills to offer to foundations and federal, state, and local agencies that fund service programs—from assessing evaluation capacity to planning or reviewing evaluations to actually carrying them out. Please contact us with your evaluation needs and questions. Over the next year we want to ascertain the level of interest in and need for our services and our capacity for responding to requests.

Our email is FPGevaluation@unc.edu or you may also contact an individual member via the FPG home page.

FPG Early Education Evaluation Initiatives Group Members

Donna Bryant, Virginia Buysse, Dina Castro, Jim Gallagher, Lynne Kahn, Kelly Maxwell, Ellen Peisner-Feinberg, Noreen Yazejian, and Kathleen Yonce. | **ed** |

How Smart a Start?



THE PROGRAM IS HUGE. The goals are ambitious. Demands for evidence that the program is working have been persistent from the beginning. FPG has risen to the task, conducting a complex evaluation over a decade that has simultaneously provided the State of North Carolina with the evidence it needed to continue funding for the Smart Start initiative, helping local partnerships identify areas that needed improvement, and training a network of early childhood evaluators who now support the local partnerships.

Smart Start is a comprehensive, community-based initiative serving North Carolina children under the age of 6 and their families. The program was launched in 1993 with the goal of ensuring that all children enter school healthy and prepared to succeed. From an initial group of 18 participating counties, Smart Start has expanded to include all 100 counties in 81 local partnerships (the local nonprofit organizations that administer the funds).

Smart Start does not prescribe specific activities to achieve its goals. Rather the local partnerships devise their own strategies focusing on three major areas of service implementation—child care and education,



**Children who
attended higher
quality centers
scored significantly
higher on measures
of skills and
abilities that are
deemed important
for entering
kindergarten
ready to succeed.**

family support programs, and health services. Progress in the provision and quality of these areas is tied to the longer-range goal of increased child preparedness for school.

Smart Start is an ambitious program, currently funded by the state at a level of \$190 million per year, and as much as \$240 million per year in the past. State legislators were eager to learn of the program's accomplishments within a few years of its implementation. In 1993, the NC Department of Health and Human Services' Division of Child Development contracted with FPG to evaluate the Smart Start initiative. FPG formed a statewide evaluation team consisting of researchers from FPG as well as the

Schools of Education, Social Work, and Public Health at The University of North Carolina at Chapel Hill.

Between 1993 and 2003, the team conducted

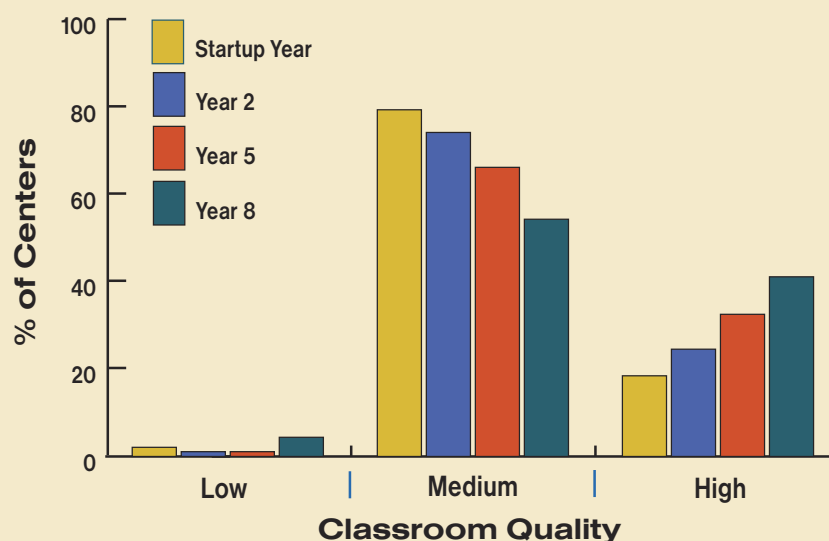
dozens of studies and produced 35 reports. "People wanted data as early as 1994 when many of the programs had only just started," says Donna Bryant, FPG senior scientist and director of the Smart Start evaluation. "We gave them data on numbers of children being served and how Smart Start was being implemented. Only later could we measure whether services and children's readiness had actually improved."

The latest findings, published in the March 2003 report, *Smart Start and Preschool Child Care Quality in North Carolina*, confirm the positive relationship between Smart Start services and school readiness. "We showed that children in higher quality child care do better in kindergarten," Bryant says. "This provided the state with the evidence it needed to continue legislative support for Smart Start."

To conduct this evaluation, FPG analyzed 110 preschool child care programs in 20 partnerships that entered Smart



Preschool Classroom Quality Improved Over Time



Start in the first, third, and fourth years of funding and in a variety of geographical settings. FPG measured the quality of classroom practices and the centers' level of participation in Smart Start-funded activities in the past year. From these classrooms, FPG assessed 512 children on their language, literacy, numeracy, and social-emotional skills.

FPG researchers analyzed whether participation in Smart Start-funded activities was related to child care center quality as measured by the ECERS, the *Early Childhood Environment Rating Scale*. Finally, they analyzed whether preschool classroom quality was related to children's skills and abilities in their preschool years and on into their kindergarten years, as measured by individual child assessments and teacher ratings of children.

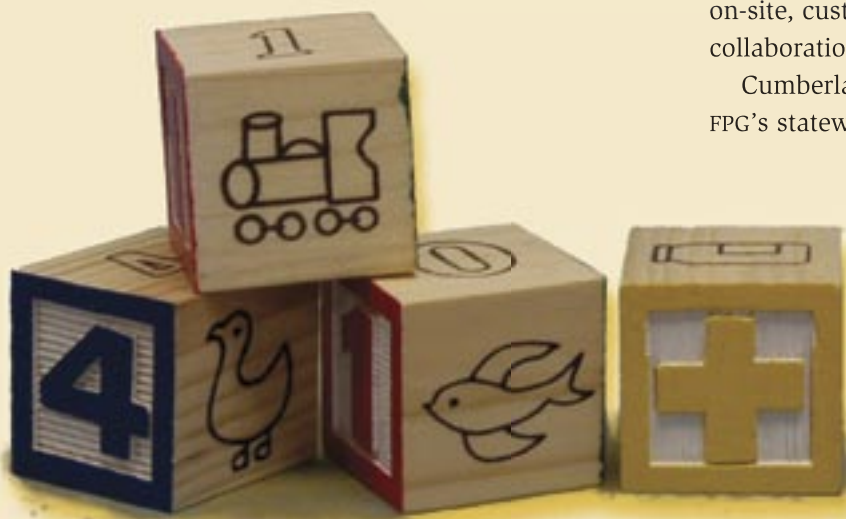
"The analysis showed that child care quality in this sample of child care centers has increased significantly over time, with the increase significantly related to the amount of a center's participation in Smart Start activities," Bryant says. "Children who attended higher quality centers scored

significantly higher on measures of skills and abilities that are deemed important for entering kindergarten ready to succeed. These results were over and above the effects of gender, ethnicity, and income."

Karen Ponder, president of the North Carolina Partnership for Children, says FPG's evaluations of Smart Start have been of tremendous value to program directors and policy makers. "First, the data have been used to modify and change certain services," Ponder says. "For example, in the report entitled *Demonstrating Effective Child Care Quality Improvement*, we discovered there were some key factors that appeared to affect the success of quality improvement efforts. We were able to use this information to improve the current practices of local partnerships." The key factors that came up repeatedly in the interviews conducted for this study were: strong leadership; strategic planning for a system of quality improvement programs; support for the education and professional development of the work force; financial rewards for higher education and improved quality; on-site, customized technical assistance; and effective collaborations with multiple community agencies.

Cumberland County's Partnership for Children used FPG's statewide evaluation of school readiness as impetus to conduct its own countywide school

readiness assessment, assisted by FPG researchers Kelly Maxwell and Donna Bryant. This assessment pinpointed several weaknesses and spawned corrective actions. "Our assessment



... the second major value of the Smart Start evaluations has been the documented evidence that Smart Start is reaching its goals of improving child care and school readiness.

showed we were weak in transition practices,” says Eva Hansen, executive director of the Partnership for Children of Cumberland County. “As a result, we’ve developed more focused activities. We’ve hired some transition coordinators and we’ve expanded our parent/kindergarten academy, a 6-week parent education program to help children and families adjust to entering kindergarten.”

Ponder says the second major value of the Smart Start evaluations has been the documented evidence that Smart Start is reaching its goals of improving child care and school readiness. “These data are used frequently with policy makers to gain their continued support for Smart Start,” Ponder says.

Through the decade-long evaluation process, FPG developed close relationships with the evaluators in the local partnerships. A network of early childhood evaluators supported by FPG through the course of the evaluations now help counties evaluate their outcomes on an on-going basis. Bryant says that this network is a positive by-product of the original Smart Start evaluation work.

Bryant reports that the FPG team has received many requests to help other states and communities that have implemented programs similar to Smart Start. While engaged in the Smart Start evaluation, FPG offered advice to others, for example, posting an evaluation notebook on the web. However, the team typically urged states to develop their own evaluation capabilities.

Now that the 10-year Smart Start evaluation is over, Bryant says the FPG evaluation team is more willing to undertake evaluations in other states. “We learned so much

about evaluating comprehensive community initiatives and we helped North Carolina learn what works to improve early childhood programs,” Bryant says. “Smart Start has been an innovative and successful initiative.” |ed|

To Learn More

FPG Smart Start Evaluation Project
www.fpg.unc.edu/smartstart

Smart Start (North Carolina Partnership for Children)
www.ncsmartstart.org

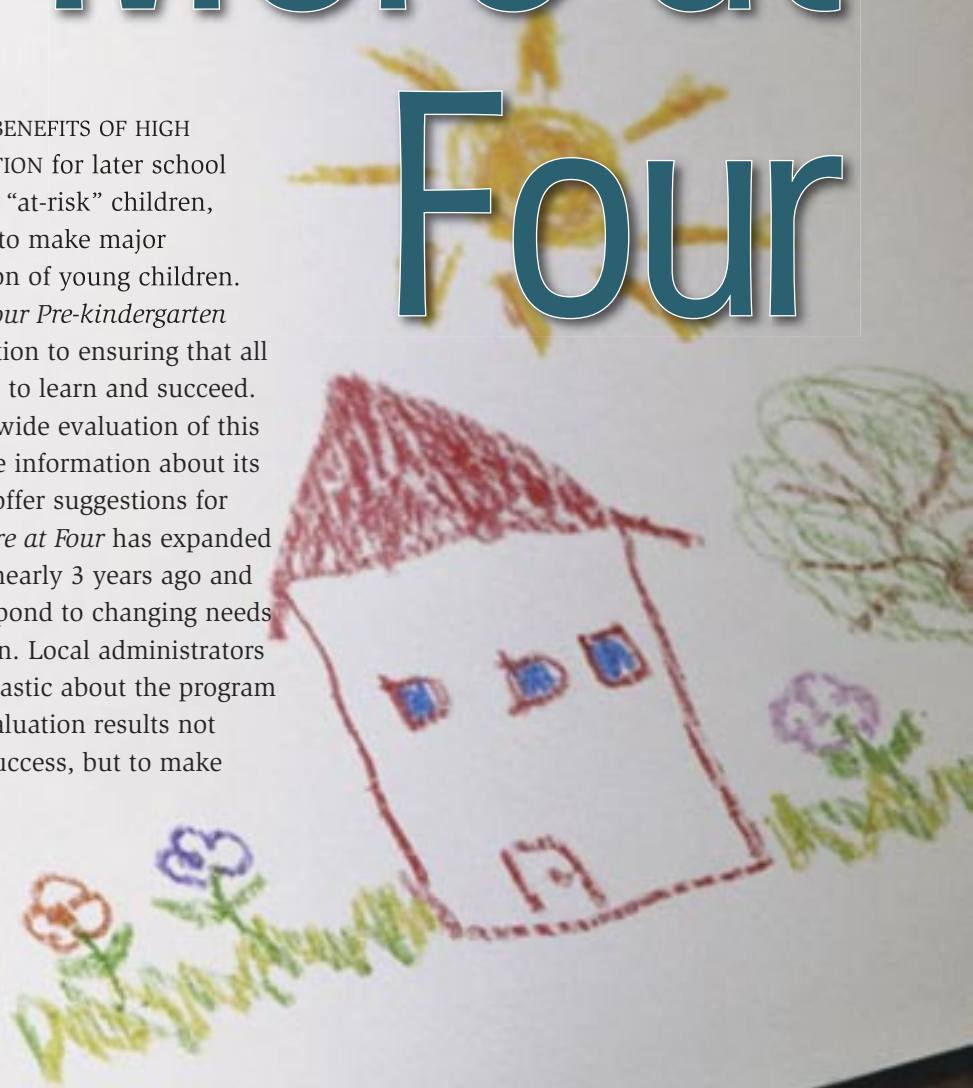
North Carolina’s kindergartners & schools: Summary report. Maxwell, K. L., Bryant, D. M., Ridley, S. M., & Keyes-Elstein, L. (2001). Chapel Hill: The University of North Carolina, FPG Child Development Center.

North Carolina’s kindergartners & schools: Executive summary. Maxwell, K. L., Bryant, D. M., Ridley, S. M. & Keyes-Elstein, L. (2001). Chapel Hill: The University of North Carolina, FPG Child Development Center.



Much More at Four

THE RESEARCH ON THE BENEFITS OF HIGH QUALITY EARLY EDUCATION for later school success, especially for “at-risk” children, has prompted many states to make major investments in the education of young children. North Carolina’s *More at Four Pre-kindergarten Program* is one state’s solution to ensuring that all children enter school ready to learn and succeed. FPG is conducting the statewide evaluation of this program in order to provide information about its effectiveness as well as to offer suggestions for program improvement. *More at Four* has expanded rapidly since its inception nearly 3 years ago and evaluators have had to respond to changing needs for supporting information. Local administrators and teachers are enthusiastic about the program and hope to use the evaluation results not just to confirm their success, but to make improvements.



Launched in January 2002, the *More at Four Program* is a North Carolina state-funded initiative designed to help at-risk 4-year-olds prepare for elementary school, particularly those children who would not otherwise have a pre-kindergarten experience. The *More at Four Program* is distinguished from Smart Start by focusing specifically on pre-kindergarten educational programs for the neediest group of 4-year-olds, whereas Smart Start is a broad-based initiative designed to provide a range of services for children aged birth through 5 years. Funding for the *More at Four Program* for the year 2004–05 is just under \$51 million.

The *More at Four Program* provides funding for classroom-based educational programs at a variety of sites designated by the local administration within each county or multi-county region. These sites, including public schools, for-profit and nonprofit private child care centers, Head Start programs, and other combinations, must meet a variety of program guidelines and standards involving curriculum, training and educational levels for teachers and directors, class size, and student-teacher ratios.

In Johnston County, North Carolina, the *More at Four Program* provides vital services to Latino children among others. “Fifty percent of our children entering kindergarten do not speak English,” says Laura Sylvester, community outreach coordinator for the Johnston County Partnership for Children (the administrative agency for *More at Four* in that county). “We know if they enter kindergarten like that, teachers will have trouble teaching them and the children will have trouble learning. We now have three bilingual staff members working on the project. They are going out and



looking for children, working with the parents to get them enrolled at a *More at Four Program* center. Our staff also refer the families to other agencies where they have a need.”

Legislators originally approved the *More at Four Program* with the requirement that an annual evaluation be conducted. The NC Department of Health and Human Services *More at Four Pre-kindergarten Program* has contracted with FPG to perform this evaluation since the program began. FPG released its Year 1 evaluation report in 2003 (see www.fpg.unc.edu/~mafeval/pages/publications.cfm). The Year 2 evaluation report will be released this winter, with the Year 3 report coming out in the spring of 2005.

From the start, evaluating the *More at Four Program* has presented FPG with unique challenges. *More at Four* is a new program and a rapidly expanding one, starting in 2002 serving 1,244 children in 139 classrooms across the state to serving nearly 11,000 children in over 900 classrooms today. Local programs use an online system developed by

The *More at Four Program* provides vital services to Latino children among others.



Researchers gather information from monthly service reports, annual observations of classroom quality, annual parent surveys administered at the end of the year in both English and Spanish, and individual child assessments at the beginning and end of the *More at Four* year.

FPG to provide monthly service report information about program operations from the county level down to the individual child level. The FPG team is responsible for managing the system and analyzing this information, in addition to gathering more in-depth data directly from samples of classrooms, children, and families across the state.

“The amount of data we collect for this project is huge,” says Cathy Maris, the *More at Four Program* evaluation project coordinator for FPG. “Our team is out in the field 6 to 8 months of the year gathering data on hundreds of children and their classrooms. We also manage the service report data, which includes information on more than 10,000 children each month. It keeps us busy, but it feels good to be part of something that seems to be making such a positive difference in children’s lives.”

Because the *More at Four Program* is new, funded above and beyond Smart Start, politicians have been under pressure to justify its existence. Their urgent need for information often falls to FPG staff. “We’ve had to be very responsive to the needs of the *More at Four Program* State Office, the Governor, and the legislature for

specific information, while at the same time being the external evaluator who can be objective and scientific,” says Ellen Peisner-Feinberg, the principal investigator for the evaluation and a Scientist at FPG. “That might mean dropping what we are doing to focus on a specific question they need answered.”

The goals of the evaluation have been to provide information regarding the quality of the program and its effectiveness for children, as well as to indicate suggested areas for program improvement. The primary research questions addressed by the evaluation have been:

- What were the characteristics of the local programs?
- Who was served by the *More at Four Program*?
- What was the quality of the services provided?
- How satisfied were families with the program?
- What were the outcomes for children attending these programs?

To address these questions, FPG researchers gather information from monthly service reports, annual observations of classroom quality, annual parent surveys administered at the end of the year in both English and Spanish, and individual child assessments at the beginning and end of the *More at Four* year. The FPG evaluation team includes a research staff of 6, with assistance from other data collectors, data programmers, and statisticians.

FPG’s Year 1 report was limited to descriptive information of the *More at Four Program*, as the program had only been in existence for 6 months, and individual sites operated for an average of only 3 months. The Year 2 evaluation offered the first chance to look at the quality of services and their impact on children. As of this writing, the Year 2 Report is being

finalized. However, the results look encouraging.

With respect to outcomes, the children sampled showed significant developmental growth in language and literacy skills, general knowledge, and behavioral skills. On many of these measures, children demonstrated more growth in skills over the school year than would have been expected without such a program. Children who entered the program at greater need (e.g., children at higher levels of service priority status, at greater overall risk, or with lower levels of English proficiency) showed even greater gains than children of lesser need, suggesting that the program is working for the target population.

Data showed that, overall, the *More at Four Program* provided a good quality preschool experience. Scores on the measure of classroom practices were in the highest quality range for half of the sample and in the medium range for the other half. Notably, no classrooms scored in the poor quality range.

Parent surveys revealed that most parents were very satisfied with all aspects of the *More at Four Program*. Nearly all parents reported their children “always” or “often” had positive experiences with the program. Parents were also generally pleased with how the program helped develop skills related to kindergarten success.

While researchers found a great deal of variation among the different counties/regions in program characteristics, the local sites were generally in compliance with the program requirements. “For the most part, individual sites met the guidelines for program operation, including class size and operating hours, with greater variation in the length of the program year, given the program expansion that was still going on in the second year,” Peisner-Feinberg says.

More at Four Evaluation Methodology

THE EVALUATION OF THE *MORE AT FOUR PROGRAM* has gathered a variety of different types of information from a wide range of sources in order to provide a comprehensive look at the program statewide. Each of the 91 counties or multi-county regions provides monthly service report data for every county, site, classroom, and child participating in the program using an online system. The data from this reporting system, which FPG developed and manages, are analyzed to examine the characteristics of program operations for the entire state. These service reports include information such as program size and operation days, teacher and administrator qualifications, and child demographic characteristics and attendance information.

Researchers observed a random sample of classrooms to determine the global quality of classroom practices and the level of curriculum implementation in the second and third years of the program. The former involved observations of 257 classrooms over a 2-year period to gauge such practices as the developmental appropriateness of activities and materials provided, the interactions among teachers and children, the physical environment, and the daily organization of the program. A total of 128 classrooms were observed during this same time period to determine the extent to which the organization of the environment, the materials provided, and the general schedule and routines were structured in accordance with the guidelines of the different curricula used in these classrooms.

Surveys from 1,666 parents in the first and second years provided information about satisfaction with the *More at Four Program*, perceptions of the program's effects on their children's skills and development, parents' level of involvement in program activities, and family demographic characteristics.

For a sample of 788 children over the past two years, researchers conducted individual assessments of language and literacy skills, math skills, general knowledge, and social skills near the beginning and end of the program year. These data provided information about the amount of development growth experienced by children over the *More at Four Program* year. The researchers are currently following a sample of these children into kindergarten to look at the longer-term effects of participation in the *More at Four Program* on children's school success. ■

The evaluation has shown that the program is reaching the target group—nearly three-quarters of the children served during the first two years of the *More at Four Program* had not been previously served in a pre-kindergarten or child care program. In addition, the evaluation showed that a majority of children served were designated at-risk, especially in terms of family income and parental employment. Significantly, 9% of children being served had disabilities, compared to the US population average of 6%.

“The findings suggest that, overall, the programs are doing what they’re supposed to be doing and having beneficial effects on children,” Peisner-Feinberg says. “There are some areas where we can suggest ways to improve and we look forward to sharing that information with the counties.”

Carolyn Cobb, Director of the *More at Four Program*, anticipates that the evaluation will confirm what she has

been hearing anecdotally—that the *More at Four Program* is a success. “The stories and letters we get from directors and teachers and parents are very heartening,” Cobb says. “I feel we are getting to the right kids.

“I hope to use FPG’s evaluation not just to measure success, but to improve the program,” she adds. “For example, there is a suggestion that one curriculum is better than others. And there are areas of the classroom quality data showing where some classrooms in some counties have not done as well as others. These are areas where we need to provide technical assistance and intervention.”

For Laura Sylvester, the program has already shown its worth. “The feedback I’ve been getting about the program from teachers, directors, owners and principals is all positive,” she says. “The fact that our Hispanic kids can speak perfect English after ten months is proof enough that the program is working.” |ed|

To Learn More

FPG Evaluation of the
North Carolina *More at Four Program*
www.fpg.unc.edu/~mafeval/

More at Four Pre-kindergarten Program
www.governor.state.nc.us/Office/Education/Home.asp





Making the Literacy Connection

FEW SKILLS ARE MORE IMPORTANT FOR A CHILD'S SUCCESS IN SCHOOL, and subsequently throughout life, than the ability to read. Literacy programs for preschool-age children have burgeoned with the recent availability of federal funds, but how well these programs work is largely unknown. FPG is providing answers for one North Carolina program, allowing administrators to use evaluation findings to make modifications as the program progresses.

The Literacy Connection (TLC) is an initiative conducted by the Wake County Public School System with a \$3.2 million grant from the US Department of Education through the Early Reading First program, part of President Bush's No Child Left Behind Act. TLC is designed to create centers of educational excellence for preschool children who are at risk for later

reading difficulties. The goal of the centers is to enhance inner-city preschool children's language, cognitive, and early reading skills through staff development, family education and involvement, continuity between preschool and school settings, and community partnerships. Children served by the centers include English

language learners and children with disabilities.

Wake County Schools has subcontracted with FPG to evaluate the program, which got underway in the fall of 2003. FPG's analysis of the first full year of implementation is scheduled for release in the summer of 2005 and a final analysis by the fall of 2006.

TLC includes four main components. First, the program trains and assigns literacy coaches to each participating pre-kindergarten (pre-K) classroom. Once a week, the coach works with the teacher and the teacher's assistant on how to increase the amount of reading in the classroom, employing the latest techniques demonstrated through research to be effective. Second, TLC sponsors training sessions for parents on how to read to children and set up helpful routines. The third component addresses the often difficult transition between pre-K and kindergarten. TLC explains to parents how to enroll their child in kindergarten. The program also arranges for a local kindergarten class to visit the pre-K class, after which the pre-K children will visit the kindergarten class. Staff development is the fourth component. Once a month, TLC invites participating teachers to a workshop to learn about the latest research findings in the area of literacy. This provides teachers with a comprehensive foundation on which to build their literacy programs.

"We are curious to see whether providing teachers with the tools, in terms of language materials and knowledge about literacy practices, coupled with a strong parent education component, leads to children who are more prepared for school," says Noreen Yazejian, FPG principal investigator.

FPG's evaluation is assessing 11 participating classrooms with 24 teachers/assistants and 88 students. Researchers



Literacy coaches work with teachers once a week.

are employing a pre/post design to measure changes in classroom environments; teacher knowledge; teacher instruction and planning; children's language, cognitive, and early reading skills; and parent

knowledge and involvement in supporting their children's literacy development. Classroom environments are being measured through direct observation. Teacher knowledge, instruction, and planning are being measured through surveys, interviews, and focus groups. Individual assessments are being used to assess children's language, cognitive, and early reading skills. In addition, researchers will examine kindergarten entry assessments, conducted by Wake County Schools, to see whether children coming from these centers are performing better than their peers. Parent knowledge and involvement is being assessed through surveys.

FPG's evaluation is designed to provide feedback to administrators as the project develops. This will allow TLC program administrators and literacy coaches like Debbie Gooch to make modifications where needed.


"Through the evaluation that FPG is doing, we hope teachers will be able to look at the results for their children to enhance their teaching practices," Gooch says. "For example, if many children score low on phonological awareness, teachers will know they need to increase activities that develop that skill. At the same time, with the focus groups that FPG is doing with our classroom teachers, our TLC staff hope to learn what's working and what needs to be addressed through professional development."

Wake County is one of thirty Early Reading First grant recipients nationwide and one of three in North Carolina. FPG anticipates that the results of this study will be of interest to educational organizations around the country seeking to replicate literacy programs for preschoolers. |ed|

To Learn More

US Department of Education • Early Reading First
www.ed.gov/programs/earlyreading/index.html

Can Song and Dance Improve Kids' Chances?



SPEND THE DAY IN A PRESCHOOL CLASSROOM and you're likely to see and hear some music and movement activities, whether it's children singing songs, dancing to music, or marching in a parade with musical instruments. Most educators would agree that music and movement experiences are one component for providing a high quality early childhood program. Such activities are intrinsically fun for children and have been incorporated into preschool classrooms around the country. However, there is little research on how such activities in the classroom contribute to children's development.

In 2002, the Foundation for Music-based Learning, a non-profit organization located in Greensboro, NC, contracted with FPG to conduct a study of the effects of a music and movement intervention on children's skills in Head Start classrooms.

"We were interested in observing whether specific musical practices in the classroom would relate to children's school readiness skills," says Noreen Yazejian, co-principal investigator at FPG. "Ours is one of the few studies nationally that has looked at the effects of a classroom level

music curriculum paired with a comparison group.”

FPG’s evaluation focused on 207 children in 27 Head Start classrooms in three states, a suburban area of North Carolina, a rural area of Kentucky, and an urban area of New York. The study included both an intervention group of 15 classes and a comparison group of 12 classes.

Classrooms in the intervention group received the music and movement curriculum delivered by an early childhood music teacher twice a week for 30 minutes a day throughout the Head Start program year. Classrooms in the comparison group received no additional music and movement activities other than what was typically available.

FPG researchers assessed children in both groups at the beginning and end of the year to measure growth in language, motor, and social skills. In addition, they observed each classroom before and after the intervention to see whether the intervention affected the quality of classroom practices overall.

The study found one area, communication skills, in which children receiving the music and movement intervention showed more growth than children in the comparison group. Specifically, children receiving the music intervention were rated higher on language and listening skills, both important components of school readiness. The data suggest that the music curriculum did not affect overall classroom quality, which may not be surprising given that the music intervention was only one hour/week within a full-time child care program.

However, FPG’s evaluation has helped fill in the knowledge gaps of what it takes to improve the quality of preschool classrooms and the school readiness skills of children in those classrooms. “People are trying to figure out what can be done to improve the quality of classroom practices,” says

Ellen Peisner-Feinberg, co-principal investigator of the study. “We are trying to ask and answer this question at all levels in our research. It is also possible that current measures of program quality may not be sensitive enough to measure improvements resulting from specific interventions

such as enhanced music and movement education.

“The current study suggests that adding high quality music and movement activities to preschool classrooms through a music teacher, even for one hour/week, had positive effects on one aspect of children’s

development,” she adds. “I’d like to see future research in this area look at how to help teachers themselves provide such high quality activities on a regular basis. We know that some type of music and movement activities are already a part of most preschool classrooms, and we now have some evidence that when done well, they can make a difference for children.” |ed|



**To Learn More about the
Music & Movement Curriculum**

www.musikgarten.org



Center Illuminates Early Childhood Outcomes

ACROSS THE NATION, federal funding for Infant, Toddler and Preschool programs created under the Individuals with Disabilities Act (IDEA) is vulnerable because of a lack of data showing what differences these programs make for participating children. Individual state programs are also under scrutiny due to declining tax revenues. Help for these much-needed programs is on the way through the Early Childhood Outcomes Center (ECO).

Formed at the behest of the US Department of Education's Office of Special Education Programs (OSEP), ECO promotes the development and implementation of child and family outcome systems that can be used for national, as well as state and local

accountability. The Center's principal activities are:

- Collaboration with stakeholder and other groups concerned with outcomes measurement
- Research on issues related to the development and implementation of outcomes measures
- Technical assistance to support states in developing and implementing outcome measurement systems

ECO is a collaborative effort among five organizations. SRI International serves as prime contractor and provides overall leadership for the ECO Center. FPG coordinates technical assistance services and collaboration with other child care accountability efforts. Other subcontractors include Juniper Gardens Children's Project at the University of Kansas, which leads

research; the National Association of State Directors of Special Education, which serves as the liaison to all state directors of special education; and the University of Connecticut Center for Excellence in Developmental Disabilities Education, Research, and Service, who along with FPG director Don Bailey takes the lead on all efforts related to family outcomes.

Principal clients include all state programs funded through Part C and Section 619 of IDEA. The administrators of these state programs are excited about working with ECO on the evaluation of their programs.

"Working with the ECO Center has provided a focus and depth of research and information that is allowing the early childhood community to really consider the options for how to assess the effectiveness of our programs,"

says Ruth Littlefield, director of the Preschool Program in the Division of Special Education in the New Hampshire Department of Education. “It is raising the bar in terms of the questions we ask and the answers we can come up with to assess our programs.”

“The center provides a great chance for us to take a long-term look at the impact of early intervention services, particularly of outcomes involving children’s developmental growth—their social, emotional, and language skills,” says Duncan Munn, head of the Early Intervention Program within the North Carolina Department of Health and Human Services. “We’ve looked at family outcomes, systems outcomes, and various quantitative factors, but we’ve never had the resources to do a systematic, large-scale child outcomes study.”

Lynne Kahn, director of technical assistance for ECO, describes the two ways in which the Center will assist its state clients. “In what we call ‘the fast track,’ we will support all states in getting quality data for a minimal set of outcomes that will be reported by all states to OSEP. We also will provide intensive assistance to

six to eight selected states, which will focus on developing a more comprehensive outcome systems for states for use in documenting program outcomes and planning for program improvements.” ECO will work with these states on such areas as evaluation design, training for data collection, supervision of data collection, and understanding, analyzing and using data.

Kahn brings a wealth of experience to ECO as a result of her long-standing role as Associate Director of Evaluation with the National Early Childhood Technical Assistance Center (NECTAC). In operation for

more than 20 years, NECTAC’s primary business has been providing technical assistance to state and local clients, transferring knowledge about early childhood research and effective practices and policies. **led**



For More Information
Early Childhood Outcomes Center
www.the-ECO-center.org

Thanks to the over 200 readers of *Early Developments* who responded to the survey we included in one of our recent issues. Based on these responses, we learned that a majority of you apply ideas from *Early Developments* to your own work, find additional information on topics using contacts and references supplied by *Early Developments*, and share *Early Developments* with others. As one reader stated in a personal comment: "It is the one thing on my bedside pile of journals and articles that I consistently pick up and read. It is short, timely, attractive and informative."

We're glad to hear that ED provides a useful service and now we need your help.

The *Early Developments* magazine reaches more than 9000 people three times a year.

Help us sustain our tradition of excellence in sharing timely information during a time of rising costs and declining budgets. We need your continued support. Please volunteer a subscription to the *Early Developments* magazine and accept our sincere thanks. The suggested volunteer subscription amount is \$20 per year, but the exact amount of your tax deductible donation is up to you.

Thank you!

Enclosed is my voluntary subscription

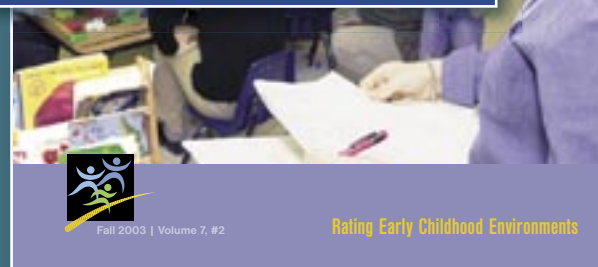
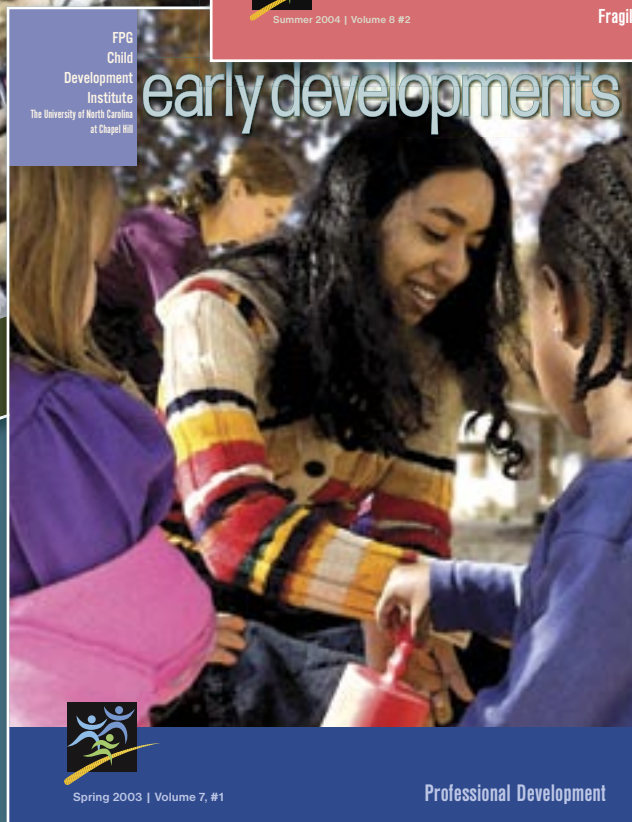
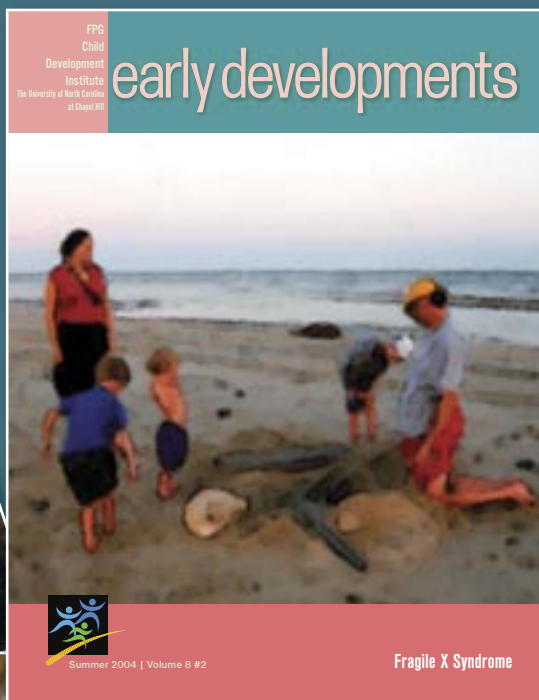
to
Early Developments, payable to UNC Chapel Hill,
 in the amount of: _____

 First Name M.I. Last Name

 Street

 City State Zip

Please mail to:
 FPG / *Early Developments*
 CB# 8180
 UNC CH
 Chapel Hill, NC 27599-8180



recent publications

fpg

Adult attachment style and parental responsiveness during a stressful event. Edelstein, R. S., Alexander, K. W., Schaaf, J. M., Goodman, G. S., Quas, J. A., & Shaver, P. R. (2004). *Attachment and Human Development*, 6, 31–53.

All about the ECERS-R: A detailed guide in words and pictures to be used with the ECERS-R. Cryer, D., Harms, T., & Riley, C. (2003). Winston-Salem, NC: Kaplan Early Learning, PACT Group.

All about the ITERS-R: A detailed guide in words and pictures to be used with the ITERS-R. Cryer, D., Harms, T., & Riley, C. (2004). Winston-Salem, NC: Kaplan Early Learning, PACT Group.

Are child developmental outcomes related to before-and-after-school care arrangements? Results from the NICHD Study of Early Child Care. NICHD Early Child Care Research Network. (2004). *Child Development*, 75(1), 280–295.

Community design: The next step to an active society? Bors, P., Altpeter, M., Luken, K., & Marshall, V. (2004). *The Journal on Active Aging*, 3(1), 24–32.

Consultation as a framework for productive collaboration. Wesley, P. W., & Buysse, V. (2004). *Journal of Educational and Psychological Consultation*, 15(2), 127–150.

Consultation in early childhood settings. Buysse, V., & Wesley, P. W. (2005). Baltimore: Paul H. Brookes.

Cord-blood transplants from unrelated donors in patients with Hurler's syndrome. Staba, S. L., Escolar, M. L., Poe, M., Kim, Y., Martin, P. L., Szabolcs, P., et al. (2004). *New England Journal of Medicine*, 350(19), 1960–1969.

Creating inclusive 4-H environments for people with disabilities. Stumpf-Downing, M., Henderson, K., Luken, K., & Bialeschki, D. (2004). *Journal of Extension*, 42(4). Retrieved from <http://www.joe.org/joe/2004august/a1.shtml>.

Early intervention service coordination policies: National policy infrastructure. Harbin, G. L., Bruder, M. B., Adams, C., Mazarella, C., Whitbread, K., Whitbread, K., et al. (2004). *Topics in Early Childhood Special Education*, 24(2), 89–97.

The ecological context of challenging behavior in young children with developmental disabilities. Scarborough, A. A., & Poon, K. K. (2004). In L. M. Glidden (Ed.), *International review of research in mental retardation* (pp. 229–260). San Diego, CA: Academic Press.

The effect of format modifications and reading comprehension on recall of informed consent information by low-income parents. Campbell, F. A., Goldman, B. D., Boccia, M. L., & Skinner, M. (2004). *Patient Education and Counseling*, 53(2), 205–216.

Effects of otitis media on children's speech and language. Roberts, J. E. (2004). Ontario, Canada: BC Decker.

Family involvement packets. Coleman, M. R., & Coltrane Shah, S. (2004). Washington, DC: Council for Exceptional Children.

For more information about FPG publications, see the FPG web site at www.fpg.unc.edu or contact the FPG Publications Office at 919.966.4221 or FPGpublications@unc.edu

Health disparities between adults with developmental disabilities, adults with other disabilities, and adults not reporting disability in North Carolina. Haverkamp, S., Scandlin, D., & Roth, M. (2004). *Public Health Reports*, 119(4), 418–426.

Learning games, the abecedarian curriculum: 48–60 months. Sparling, J., & Lewis, I. (2004). Chapel Hill, NC: MindNurture, Inc.

Mother-child relationship dysregulation in the toddler years: Antecedents and consequences. NICHD Early Child Care Research Network. (2004). *Development and Psychopathology*, 16(1), 43–68.

Multiple pathways to early academic achievement. NICHD Early Child Care Research Network. (2004). *Harvard Educational Review*, 74(1), 1–29.

National early intervention longitudinal study: Birth history and health status of children entering early intervention. [NEILS Data Report 5]. Spiker, D., Mallik, S., Hebbeler, K., Scarborough, A., Simeonsson, R., & Bailey, D. (2004). Menlo Park, CA: SRI International.

The national early intervention longitudinal study: Family outcomes at the end of early intervention. [NEILS Data Report 6]. Bailey, D., Scarborough, A., Hebbeler, K., Spiker, D., & Mallik, S. (2004). Menlo Park, CA: SRI International.

A national picture of children and families entering early intervention. Scarborough, A. A., Spiker, D., Mallik, S., Hebbeler, K., Bailey, D. B., & Simeonsson, R. J. (2004). *Exceptional Children*, 70(4), 469-483.

Observation resources that help teachers support young children in home, community and classroom settings. Catlett, C., & Winton, P. (2004). *Young Exceptional Children*, 7(3), 30.

Otitis media and speech and language: A meta-analysis of prospective studies. Roberts, J. E., Rosenfeld, R. M., & Zeisel, S. A. (2004). *Pediatrics*, 113(3), 237-247.

Otitis media, hearing loss, and language learning: Controversies and current research. Roberts, J. E., Hunter, L., Gravel, J., Rosenfeld, R., Berman, S., Haggard, M., et al. (2004). *Journal of Developmental and Behavioral Pediatrics*, 25(2), 1-13.

Parent involvement in Head Start programs: The role of parent, teacher, and classroom characteristics. Castro, D. C., Bryant, D., Peisner-Feinberg, E. S., & Skinner, M. (2004). *Early Childhood Research Quarterly*, 19(3), 413-430.

Personnel preparation: The early recognition and cultivation of potential, using science talents and abilities to recognize students. Coleman, M. R., & Coltrane Shah, S. (2004). Washington, DC: Council for Exceptional Children.

Revisiting a comparison of eligibility policies for infant/toddler programs and preschool special education programs. Danaher, J., Shackelford, J., & Harbin, G. (2004). *Topics in Early Childhood Special Education*, 24(2), 59-67.

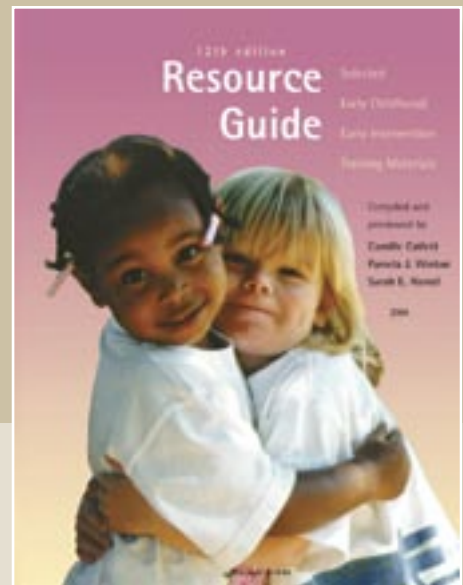
School readiness assessment. Maxwell, K. L., & Clifford, R. M. (2004). *Young Children*, 59(1), 42-46.

Science/literature connections. Coleman, M. R., & Coltrane Shah, S. (2004). Washington, DC: Council for Exceptional Children.

Spanish translation of the Infant/Toddler Environment Rating Scale (Rev. ed.). Harms, T., Cryer, D., & Clifford, R. M. (2004). New York: Teachers College Press.

Supporting the transition of one man with autism from work to retirement. Hodges, J., Luken, K., & Hubbard, A. (2004). *Therapeutic Recreation Journal*, 38, 301-311.

The transition to parenting: Continuity and change in early parenting behavior and attitudes. Cox, M. J., Burchinal, M., Taylor, L. C., Frosch, C., Goldman, B., & Kanoy, K. (2004). In R. D. Conger (Ed.), *Continuity and change: Family structure and process* (pp. 201-240). Mahwah, NJ: Erlbaum.



Selected New FPG Products

Many products developed at FPG are available for free online. You may also purchase products from the FPG Publications Office, phone 919.966.4221 or email FPGpublications@unc.edu. The FPG online catalog currently includes information on more than 300 publications. Visit the FPG web site at www.fpg.unc.edu to learn more.

FPG Highlights: 2003-2004. FPG Child Development Institute. (2004). Chapel Hill, NC: Author.

Health and disability in North Carolina 2003. NC Office on Disability and Health and the State Center for Health Statistics. (2004). Raleigh: NC Dept. of Health and Human Services.

Including preschool-age children with disabilities in community settings: A resource packet (3rd ed.). deFosset, S. (Ed.). (2004). Chapel Hill: The University of North Carolina, FPG Child Development Institute, National Early Childhood Technical Assistance Center.

Resource guide: Selected early childhood/early intervention training materials (12th ed.). Catlett, C., Winton, P. J., & Hamel, S. E. (Eds.). (2004). Chapel Hill: The University of North Carolina, FPG Child Development Institute.

Revisiting a comparison of eligibility policies for infant/toddler programs and preschool special education programs. Danaher, J., Shackelford, J., & Harbin, G. (2004). Chapel Hill: The University of North Carolina, FPG Child Development Institute, National Early Childhood Technical Assistance Center.

ed

early developments

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

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

Address Service Requested

ISSN 1536-4739

Visit us online
www.fpg.unc.edu

www.ncedi.org



THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL