

tive language, applied problems, and social skills) and maintained scores in the expected range on the remaining one (behavior problems). Children also showed substantial growth on the non-standardized measures in all areas. While some growth in skills would be expected over the year as children become older, such growth is often more limited for at-risk children, with some research evidence suggesting that their scores on standardized measures may actually decrease over time without appropriate intervention programs.

What factors were associated with better outcomes for children?

The *More at Four Program* had even stronger effects in some skill areas for children entering the program with greater needs compared to those with lesser needs. Greater gains in language/literacy skills were made over the program year for children at higher overall risk compared to those at lower risk. Children at lower levels of English proficiency exhibited greater improvement over the program year in all domains of development—language skills, math skills, cognitive knowledge, and social skills. In addition, specific structural characteristics of the classroom—better teacher qualifications, better classroom quality, and a higher proportion of *More at Four* children in the classroom—were associated with greater gains on measures of language and literacy skills, as well as some gains on math skills (teacher

qualifications) and social skills (classroom quality). This pattern of findings is similar to that of year 2, where children in classrooms with more highly qualified teachers or with higher proportions of *More at Four* participants showed greater gains in language and literacy skills, although these differences were found for a wider variety of outcome measures in year 3.

How do these findings compare to other studies of similar programs?

As found for the second year, during the third year of operation, the *More at Four Program* was performing at least as well as or better than other more established large-scale pre-kindergarten programs, both in terms of program quality and child outcomes. We compared the findings from the present study of the *More at Four Program* to the results from three studies: a national study of state pre-kindergarten programs in six states, a statewide evaluation of the Georgia Pre-kindergarten Program, and a national study of the Head Start Program. When compared to other state pre-kindergarten programs and to Head Start, *More at Four* was operating at a similar or higher level of quality in terms of teacher qualifications and classroom practices. Examination of children's outcomes over the preschool year indicates that children in the *More at Four Program* were making equivalent or slightly greater gains in language/literacy, math, and social skills compared to children attending these other types

of programs. These results suggest that the *More at Four Program* in its third year was of similar quality and had similar outcomes for children when compared to other state and national pre-kindergarten programs.

Summary

In sum, the *More at Four Program* continued to offer a high quality pre-kindergarten program for at-risk children in North Carolina, as it expanded to serve nearly 11,000 children in the third year. The program has been successful in recruiting unserved children, the primary target group. Local sites continued to meet many of the standards in the established program guidelines intended to support the provision of high quality services. Participating children experienced significant growth in developmental skills linked to school readiness over the *More at Four* year, with even greater growth for children at greater risk or in higher quality classrooms. Moreover, the findings of the evaluation of this program indicate levels of program quality and child outcomes comparable to those found for other more established large-scale programs. These results suggest that as the *More at Four Program* has grown in scale over the first three years, it has maintained a high level of program quality and positive outcomes for participating children, serving a substantial number of at-risk children who otherwise would not be likely to benefit from participation in a pre-kindergarten readiness program. ❖



EXECUTIVE SUMMARY

Evaluation of the *North Carolina More at Four Pre-kindergarten Program*

Year 3 Report
July 1, 2003–June 30, 2004

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FPG CHILD DEVELOPMENT INSTITUTE

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the *More at Four* Evaluation Team

Executive Summary

THE NORTH CAROLINA MORE AT FOUR PRE-KINDERGARTEN PROGRAM is a state-funded initiative begun in 2001–2002 for at-risk 4-year-olds, designed to help them be more successful when they enter kindergarten. The purpose of *More at Four* is to provide a high quality, comprehensive educational program for at-risk children during the year prior to kindergarten entry, first targeting “unserved” children (those not already being served in a preschool program) and secondly, “underserved” children (those eligible for but not receiving child care financial assistance and/or those in lower quality settings). In 2003–2004, it was estimated that there were approximately 53,000 at-risk 4-year-olds in North Carolina based on poverty status (at or below 185% of poverty), with more than 7,000 of these children remaining unserved in a preschool program and more than 10,000 underserved in low quality care. A statewide evaluation of the *More at Four Program* has been conducted during the first three years to address a series of questions about the operations of the program, the quality of the program, and the outcomes for participating children. The present report contains findings from the third year (2003–2004).

What were the characteristics of the local programs?

The *More at Four Program* has experienced dramatic growth over the first three years, with an increasing number of children served each

year—1,244 in the first year, 6,125 in the second year, and 10,891 in the third year. The program reached a milestone in year 3, expanding to encompass the entire state of North Carolina, with services provided in all 100 counties. Similarly to previous years, children were served in a variety of service delivery settings in the third year, including public schools, for-profit and nonprofit private child care centers, Head Start, and various other combinations. Nearly half (48%) were in public school settings and 43% in private child care settings. Almost all individual sites met the guidelines for program operation, including class size, operating hours, and curriculum use. There was a great deal of variation among the different counties/regions in local program characteristics, including program size, types of settings, and children’s risk factor status. While there was still some ongoing expansion in year 3, there were fewer new counties and local program sites beginning operations during the year, thus allowing a substantial proportion of children to experience the full 10 months of services.

More at Four teachers and site administrators reported fairly high levels of education and licensure/credentials compared to other pre-kindergarten or child care samples, similar to those found in prior years of the program. Lead teachers and administrators in public school settings were more likely to meet the *More at Four* program standards for staff qualifications than their counterparts in community settings

or than assistant teachers in either setting. While programs were given 4 years to attain these standards, most public school lead teachers and administrators met these qualifications by the third year of the *More at Four Program*, and nearly all program staff met some or all specifications in the program guidelines for provisional approval of staff qualifications.

Who was served by the *More at Four Program*?

The *More at Four Program* continued to serve a diverse group of children in the third year. A significant proportion of the children served in *More at Four* had an identified disability (9%), more than the estimated US population average (6%). The program served the intended population based on certain risk factors (as described in the program guidelines), with the majority of children designated at risk on the factor of family income (89% eligible for free or reduced-price lunch) and almost one-fifth (18%) also at risk based on limited English proficiency. Programs also were serving the intended population based on service priority status, with the majority of children (83%; 9,070) unserved at the time of enrollment and nearly two-thirds (62%; 6,788) of the children never previously served in a preschool or child care setting, the highest service priority group. While the total number of children served in the program has grown each year, the number of children in poverty and the number of 4-year-olds in the state have continued to increase as well, suggesting that there will continue to be a substantial number of children eligible for *More at Four* and continued room for growth in order to serve all eligible children.

What was the quality of the services provided?

Observations of the quality of classroom practices in 99 classrooms

using the *Early Childhood Environment Rating Scale-Revised* (ECERS-R) indicated that the *More at Four Program* provided a high quality preschool experience based on generally accepted standards for best practice, with an average total score of 5.3. In addition, 88% of the classrooms met or exceeded the *More at Four* program guidelines in this area (total score=4.5). Overall scores on the measure of classroom practices were in the highest (good) quality range for three-quarters of the sample and in the medium quality range for the remaining classrooms, with no classrooms scoring in the poor quality range. Average scores met or exceeded the program guidelines for total scores in all seven areas of classroom practices, with scores in the highest quality range for five areas (space and furnishings, interactions with and supervision of children, language and reasoning experiences, program structure and organization, and provisions for parents and staff) and in the medium quality range for the remaining two areas (daily activities and routine care).

Observations of the level of curriculum implementation in 83 classrooms indicated that they partially met the criteria for implementation of the particular curriculum used, but typically did not fully meet these criteria, with average scores at or slightly above half the total possible score. There were moderate associations between the quality of classroom practices and curriculum implementation, suggesting that somewhat different training may be needed to improve the global quality of classroom practices and to improve the level of curriculum implementation. As a whole, a variety of structural characteristics often found to be associated with classroom quality (staff qualifications, class size,

public school vs. community settings, and child-level characteristics of the classroom) were not related to differences in the quality of classroom practices or the level of curriculum implementation. However, two individual characteristics—classrooms in community settings and classrooms with higher proportions of *More at Four* children—were associated with better quality classroom practices and higher levels of curriculum implementation, respectively.

What were the outcomes of children attending the *More at Four Program*?

Children demonstrated substantial growth in skills related to kindergarten readiness over the *More at Four* program year, based on individual assessments of 514 children at the beginning and end of the program year, similar to the findings from the second year. As expected for an at-risk population, these children entered the program with skills below average. However, the gains made by children in the *More at Four Program* indicate that they were developing at the expected rate or even greater than expected in some areas. They showed significant improvement in scores from the beginning to the end of the *More at Four* year for all outcome areas measured: language and literacy skills (receptive language, alphabet knowledge, phonological awareness, story and print concepts); math skills (applied problems and counting); general knowledge (social awareness and color naming); and behavioral skills (social skills). For children progressing at the typical rate, scores on standardized measures would remain constant over time, as they take into account expected changes related to age. In the present sample, however, children showed significant gains on three standardized measures (recep

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For more information about the Evaluation of the *North Carolina More at Four Pre-kindergarten Program* including a full version of this report, visit the web site at www.fpg.unc.edu/~mafeval.

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