

North Carolina's Kindergartners & Schools

Executive Summary
April 2001

Fall 2000 North Carolina
School Readiness Assessment



FPG Child Development Center
University of North Carolina at Chapel Hill

North Carolina has defined school readiness as

- (a) the condition of children as they enter school, based on five areas of development and learning: health and physical development, social and emotional development, approaches toward learning, language development and communication, and cognition and general knowledge; and**
- (b) the capacity of schools to educate all children who come to kindergarten, regardless of their condition. Kindergarten teachers, classrooms, and principals are important in determining schools' readiness for children.**



SCHOOL READINESS is a popular topic nationally and within North Carolina. Legislators, policy makers, and educators who face increasing pressures for accountability have called for the assessment of children as they enter school. They want to know, “Are we getting children ready for school?” This question is deceptively simple and requires a complex answer. It also leaves out an important second question about school readiness: “How well are schools prepared to meet the needs of children as they enter school?” This report provides information about two pieces of the school readiness puzzle: children and schools.

The Executive Summary presents key findings from the Fall 2000 North Carolina School Readiness Assessment (NC SRA). The Fall 2000 NC SRA gathered information about school readiness from a statewide representative sample of 1034 kindergartners and 189 public schools. The purpose of the assessment was to take a “snapshot” of school readiness at the state level.

Condition of Children

This section briefly summarizes findings for each of the five areas of children's development and learning that are important components of school readiness. Differences between children at risk and not at risk for school failure are also highlighted. For this report, risk was determined by family income.

Health & Physical Development. North Carolina kindergartners varied in their parent-reported health status and motor skills. On average, kindergartners were in very good health and demonstrated age-appropriate motor skills. The health of children from lower-income families was significantly worse than the health of children from higher-income families. Children from lower-income families also had significantly lower motor skills than children from higher-income families.

Social Development. North Carolina kindergartners demonstrated a wide range of social skills. In general, the social skills of NC kindergartners were about as well developed as those of kindergartners nationally. Children from lower-income families in North Carolina had significantly lower social skills and more problem behaviors than children from higher-income families.

Approaches Toward Learning. Overall, North Carolina kindergartners were similar to their peers nationally in demonstrating positive approaches toward learning (e.g., eagerness to learn and creativity). Children from lower-income families were rated by their parents as demonstrating these positive characteristics significantly less often than children from higher-income families.

Language Development & Communication. On average, North Carolina kindergartners' language and communication skills were lower than the national average. More NC kindergartners scored very low on language measures than would be expected based on national norms. The language and communication skills of children from lower-income families were significantly lower than those of children from higher-income families.

General Knowledge & Math Development. North Carolina kindergartners generally knew the names of basic colors. Children varied widely in their math skills when they entered school. On average, North Carolina kindergartners' math skills were below the national average. More NC kindergartners scored very low on math measures than would be expected based on national norms. Kindergartners from lower-income families had significantly lower math skills than children from higher-income families.

What did the data tell us about North Carolina's kindergartners?

- 1. Children entered kindergarten with a wide range of skills.**
- 2. As a group, North Carolina kindergartners' skills in the five areas of development and learning were about the same as or lower than kindergartners nationally.**
- 3. North Carolina kindergartners from lower-income families entered school at a significant disadvantage. Children from lower-income families had much lower skills in each of the five areas of development and learning at the beginning of school than children from higher-income families.**

Capacity of Schools

Highlights of the findings regarding the capacity of schools to educate all kindergartners effectively are presented here, organized into four sections: teachers, classrooms, principals, and schools. Comparisons are made between schools serving a high proportion and low proportion of kindergartners from lower-income families.

Teachers. North Carolina kindergarten teachers had about as much teaching experience as their peers nationally. However, far fewer NC teachers had a Master's degree or higher. Whereas almost all kindergarten teachers in North Carolina were teaching within their area of license, only a small percentage had a license that required extensive early childhood development training. Compared to teachers nationally, NC teachers were doing a better job helping children and families make the transition into school. Kindergarten teacher education and licensure did not differ for low-poverty and high-poverty schools.

Classrooms. North Carolina's average kindergarten class size of 21 was similar to classrooms nationwide, with classrooms in high-poverty schools significantly smaller than those in low-poverty schools (20 vs. 22). However, the average NC kindergarten class size was larger than the class size of 18 set as a goal by the U.S. Department of Education.¹ Kindergartners engaged in a variety of learning activities each week and, in general, had access to adequate materials in their classroom learning centers. The quantity and quality of learning center materials were the same or worse in high-poverty schools compared to low-poverty schools.

Principals. North Carolina principals had at least a Master's degree, and many had taken additional coursework. More NC principals had education beyond a Master's degree than their peers nationally. Although almost all principals had spent some time teaching, few had actually taught kindergarten. About half the principals had not received much early childhood education training recently. Principal education and early childhood training did not differ for high-poverty and low-poverty schools.

Schools. Schools varied in the types of services provided to kindergartners. In general, kindergartners from both high-poverty and low-poverty schools had the same type of professional services available to them. High-poverty schools were more likely to provide on-site prekindergarten programs for 4-year-olds at risk for later school difficulties, possibly because they had access to federal Title I funds to support these services.

What did the data tell us about North Carolina's schools?

- 1. In general, North Carolina schools were similar to schools nationally on most aspects of their capacity to meet the needs of kindergartners.**
- 2. The capacity of high-poverty schools was generally the same as the capacity of low-poverty schools, but may not be good enough to meet the needs of kindergartners at risk for school failure.**

Recommendations

The findings from the Fall 2000 NC SRA suggest that we still have work to do to ensure that each child enters school ready to succeed and that schools have the capacity to educate all kindergartners. Some recommendations are provided below.

❖ **Prioritize high quality services for children birth through five who are at risk for school failure.**

To reduce the gap in skills between children at risk and those not at risk for school failure, North Carolina must provide high quality services and supports to these children and their families each year of their lives before they enter school. Many states, for example, are starting new prekindergarten programs for 4-year-olds at risk for school failure. These prekindergarten programs are designed as high quality educational programs to improve children's school readiness skills. The Fall 2000 NC SRA data certainly suggest the need for efforts, like prekindergarten, to strengthen children's skills. However, preparing children for school starts at birth—not just the year before they come to school. We need to provide services and supports for young children at risk and their families *each year* from birth through age five.

❖ **Continue to improve the quality of all early care and education programs in North Carolina.**

About half of NC children were in some type of center-based early care and education program the year before kindergarten, and many were likely in these programs for more than one year. We know that children's development and learning is positively affected if these programs are of high quality.² Smart Start efforts have improved the quality of care and have been shown to be related to school readiness.³ The Fall 2000 NC SRA data suggest that *all* children, not just those at risk for school failure, could benefit from high quality early care and education efforts. North Carolina should continue to improve its early care and education system in order to strengthen the skills of entering kindergartners.

❖ **Provide extra resources and supports for children at risk when they enter school.** North Carolina must continue to provide high quality services for children at risk when they enter and as they move through the public school system. Without extra help, these children will likely fall even further behind their peers from higher-income families.

❖ **Continue to improve the capacity of North Carolina public schools to educate all kindergartners.** Being at or above the national average on key school characteristics still leaves much room for improvement in meeting the needs of all children when they come to kindergarten. For example, the average NC kindergarten class size was higher than the class size of 18 set as a goal by the U.S. Department of Education.⁴ Compared to kindergarten teachers nationally, fewer NC kindergarten teachers had Master's degrees. The racial and ethnic composition of kindergarten teachers should more closely reflect the racial and ethnic composition of their students. Finally, we could do more to support the successful transition of children and families as they move into the public school system.

❖ **Support families in their roles as parents and children's first teachers.** Families are critical to their child's success and should have access to information and support in their important roles. We should, for instance, provide information to families about developmentally appropriate ways to extend their child's learning during everyday routines. Early childhood programs and public schools should work to build strong positive relationships with families and provide the support families request.

❖ **Focus on improving children’s early language and math skills.**

The Fall 2000 data suggest that North Carolina kindergartners’ language and math

skills were lower than average.

To improve children’s skills in these areas, we must provide appropriate early learning opportunities for children before they enter public school. These efforts must



continue when children enter the public school system. The challenge for families and teachers (both early childhood and public school teachers) is to promote children’s learning in ways that are appropriate for their ages and developmental levels.

❖ **Support children’s development and learning in each of the five areas.**

Although it is important to pay close attention to language and math development, we must not ignore the other areas—health and physical development, social development, and approaches toward learning. Each of the five areas is important, and children’s development in one area is affected by their development in another. Families, early childhood programs, and public schools need to support children’s development in *all* five areas.

References

- ¹ U.S. Department of Education. Office of Elementary and Secondary Education. (2000). *Class-size reduction program: Guidelines for fiscal year 2000*. Washington, DC: Author.
Available: <http://www.ed.gov/offices/OESE/ClassSize>.
- ² Peisner-Feinberg, E. S., Burchinal, M. R., Clifford, R. M., Culkin, M. L., Howes, C., Kagan, S. L., Yazejian, N., Byler, P., Rustici, J., & Zelazo, J. (2000). *The children of the cost, quality, and outcomes study go to school: Technical report*. Chapel Hill: University of North Carolina, Frank Porter Graham Child Development Center.
Available: <http://www.fpg.unc.edu/~NCEDL/pages/cqes.htm>.
- ³ Bryant, D. M., Maxwell, K. L., & Burchinal, M. (1999). Effects of a community initiative on the quality of child care. *Early Childhood Research Quarterly*, 14, 449-464.
Maxwell, K. L., Bryant, D. M., & Miller-Johnson, S. (1999). *A six-county study of the effects of Smart Start child care on kindergarten entry skills*. Chapel Hill: University of North Carolina, Frank Porter Graham Child Development Center.
- ⁴ See reference 1.

© 2001 by Kelly Maxwell
Frank Porter Graham Child Development Center
University of North Carolina at Chapel Hill

This report was written by Kelly Maxwell, Donna Bryant, Stephanie Ridley, & Lynette Keyes-Elstein. We want to thank all the principals, teachers, parents, and children who participated in this project and the members of our research team who helped collect and analyze these data. We also want to thank the Ready for School Goal Team for their advice and support throughout the many phases of this project. Finally, we want to thank our many collaborators in this project: the North Carolina Partnership for Children (Smart Start); the State Board of Education; the Department of Public Instruction; the Division of Child Development, Department of Health and Human Services; and the Governor's Office. This work was funded primarily through a contract with the NC Department of Health and Human Services, Division of Child Development. The opinions expressed in this report are those of the authors and may not be those of the funding agency, collaborators, or Ready for School Goal Team members.

Suggested citation:
Maxwell, K. L., Bryant, D. M., Ridley, S. M., & Keyes-Elstein, L. (2001). *North Carolina's kindergartners and schools: Executive summary*. Chapel Hill: University of North Carolina, Frank Porter Graham Child Development Center.

For more information about the Fall 2000 North Carolina School Readiness Assessment, visit the project web site at www.fpg.unc.edu/~SchoolReadiness

The executive summary and summary report are available online at our project web site. You may order additional hard copies of this report at our web site or by contacting Stephanie Ridley
Toll-free telephone: (888) 822-8811 Email: SchoolReadiness@unc.edu

A technical report of the Fall 2000 North Carolina School Readiness Assessment is available at www.fpg.unc.edu/~SchoolReadiness/technical2000.pdf

Fall 2000 North Carolina School Readiness Assessment
Frank Porter Graham Child Development Center
University of North Carolina at Chapel Hill

5,000 copies of this document were printed at a cost of \$4,037, or \$.80 each.