



Educare Implementation Study Findings—August 2012

The Study: Since 2005, the Frank Porter Graham Child Development Institute (FPG) at the University of North Carolina at Chapel Hill has led the Educare Learning Network implementation study of the Educare model. In the 2010–11 school year, 12 Educare Schools from across the country participated in the study, which now includes more than 1,800 students. This brief reports key results from four school years—fall 2007 to spring 2011.

The Challenge: Young children from low-income, distressed environments start school far behind their more advantaged peers. This achievement gap persists to high school and is linked to social and economic problems later in life, including illiteracy, teen pregnancy, high dropout rates and unemployment. These at-risk children typically have smaller vocabularies, are less likely to know their letters and numbers and consistently score below their higher-income peers in early learning and math.¹

Why Educare? Educare is a state-of-the-art school open full-day and full-year serving at-risk children from birth to five years old. Educare Schools provide high-quality instruction and stimulating learning environments to help students arrive at kindergarten ready to learn at the level of the average 5 year old in the US.

Is it Working? Yes. Data from 12 Educare Schools (Central Maine, Chicago, Denver, Kansas City, Miami, Milwaukee, Oklahoma City, Omaha at Indian Hill, Omaha at Kellom, Seattle, Tulsa at Hawthorne, and Tulsa at Kendall-Whittier) are demonstrating results in preparing at-risk children from birth to five for later academic achievement. Evaluation data show that more years of Educare attendance are associated with better school readiness and vocabulary skills.

School Readiness

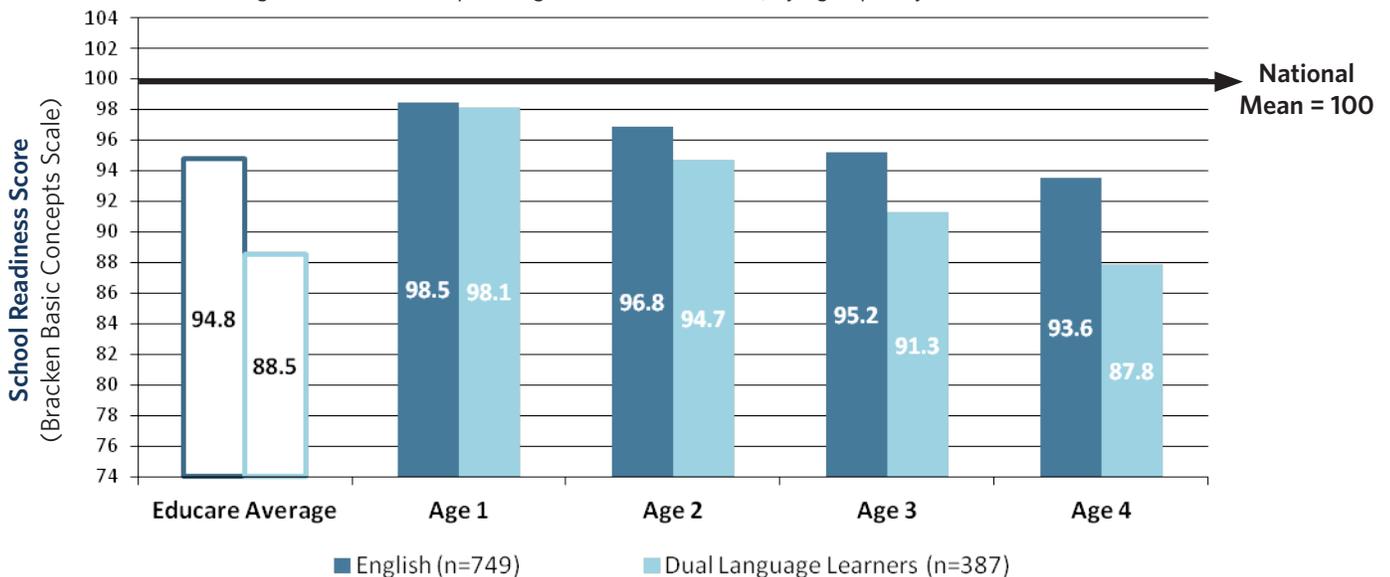
Why It's Important: Comprehension of concepts like colors, letters, shapes, sequence and numbers are important skills for classroom success. Children from high-risk populations, like those served by Educare Schools, typically score well below the national average and are usually developmentally several months behind their more advantaged peers.²

How Do We Measure School Readiness? The Bracken Basic Concepts Scale is a developmentally sensitive and standardized measure that evaluates children's comprehension of concepts like sequence, letters and colors that are essential to early communication development and school readiness.³ It is administered in the spring before children leave Educare for elementary school.

- **Children who begin the Educare program early in life score better on a school readiness assessment when they leave Educare for kindergarten compared to late-entering children. Children from both English- and Spanish-speaking homes who enter Educare before age 2 score over 98—near the national average (100) and exceeding the typical scores of at-risk children.**
- **The significant advantage of entering Educare early in life is seen even after controlling for risk factors such as maternal education, race and teen parent status.⁴ Educare graduates are ready to become active and engaged kindergartners.**

School Readiness: Children who spend more years in Educare emerge better prepared for kindergarten

Average Bracken scores of kindergarten-bound children, by age of entry into Educare (2007–11)



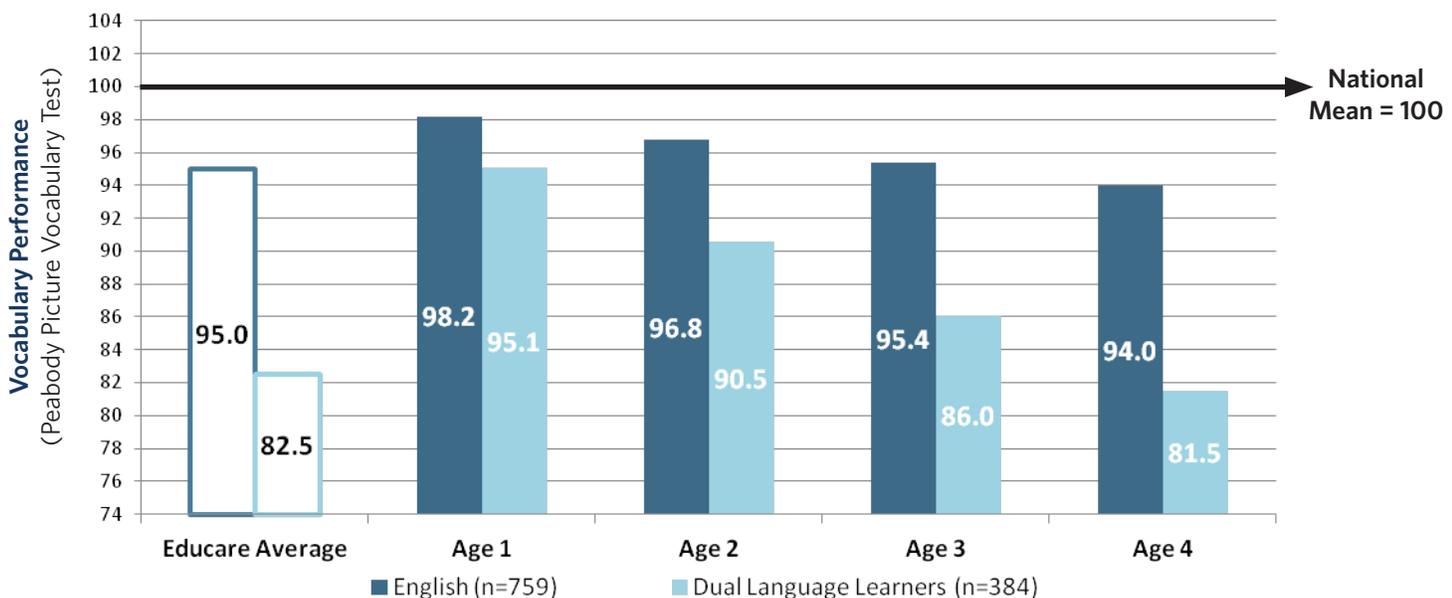
Vocabulary

Why It's Important: Communication, early literacy and vocabulary skills consistently predict later academic success. Research shows that 1st grade reading ability is a strong predictor of 11th grade reading comprehension, vocabulary and general knowledge.⁵ Low-income children typically enter kindergarten with vocabulary levels and pre-literacy skills well below those of their middle-class peers—in the low-average range or below. This achievement gap is extremely difficult to close in elementary and high school. But, if at-risk children can enter kindergarten with a vocabulary that approaches that of the average American child, their chances of becoming good readers, succeeding in elementary school, graduating from high school and staying on a successful life trajectory will have been improved.

How Do We Measure Vocabulary Skills? The Peabody Picture Vocabulary Test (PPVT) is a widely used and standardized measure of young children's vocabulary and is administered at age 3 and every spring thereafter.⁶ The PPVT is a good predictor of reading success in elementary school.

- **Kindergarten-bound Educare children score better on measures of vocabulary than most low-income children in other large studies of early achievement.⁷ Educare children average 95.**
- **As with the school readiness measure, Educare children's vocabulary scores when they leave for kindergarten are higher the earlier they enrolled in Educare. Kindergarten-bound children who entered before age 2 average 98.2 on this measure—near the national mean (100) for all children. The significant advantage of entering early is seen even after controlling for risk factors such as maternal education, race and teen parent status.⁸ Educare children are primed to be successful kindergartners.**

Vocabulary: Children who spend more years in Educare emerge better prepared for kindergarten
Average PPVT scores of kindergarten-bound children, by age of entry into Educare (2007-11)



Social and Emotional Skills

Why It's Important: Preschoolers' social, emotional and attention skills are associated with school success.⁹ Kindergarten teachers note that problems with social skills, inability to follow directions and difficulty doing independent and group work are possible causes of children's difficult transitions into kindergarten.¹⁰ At Educare, children develop the skills to become active, engaged and successful students.

How Do We Measure Social and Emotional Skills? The Devereux Early Childhood Assessment (DECA) is a nationally normed assessment that measures behavior on three scales of initiative, attachment and self-control in preschool children ages two to five.¹¹ The DECA is administered in the fall and spring of each year.

Main Findings: Educare children enter kindergarten exhibiting average or above average social-emotional skills. These social and emotional skills help Educare children negotiate the transition to kindergarten and its new demands, new teachers and new peers—setting them up for school success.¹²

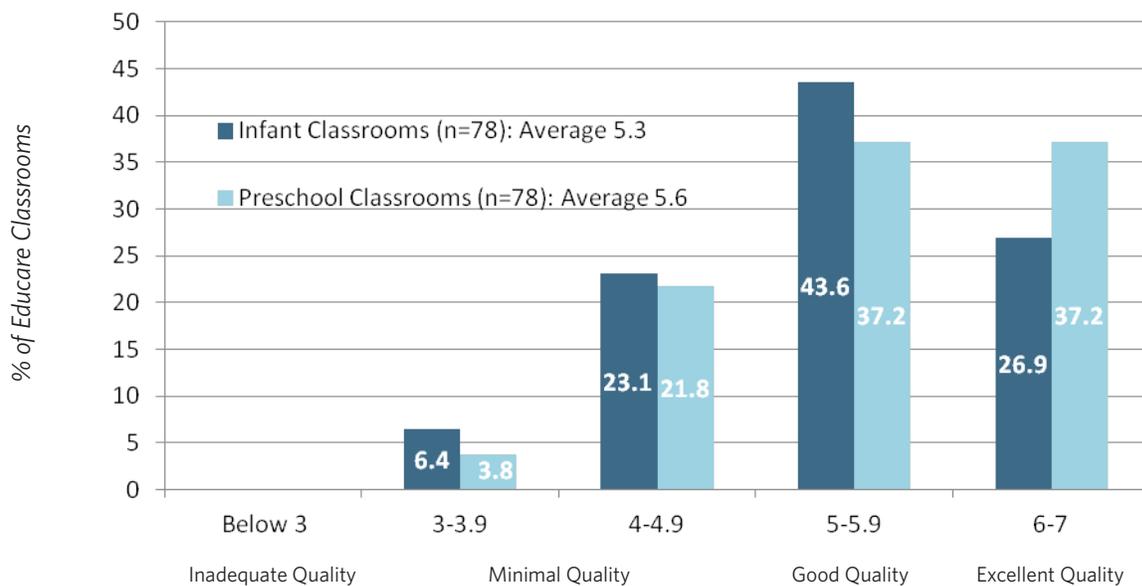
Classroom Quality

Why It's Important: Educare's high-quality classrooms are integral to children's success. Classroom quality—specifically, the interactions between staff and children and among children themselves, in addition to the adequacy and use of materials and aspects of the physical space—predicts child outcomes. We know from a large body of research that good quality classroom environments are associated with enhanced child outcomes in the areas of language, vocabulary, early math and social skills.¹³ Educare teachers and program leaders use scores on observations of classroom quality to inform continuous improvement of individual classrooms and of Educare Schools as a whole.

How Do We Measure Classroom Quality? The Infant/Toddler Environment Rating Scale (ITERS-R) and the Early Childhood Environment Rating Scale (ECERS-R) are observational measures widely used by researchers and government agencies to assess the quality of child care and early education settings.^{14,15} A high score indicates higher classroom quality in terms of the activities, staff-child interactions, equipment, space and materials. Educare also uses the Classroom Assessment Scoring System (CLASS) to measure three domains of quality: emotional support, classroom organization and instructional support.¹⁶ Used by Head Start programs across the country, CLASS scores are predictive of gains in students' language, reading and math skills. On all of these quality measures, scores range from 1-7 with 5 generally being the benchmark for quality.

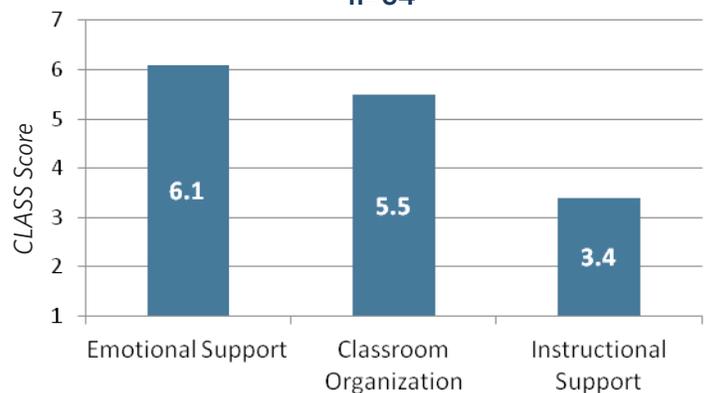
- Across the 12 Educare Schools, **70% of infant/toddler classrooms scored a 5 or above on the ITERS-R with an average quality rating of 5.3**—much higher than classrooms observed in a recent national study of infant/toddler care settings.¹⁷
- **Scores on the ECERS-R for preschool classrooms also reach the good quality benchmark with an average of 5.6 across the 12 Schools**, with 74% of classrooms rating a score of 5 or above. Other national studies of preschool classroom quality have found classroom scores ranging from 3.5 to 4.8—putting Educare preschool classrooms well above this range.¹⁸ All scores below are from the 2010-11 school year.

Classroom Quality Scores: ITERS-R and ECERS-R



- **Educare CLASS scores are also high on emotional support and classroom organization, confirming that Educare's preschool classrooms are warm, organized and nurturing environments that promote learning for students.** Research has found that children acquire academic skills only when CLASS instructional support is 3.25 or above.¹⁹ Educare's mean score exceeds that threshold and is also higher than averages in other large-scale studies of early childhood programs.²⁰

**Preschool Classroom Quality Average Scores: CLASS
n=64**



Still to Come...

The Educare Learning Network and FPG will continue to analyze implementation study data in ways that best inform both practitioners and policymakers. Children in the implementation study are followed longitudinally through their time at Educare. As the Network expands and diversifies, we will continue to conduct these and more extensive analyses of child, family and classroom characteristics. We believe this ongoing research will continue to demonstrate that early enrollment and quality teaching and learning environments are key elements of the Educare story.

We are also conducting a randomized control study of the Educare model at five Schools, with 225 children and families participating. We believe the results of the study could further bolster the case for investments in high-quality early learning programs for vulnerable young children. **For more information** about FPG or the Educare studies, go to <http://eln.fpg.unc.edu/>

ENDNOTES

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