



## Promising Early Returns: Educare Implementation Study Data – April 2009

**The Study:** The Frank Porter Graham Child Development Institute at the University of North Carolina-Chapel Hill leads the Bounce Learning Network Implementation Study of the Educare model. In the 2007-08 school year, 5 Educare programs from across the country participated. This brief reports promising early returns.

**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 drop-out 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.<sup>1</sup>

**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 provides quality learning environments to help its students arrive at kindergarten healthy and ready to learn.

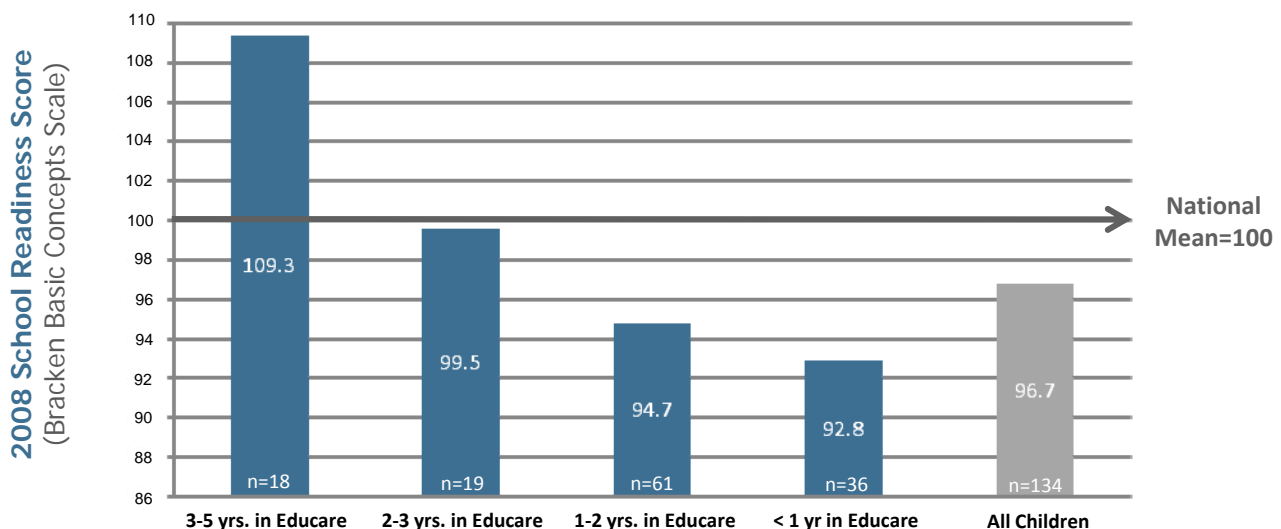
**Is it Working?** Yes. Early data from Educare programs in five cities – Chicago, Denver, Milwaukee, Omaha and Tulsa – reveal promising results in preparing at-risk children from birth to five for later academic achievement. Evaluation data show that more years of Educare attendance are associated with better school readiness and vocabulary skills.

### School Readiness

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

- **School readiness scores of Kindergarten-bound Educare children, by contrast, average 96.7 – nearing the national average of 100.**<sup>3</sup>
- **The earlier the better:** Children who begin the Educare program earlier in life score better on measures of school readiness – with those kindergarten-bound children who joined Educare between birth and 2 years-old **exceeding the national average by 9 points.** This pattern persists even after controlling for risk factors such as maternal education, race and teen parent status.<sup>3</sup>

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



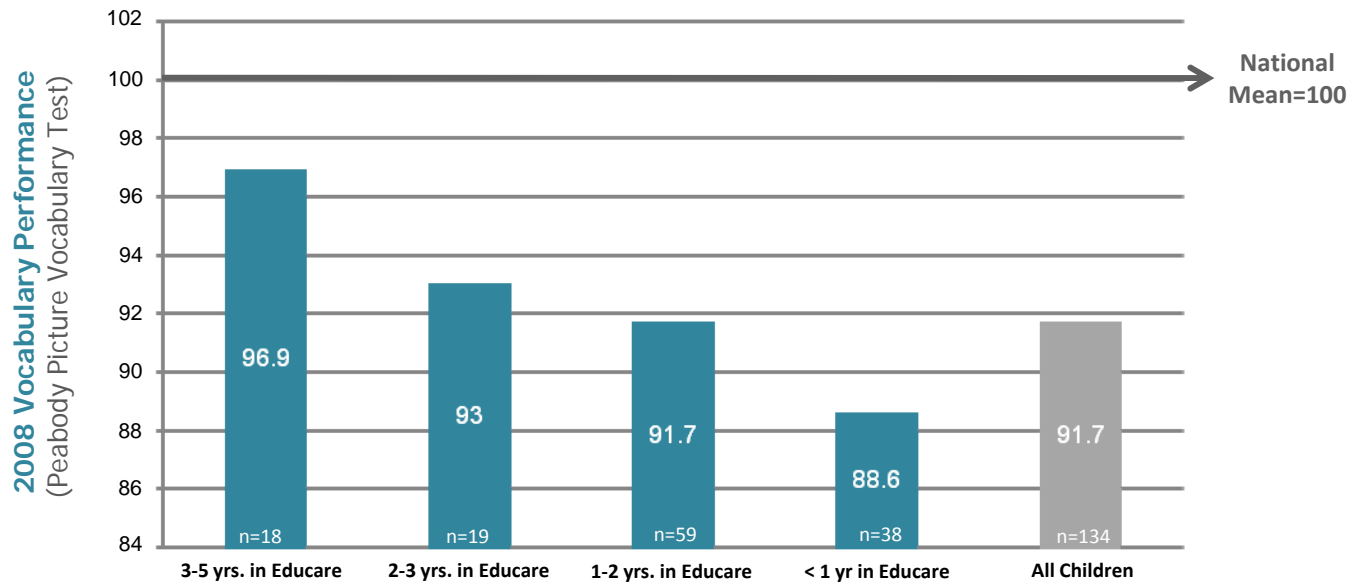
**How do we measure school readiness?** The Bracken Basic Concepts Scale is a developmentally sensitive and standardized measure that evaluates children's comprehension of concepts like sequence, letters and colors that are essential to early communication development and school readiness. It is administered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

## Vocabulary

**Why it's Important:** Communication, early literacy and vocabulary skills consistently predict later academic success. In fact, research shows that first-grade reading ability is a strong predictor of 11<sup>th</sup> grade reading comprehension, vocabulary and general knowledge.<sup>4</sup> 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 11<sup>th</sup> grade, graduating high school and staying on a successful life trajectory will have been improved for the better.

- **Kindergarten-bound Educare children score better on measures of vocabulary than most low-income children in other large studies of early achievement. Educare children average 91.7.**<sup>5,6</sup>
- **The earlier the better:** Five site data from 2007-2008 suggest that the more time children spend in Educare, the better prepared they are for Kindergarten. **Kindergarten-bound children who began the Educare program between birth and 2 years-old averaged vocabulary scores of 96.9 – approaching the national mean for all children.** This pattern persists even after controlling for risk factors such as maternal education, race and teen parent status.<sup>5</sup>

### Vocabulary: Children who spend more years in Educare emerge better prepared for kindergarten



**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 every spring beginning at three years-old. The PPVT is a good predictor of reading success in elementary school.

## Social and Emotional Skills

**Why it's Important:** Social and emotional skills – such as the capacity to control one's behavior, to get along with peers, and to ask for and receive help – are critical to school success. At Educare, children develop the skills to become active, engaged and successful students.

- **88% of Chicago Educare five-year-olds have social skills rated as meeting or exceeding national averages.**<sup>7</sup>
- Chicago Educare graduates are half as likely as other children from low-income communities to demonstrate behavioral problems at the transition to kindergarten.<sup>8, 9</sup>

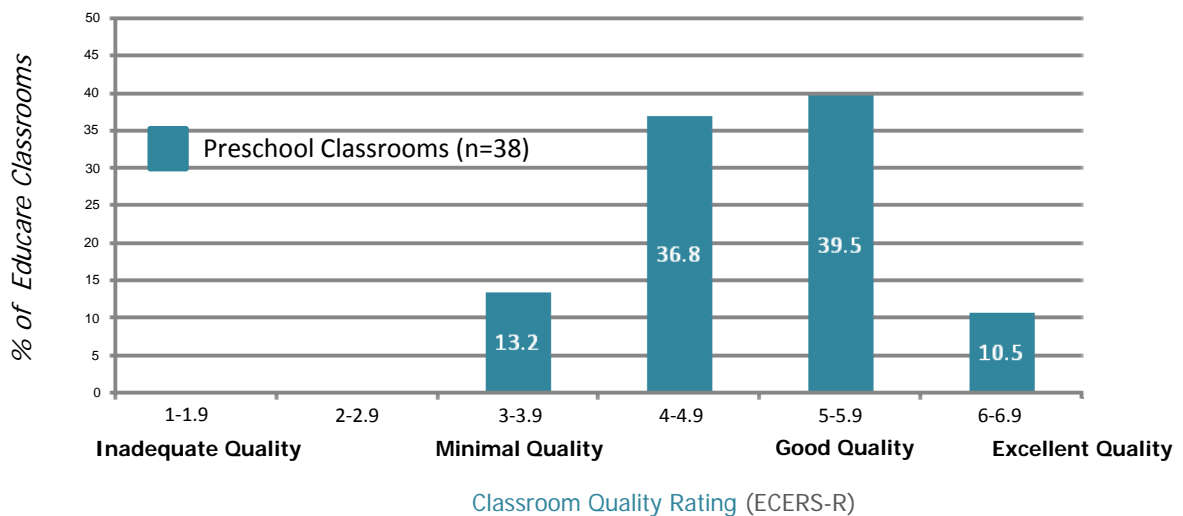
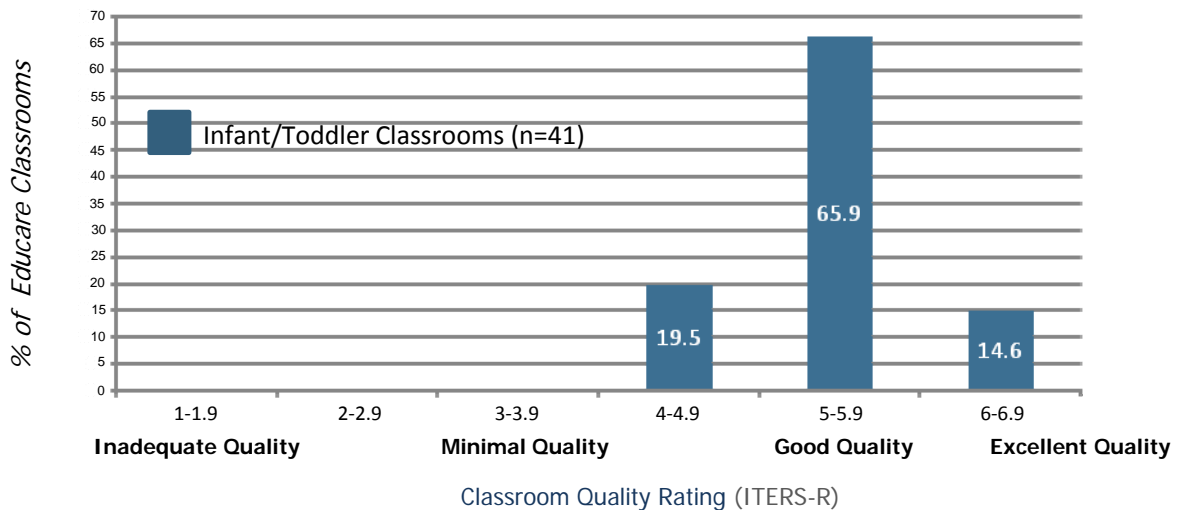
**How do we measure social and emotional skills?** The Devereux Early Childhood Assessment (DECA) is a nationally normed assessment that measures behavior on three scales of initiative, attachment and self-control in preschool children aged two to five. The DECA is administered in the fall and spring of each year.

# Classroom Quality

**Why it's Important:** Educare's high quality classrooms are likely 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.<sup>10</sup> On a scale of 1-7, the benchmark of good quality is a score of 5 or higher.

- Across the five Educare sites, 80% of infant-toddler classrooms scored a 5 or above – **with an average quality rating of 5.9** – much higher than observed in a recent national study of infant-toddler care settings.<sup>11</sup>
- **Scores for preschool classrooms also reach the good quality benchmark of 5.0 with an average of 5.1 across the 5 sites**, with half of classrooms rating a score of 5 or above. Other national studies of preschool classroom quality have found classroom scores ranging from 3.4 to 5.2 – putting Educare preschool classrooms at the top of this range.<sup>12</sup>

## Educare Classroom Quality



**How do we measure classroom quality?** The Infant-Toddler Environmental Rating Scale (ITERS) and the Early Childhood Environmental Rating Scale (ECERS) are observational measures widely used by researchers and government agencies to assess the quality of child care and early education settings. The measures rate quality on a scale of 1 (inadequate) to 7 (excellent). A high score indicates higher classroom quality in terms of the activities, staff-child interactions, equipment, space, and materials.

## Still to Come...

In partnership with the Bounce Learning Network of Educare Centers, we 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. New sites enter the Network – and the study – each year. With this expansion, we hope to replicate the exciting early results reported here with future cohorts, in diverse locales and through more extensive analyses of child, family, and classroom characteristics. We believe this ongoing research will continue to demonstrate that early enrollment and quality learning environments are key elements of the Educare story. Finally, we are also in the early stages of planning for a randomized control study of the Educare model which we believe could further bolster the case for investments in high-quality early learning programs for at-risk young children.

**For more information** about the study, go to [www.fpg.unc.edu/~bounce](http://www.fpg.unc.edu/~bounce).

### FOOTNOTES

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