

# DEMONSTRATING RESULTS

EDUCARE PREPARES YOUNG CHILDREN FOR SUCCESS

December 2017

## Gaps in Student Achievement Are Present Before Kindergarten

Families living in poverty face many challenges, including joblessness, homelessness and food insecurity. Poverty also creates disadvantages in access to high-quality public education, starting in the earliest years of a child's life. Young children who grow up in financially challenged or otherwise stressed households often start kindergarten far behind their more-advantaged peers. Children from low-income families typically have more limited vocabularies, are less likely to know their letters, recognize fewer numbers and exhibit poorer social-emotional skills.<sup>1</sup> The resulting achievement gap, which is evident before kindergarten, often widens and persists throughout a child's life, leading to social and economic problems, including higher rates of illiteracy, teen pregnancy, dropping out of high school and unemployment.<sup>2</sup>

This is preventable. Research demonstrates that high-quality early childhood education can prevent or narrow the achievement gap among financially disadvantaged children.<sup>3</sup> When children attend high-quality early learning programs, they are better prepared to learn, are more likely to graduate from high school and earn higher incomes as adults.<sup>4</sup> Additionally, children are less likely to repeat a grade, require special education or need public assistance as adults.<sup>5</sup> High-quality early education is an essential part of a healthy childhood and improves the likelihood of a successful future.

### **Educare Offers High-Quality Early Education**

Educare advances high-quality early education practices and the policies that support them. Educare's comprehensive model is grounded in research from early childhood development, education and social work, and is implemented in a coast-to-coast network of early childhood schools. Educare develops and tests innovative practices and shares that knowledge with early childhood providers across the country. Educare also brings together policymakers, business leaders and other champions to call for more efficient use of existing resources and increased investments in early learning.

Educare schools serve children ages 6 weeks to 5 years from financially challenged families. Each Educare school is a Head Start and Early Head Start program. State child care and local education dollars also support programming, and private philanthropic dollars fund innovative features.

Educare's four primary domains of practice—data utilization, embedded professional development, high-quality teaching practices and intensive family engagement—are essential to delivering strong outcomes for children and families. The research-based program offers full-day, full-year services, classrooms that maintain low child-staff ratios and small class sizes. Staff intentionally partner with parents to help them support their children's developmental and learning needs. Educare integrates professional development for staff into the school to enhance practices that improve child and family outcomes. A hallmark of Educare is its partnership with researchers to collect, review and interpret data for continuous program improvement. By evaluating progress, Educare ensures its schools effectively prepare young children for success in kindergarten and beyond.

Research shows that when children leave Educare for elementary school, the majority are academically, socially and emotionally prepared for kindergarten.









## A Comprehensive Evaluation of Educare's Effectiveness

Researchers from the Frank Porter Graham Child Development Institute at the University of North Carolina at Chapel Hill and evaluators at each Educare school have been studying implementation and outcomes since 2005. Through the innovative *Educare Implementation Study*, researchers assess child and family outcomes, staff practices, and Educare classroom and program quality.

This report includes *Educare Implementation Study* data from the 2014–2015 school year, collected from 20 schools and more than 2,700 children and families. Longitudinal findings are also included.

The Educare model is built on the foundation of the Head Start and Early Head Start performance standards. Comparisons with Head Start and Early Head Start are made within this report to show how Educare children and families progress compared to other low-income children and families.

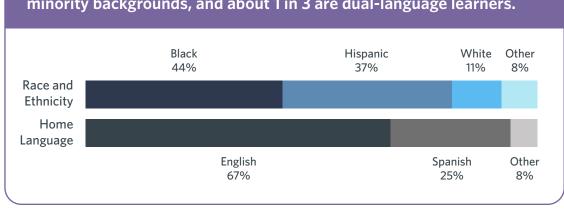
#### NATIONAL NETWORK OF SCHOOLS SERVING CHILDREN AND FAMILIES

Educare operates in 14 states and the District of Columbia (Figure 1). While many Educare schools are based in urban locations, Educare West DuPage is located in suburban Chicago, Educare Central Maine is in a rural community and Educare Winnebago is on the Winnebago Indian Reservation in northeastern Nebraska. This geographic diversity, along with the corresponding racial and linguistic makeup of students (Figure 2), indicates that the Educare model can be implemented effectively in varied settings with children and families from different backgrounds.



#### Educare serves young children and families across the country.

Figure 1 | Educare's national network of high-quality early childhood schools, 2017.



## Nearly 90% of Educare students across the country are from minority backgrounds, and about 1 in 3 are dual-language learners.

Figure 2 | Race, ethnicity and language characteristics of Educare children, 2014–2015 (N= 2,732).

In addition to differences in race and language characteristics, Educare parents tend to be younger than parents in higher-income families. In fact, nearly 20% of Educare mothers were teenagers when their child was born. In contrast, only 14% of first-time births in the United States are to mothers younger than 20.<sup>6</sup> Additionally, about 50% of Educare parents are single. Nationally, only 35% of children younger than 18 live in single-parent families.<sup>7</sup>

## **Educare Families Face Challenges Related to Financial Pressures**

Educare families report having fewer resources and encountering more daily financial challenges and substantial life stressors than higher-income families. These stressors alone, and especially in combination, are known to have negative effects on child development.<sup>8</sup> Specifically, these stressors lead to poorer health and educational outcomes and reduce the ability of children to learn, adapt and grow starting before birth through adolescence.<sup>9</sup>



**Nearly 20% of Educare mothers or caregivers show signs of depression.** A national study of maternal depression found that about 10% of all mothers experienced depression.<sup>10</sup>



More than 30% of Educare parents worry about running out of food and 20% report actually running out of food. Nationally, nearly 16% of families with children younger than 18 were food insecure in 2007.<sup>11</sup>



Among Educare parents and guardians, **15% worried about being homeless** in the past year while **6% reported homelessness**. Across the country, less than 1% of people were homeless in 2015. Approximately 37% of those individuals were in a family.<sup>12</sup>

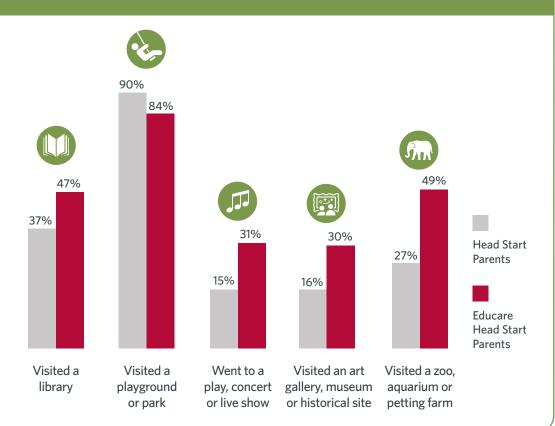


More than **15% of Educare families had at least one family member incarcerated in the last 12 months**. Nationally, 7% of children younger than 18 *ever* had a parent or guardian who was incarcerated.<sup>13</sup>

## **Educare Parents Are Engaged** in Their Children's Learning

Research has shown that when parents are able to adapt and manage stressors, they can help improve the health and educational outcomes of their children.<sup>14</sup> Studies also show that a parent's involvement in a child's education leads to stronger parent-child relationships and better developmental outcomes for children.<sup>15</sup>

Because Educare places a strong emphasis on parent engagement, Educare parents demonstrate high levels of involvement in their children's learning. The majority of Educare parents report engaging with their children at least three times a week in activities like talking to them about their day at Educare, teaching them letters or numbers and reading to them. Moreover, Educare parents engage in learning activities with their children more often than similar low-income parents (Figure 3). Educare parents have high expectations for their children: 85% say they expect them to graduate from college.



Educare parents engage in learning activities with their children more often than similar low-income parents.

Figure 3 | Comparison of self-reported parent-child activities in the past month among Head Start families, 2009 (N=3,349)<sup>16</sup> and Educare families, 2014–2015 (N=2,427).<sup>17</sup>

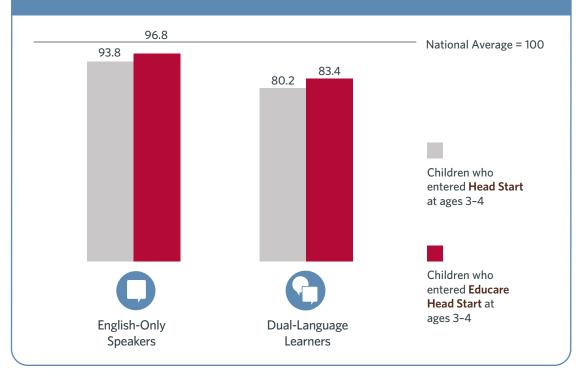
## **Educare's High-Quality Program** Narrows the Achievement Gap

Children from low-income families, like those served by Educare, typically score well below the national average on standardized assessments. When entering kindergarten, they are often developmentally several months or more behind their more-advantaged peers.<sup>18</sup> Kindergarten readiness includes knowledge of academic concepts like letters, colors, shapes, sequence and numbers, as well as language and social-emotional skills.

Educare schools work intensively to prepare children for elementary school. Impressively, the majority of Educare students enter kindergarten exhibiting average or above average school-readiness and social-emotional skills.

#### KINDERGARTEN READINESS: STRONG LANGUAGE SKILLS

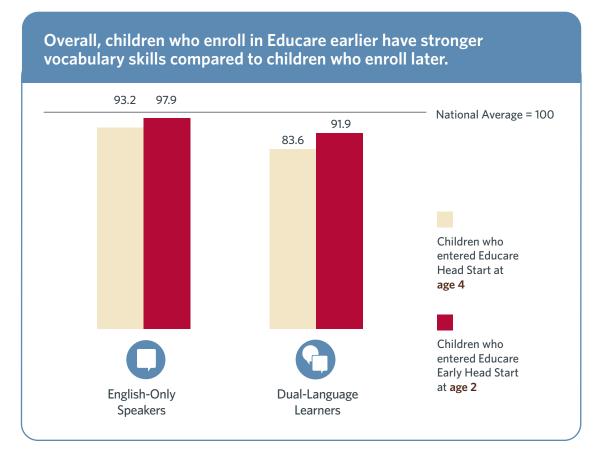
Early vocabulary skills have been shown to be highly predictive of later academic success.<sup>19</sup> Educare students from both English-only and dual-language families demonstrate better vocabulary skills at kindergarten entry than similar low-income peers (Figure 4).



Educare students, including dual-language learners, outperform low-income peers on vocabulary assessments.

**Figure 4** | Comparison of average vocabulary skills among children in Head Start, 2009 (N=1,410 English-only speakers and N=521 dual-language learners)<sup>20</sup> and Educare, 2015 (N=305 English-only speakers and N=191 dual-language learners). Vocabulary measured the spring before kindergarten entry using the *Peabody Picture Vocabulary Test, Fourth Edition.*<sup>21</sup> Average scores are statistically significantly different, even after adjusting for socio-demographic factors. See Figure 5 for explanation of national average.

And the earlier children start, the better. Children who enter Educare at younger ages have higher levels of receptive vocabulary skills at kindergarten entry than children who start Educare later (Figure 5). One year of preschool is not enough to sufficiently narrow the achievement gap.

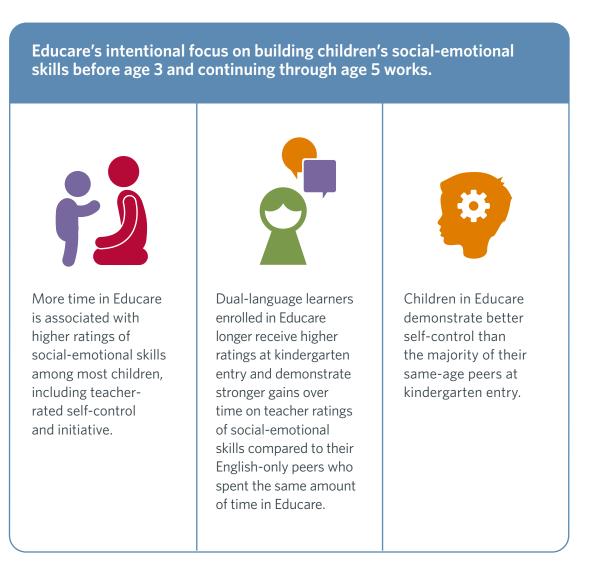


**Figure 5** | Language scores at age 5 by entry age in Educare and home language, 2007-2013 (N=3,542 Englishonly speakers and N=1,492 dual-language learners).<sup>22</sup> Vocabulary measured the spring before kindergarten entry using the *Peabody Picture Vocabulary Test, Fourth Edition*.<sup>23</sup> A national average is a standardized mean set of scores obtained from a nationally representative sample of same-age children who have completed the assessment. This sample is intentionally selected to represent all same-age children based on a range of key demographic characteristics (e.g., income-level, race, ethnicity, special education status, geographic diversity) to allow for comparison of assessment scores in a meaningful way.

Dual-language learners benefit even more from earlier entry and longer involvement in Educare, demonstrating stronger gains in English-language ability. Importantly, the gains in English-language skills do not occur at the expense of Spanish-language proficiency, which develops in equal measure.<sup>24</sup>

#### KINDERGARTEN READINESS: STRONG SOCIAL-EMOTIONAL SKILLS

The early years are a critical time to build social-emotional skills, such as sharing, taking turns, self-control, following directions and staying focused. Cultivating such skills is essential for children to be able to learn more academic skills later.<sup>25</sup>

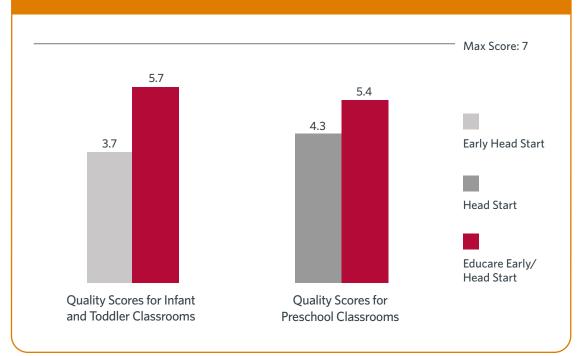


**Figure 6** | Findings from social-emotional assessments completed in fall and spring 2007-2013 for Educare children ages 1 to 5 (N=3,542 English-only speakers and N=1,492 dual-language learners).<sup>26</sup> Teacher-rated social-emotional student competencies measured using the *Devereux Early Childhood Assessment.*<sup>27</sup>

#### **ENVIRONMENT MATTERS**

A large body of research shows that experiences in high-quality classrooms are related to the growth of young learners' language, vocabulary, early math and social skills.<sup>28</sup> Educare schools measure the quality of classroom environments, teacher-student interactions and instruction every year through widely used observational measures.

Educare classroom quality, which contributes to positive student outcomes, consistently exceeds that of classrooms in other national studies (Figure 7).

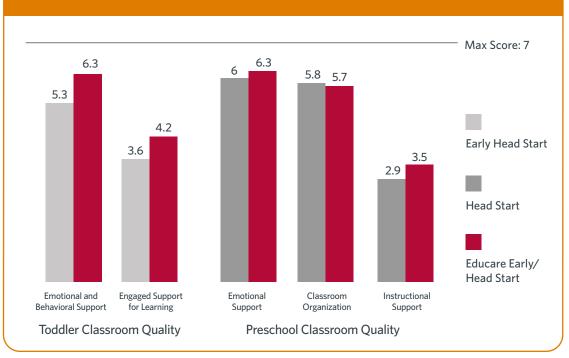


Educare consistently rates higher on global classroom quality measures compared to other providers serving low-income children.

**Figure 7** | Average global classroom quality scores in Early Head Start, Head Start and Educare classrooms. Infant and toddler classrooms: Early Head Start, 2010 (N=469)<sup>29</sup> and Educare, 2014-2015 (N=117). Preschool classrooms: Head Start, 2009 (N=370)<sup>30</sup> and Educare, 2014-2015 (N=130). Classrooms measured by the *Infant-Toddler Environment Rating Scale, Revised Edition*<sup>31</sup> and *Early Childhood Environment Rating Scale, Revised Edition*<sup>32</sup>

#### QUALITY TEACHING AND HIGHLY QUALIFIED STAFF LEAD TO SUCCESS

Research demonstrates that high-quality teacher-child interactions are an important component to delivering effective early learning programs.<sup>33</sup> Educare rates higher than other national early childhood providers on measures of classroom climate, routines and procedures, as well as how teachers promote learning and development (Figure 8).



Educare teachers provide higher quality interactions and instruction compared to other providers who serve low-income children.

**Figure 8** | Average scores for quality of teacher-child interactions and instruction in Early Head Start, Head Start and Educare classrooms. Infant and toddler classrooms: Early Head Start, 2010 (N=218)<sup>34</sup> and Educare, 2014-2015 (N=117). Preschool classrooms: Head Start, 2015 (N=227)<sup>35</sup> and Educare, 2014-2015 (N=115). Classrooms measured by the *Classroom Assessment Scoring System*.<sup>36</sup>

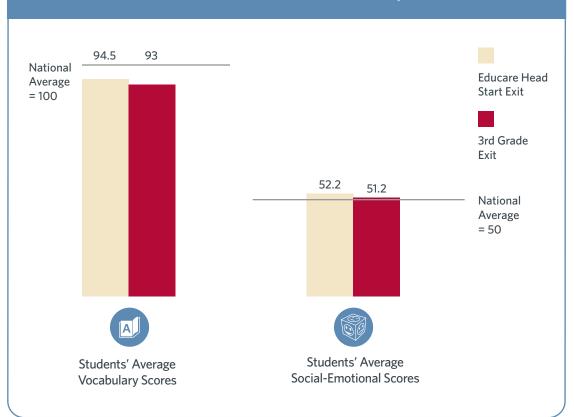
Educare's high staff qualifications are another indicator of quality early childhood programming. Research shows that children learn more from teachers who have higher education degrees.<sup>37</sup>

At Educare, more than 85% of lead classroom teachers have a bachelor's or master's degree. Additionally, nearly half of Educare teacher aides and assistant teachers have a child development associate credential or the corresponding state equivalent. In contrast, current research estimates that only about 42% of lead teachers in center-based child care programs and 51% of Head Start teachers hold a bachelor's degree or higher.<sup>38</sup>

## **Educare Graduates Succeed in Elementary School**

Two Educare schools are conducting studies to track and monitor the progress of children and families after they leave Educare and enter elementary school. The *Educare Chicago Follow-Up Study*, with a sample of nearly 300 children and families, has found that Educare graduates maintain their vocabulary and social-emotional skills relative to their same-age peers through 3rd grade (Figure 9).

Additionally, more than three-quarters of former Educare Chicago parents are rated by their child's classroom teacher as being "similarly" or "more" involved than other parents in the classroom across kindergarten to 3rd grade. In other studies of vulnerable, low-income populations, rates of parental involvement tend to decrease over time and as the student proceeds into higher grades.<sup>39</sup>



**Figure 9** | *Educare Chicago Follow-Up Study* data. Vocabulary scores measured using the *Peabody Picture Vocabulary Test, Fourth Edition*, at Educare exit, 2005-2011 (N=181) and at 3rd grade exit, 2009-2015 (N=181). Teacher-rated social-emotional student competencies measured using the *Devereux Early Childhood Assessment*<sup>40</sup> at Educare exit, 2005-2011 (N=105) and using the *Devereux Student Strengths Assessment*<sup>41</sup> at 3rd grade exit, 2009-2015 (N=105). Differences in average scores from Educare exit to 3rd grade exit are not statistically significant. A national average is a standardized mean set of scores obtained from a nationally representative sample of same-age children who have completed the assessment. This sample is intentionally selected to represent all same-age children based on a range of key demographic characteristics (e.g., income-level, race, ethnicity, special education status, geographic diversity) to allow for comparison of assessment scores in a meaningful way.

## On average, Educare Chicago graduates' vocabulary and social-emotional skills don't fade out in elementary school.

Another study follows students who attended one of two Educare schools in Omaha. An analysis of the students' performance in elementary school showed promising results.

A small sample of students who attended Educare Omaha for at least two years had significantly higher average state reading and math assessment scores in elementary school compared to other low-income students in the same school district and grade levels. Their average scores were also higher than those of children who attended Educare for less than two years. These initial results contribute to the evidence base that more time in a high-quality early learning program is associated with more positive long-term outcomes.





## **Educare Continues to Evaluate Its Work and Share Results**

Educare is committed to conducting research and using the results to improve practices not only in our own schools but also in programs serving vulnerable young children and families across the country. We also use our findings to advance policy changes and to advocate for increased investments in high-quality early childhood programs at local, state and federal levels.

Additional studies are underway, including a multischool, coordinated follow-up study and a randomized control study of the Educare model. Educare's *National Research Agenda for Early Education* aims to catalyze new research that builds a national body of evidence about effective early education practices that can be implemented at scale to improve the lives of low-income young children and their families.

For more information about Educare, its research agenda and academic journal articles published using Educare data, visit educareschools.org. To learn more about the Frank Porter Graham Child Development Institute and the *Educare Implementation Study*, visit eln.fpg.unc.edu.

Please direct questions about Educare research to Tony Raden, senior vice president, research and policy initiatives (araden@theounce.org), or Amanda Stein, director, research and evaluation (astein@theounce.org), at the Ounce of Prevention Fund.

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## Endnotes

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