



# A National Research Agenda for Early Education

April 2014



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# Introduction

The Educare Learning Network—a nationwide network of high-quality early childhood education schools—is committed to demonstrating that research-based early education can prevent the persistent achievement gap for our nation’s young children living in low-income communities. But true progress toward closing this gap will require the mobilization of research and evaluation to elucidate the best practices and inspire the innovations that will support children and families in low-income households to achieve their full potential. To that end, the Educare Learning Network (the Network) has identified urgent and compelling research priorities for the early education field and articulated them here, in this national research agenda.

An intentional commitment to research and innovation has long been central to the success of the Network in preparing young children and families to achieve in school and in life. Indeed, Educare Schools are committed to continuous, data-driven improvement, pairing the expertise of some of the best leaders, educators and practitioners in the field with an accomplished nationwide team of early childhood researchers. In establishing this agenda, the Network aims to build on its long tradition of improvement and inquiry, and to leverage the unique contributions of Educare Schools as leaders in early education practice, as cutting-edge partners in research and evaluation, and as laboratories of innovation that can export best practices to raise the quality of early education nationwide.

The research agenda highlights current gaps in knowledge and practice and articulates research questions with significant potential to impact the field. In particular, the agenda proposes the use of interdisciplinary research methods to advance knowledge about four core domains of practice, which evidence shows are critical to improving outcomes with children and families. These key areas of inquiry are data utilization, embedded professional development, high-quality teaching practices and intensive family engagement. Once documented, best practices in these core domains can be shared broadly to improve early education programs across the country, and in turn, meaningfully impact the lives of infants, toddlers, and preschoolers and their families.

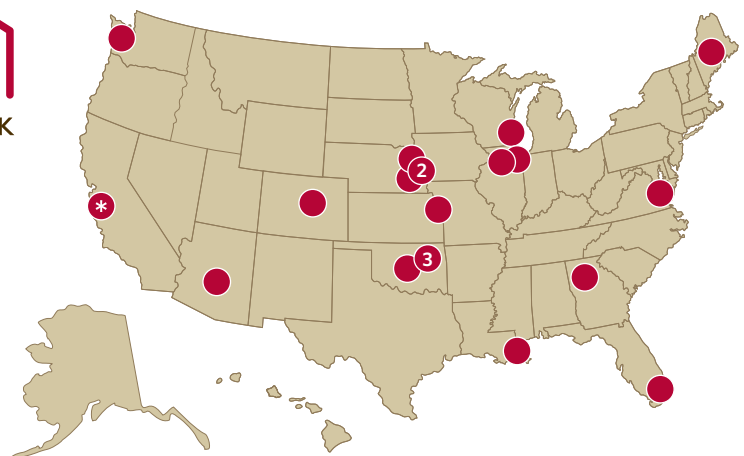
Ambitious in scope, this research agenda requires cross-disciplinary expertise and collaboration. The questions put forth herein cannot all be answered by the Network alone. Rather, we invite and encourage all stakeholders and partners from early education and allied fields—researchers, families, research-granting agencies, schools and other community

organizations—to share their diverse expertise and to advance studies of these core areas of inquiry in diverse early education settings nationwide. Together we can aspire to investigate and discover the most effective ways to support young children’s learning and development, sustain early gains and pave the way for later academic and life success.



# I. Educare Learning Network

Educare is a comprehensive, full-day and year-round early education program for children from 6 weeks to 5 years old and their families in low-income communities. In some Educare programs, services even begin prenatally, with expectant parents receiving services from trained home visitors in the months leading up to their children’s births. In 2000, the first Educare School opened on Chicago’s South Side in what was then the poorest census tract in the country. Since then, the Buffett Early Childhood Fund and the Ounce of Prevention Fund, partnering with other national and local philanthropies, have supported the implementation and replication of this program model with a growing group of Educare Schools in high-poverty communities across the country. Federal funds from Early Head Start and Head Start provide critical financing for program operations, which are braided with other public funding streams—including state child care, preschool and school-district dollars—to achieve Educare’s high-quality model. Together these public-private partnerships across the country form the Educare Learning Network—a coast-to-coast network of Educare Schools committed to preventing the persistent achievement gap facing young children living in low-income communities. The Educare Learning Network currently consists of 20 operating Educare Schools in diverse communities, serving approximately 3,000 children and guiding professional development for 750 early childhood staff.



Chicago  
 Omaha at Kellom  
 Omaha at Indian Hill  
 Milwaukee  
 Tulsa at Kendall-Whittier  
 Tulsa at Hawthorne

Tulsa at MacArthur  
 Denver  
 Miami-Dade  
 Oklahoma City  
 Seattle

Kansas City, KS  
 Central Maine (Waterville)  
 Arizona (Phoenix)  
 Washington, DC  
 West DuPage, IL

Atlanta  
 Lincoln, NE  
 New Orleans  
 Winnebago, NE  
 Silicon Valley (San Jose)\*  
 \* Opening in 2015

As of February 2014

Each Educare School promotes the healthy development and school readiness of infants, toddlers and preschoolers from families living at or below the federal poverty level. Educare Schools use evidence-based approaches to foster children’s learning, engage families and enhance teacher quality, with the goal of improving child and family trajectories and outcomes. The Educare model theory of change includes four core domains of practice—data utilization, embedded professional development, high-quality teaching practices and intensive family engagement—that in the context of strong leadership and linkages to community partners aim to enhance achievement and overall well-being among Educare children and families. The Educare Learning Network considers these four components to be active ingredients in ensuring that children and families are ready for success in school and life.

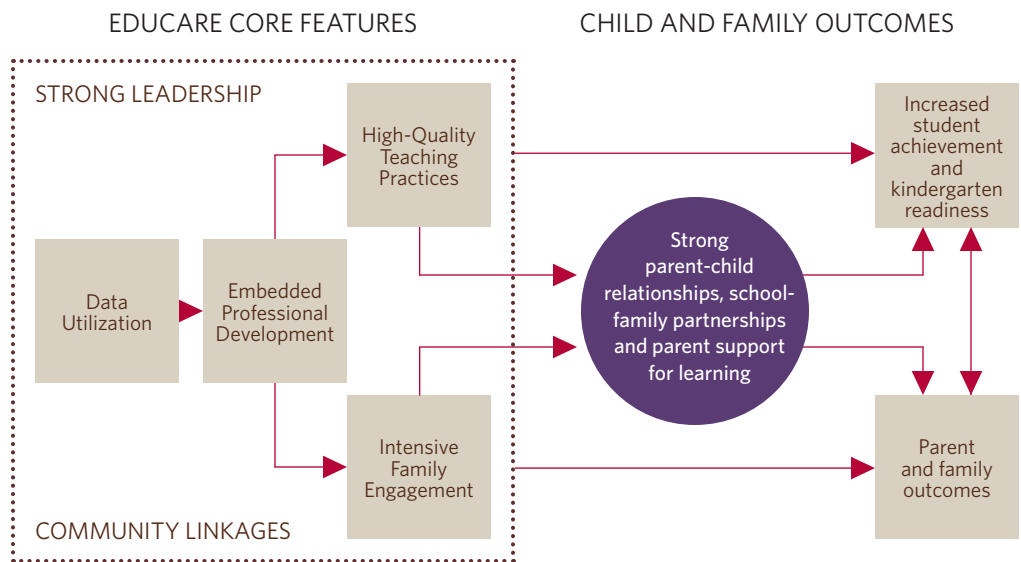


Figure 1. Educare Logic Model

To evaluate how well the Network is achieving our goal of supporting families and preparing children for educational and life success, an accomplished nationwide team of researchers has been tracking program quality and outcomes throughout children’s time at Educare and beyond. The team includes nationally renowned researchers from the Frank Porter Graham Child Development Institute (FPG) at the University of North Carolina at Chapel Hill and Ph.D.-level local evaluation partners (LEPs) at each Educare School, many of whom are affiliated with local universities and who represent a broad range of interests and areas of expertise. These researchers have been rigorously evaluating the Educare Learning Network through our core studies: the Educare Implementation Study, the Educare Randomized Controlled Trial and Educare Follow-Up Studies in several communities. Below we summarize these key studies. For more information on each, please see Appendix C.

### EDUCARE IMPLEMENTATION STUDY

Since 2005, researchers from FPG and LEPs from each Educare School have been evaluating classroom quality and child and family outcomes through the Educare Implementation Study. The study was planned and designed to provide program staff with information for continuous program improvement, and families with information to help them better support their children's learning; to provide information about how well the Network as a whole and individual programs in particular are making progress toward the goal of implementing Educare's core domains of practice; and to describe and understand the progress children and families are making longitudinally while in Educare.

Data from the study document that Educare's theory of change is operating as predicted, with children entering kindergarten ready for school. Educare children's school readiness and vocabulary scores are at the national average, considerably higher than is typical of children from low-income families. Critically, these data also show that the age at which a child enters the Educare program is related to the child's later achievement scores—the younger that children are when they enter Educare, the better prepared they are at kindergarten entry.

### EDUCARE RANDOMIZED CONTROLLED TRIAL

The Educare Randomized Controlled Trial (RCT) that is under way at five schools will provide a gold-standard test of the effects Educare has on various child and family outcomes. The study recruited infants to track the progress of children in the critical period from birth to three years, and the Network plans to follow these children through kindergarten. Though the results of the RCT are not yet available, we believe that they will confirm what the Implementation Study has demonstrated for the past several years—that Educare is among the most effective strategies for preparing at-risk young children for school.

### EDUCARE FOLLOW-UP STUDIES

Educare's oldest cohorts are preparing to enter 9th grade, carrying with them the potential to test our hypothesis, through follow-up studies, that children and families who attend Educare achieve greater success in their academic pursuits and in life than other comparable low-income children who do not attend Educare. There have been three locally driven Follow-Up Studies—conducted in Chicago, Omaha and Tulsa—with differing structures but a common goal: to follow the progress of Educare children and families as the children move into elementary school. The results are promising, demonstrating that children sustain the gains they made while at Educare well into elementary school. Additional studies in Maine and Denver have recently been launched, and Educare Kansas City plans to initiate one as well.



# II. The Educare Learning Network Strategic Plan

In July 2012, the Educare Learning Network formally adopted a 10-year strategic plan that set forth an ambitious vision and direction for the Network (see Appendix B for a summary of the strategic plan).

## VISION STATEMENT

The Educare Learning Network will demonstrate that research-based early childhood education prevents the persistent achievement gap for our nation's most at-risk young children. The Network's evidence, practice expertise and dynamic partnerships will help ensure that all children and families, especially those at greatest risk, will have access to effective early learning and that the first five years will be an integral part of our country's education system.

The strategic plan highlighted three key strategic directions critical to achieving this vision:

- 1.** Model best program practices, generate strong evidence for high-quality early learning and communicate it to the broader field
- 2.** Expand access to high-quality early learning by extending best practices and promoting policy change and increased investments
- 3.** Build strong connections with K-12 education and influence broader education efforts

These strategic directions are the overarching priorities driving the Educare Learning Network Research Agenda. They encourage the Network to evaluate unique and innovative practices and export and scale those that benefit the lives of young children and families in low-income communities. They also call for the Network to work with early education and allied fields nationwide to broadly implement and evaluate promising and evidence-informed practices, and to explore critical research questions.

To advance our work on these strategic directions, the Educare Learning Network Research Agenda is intended to catalyze research that will contribute to a national body of evidence on beneficial and cost-effective strategies to improve early education programs across the country and, in turn, improve child and family outcomes. Pursuing the research questions posed here will position the field to better answer the questions, "What characteristics and conditions set young children living in low-income households and their families on a path toward achievement and life success—and what can we do to more effectively foster these?"

# III. The Educare Learning Network Research and Evaluation Committee

Created as part of the Network’s strategic planning process, the Educare Learning Network Research and Evaluation Committee comprises Educare School leaders, local evaluation partners and representatives from the Frank Porter Graham Child Development Institute, the Buffett Early Childhood Fund, the Educare Learning Network and the Ounce of Prevention Fund. This interdisciplinary team collaborated to create a new research-agenda framework for the Network, share ongoing research initiatives, brainstorm new questions and areas for exploration, and devise strategies for supporting research inquiry and coordinating and leveraging research partnerships.

The process for developing the Network’s research agenda began with the first convening of the committee in March 2013. Meetings throughout the ensuing year provided many opportunities for refinement of the agenda. Interviews with other key stakeholder groups—including Educare staff and early childhood policy experts, researchers and philanthropists—gleaned diverse feedback and ensured that the development of the agenda was guided by the voices of the broader early childhood community. The culmination of the committee’s work, this agenda presents a vision for future research inquiry devoted to high-quality practice to improve the lives of infants, toddlers, preschoolers and their families living in low-income communities.

# IV. The Educare Learning Network Research Framework

The Research and Evaluation Committee determined that the best framework to guide and organize its priority areas of inquiry is the Educare model. The Educare model encapsulates four interrelated domains of practice that have gained prominence in the recent literature for their critical role in creating high-quality early learning experiences and positive outcomes for children and families. Thus, the framework reflects the Network's commitment to catalyzing research and evaluation to explore and refine those domains of early childhood practice that significantly impact child and family well-being.

The four core domains of practice that we have defined as critical content areas of inquiry for the field are (in no particular order):

- Data utilization
- Embedded professional development
- High-quality teaching practices
- Intensive family engagement

These domains are interconnected, as represented by the arrows in the Educare logic model. (For reference, see page 7.) Indeed, many important research questions may explore the dynamic interrelationships between these domains. For instance, one of the research questions proposed in this agenda pertains to the effectiveness of embedded professional development in improving the quality of teaching practices; another explores the ways data use supports family-engagement practices. Thus, research should explore the four critical domains of practice, the relationships between them and the organizational culture and conditions that are necessary to support their effective implementation. In addition, there are other cross-domain questions researchers may wish to explore, including the cost-effectiveness and long-term economic returns associated with these core areas.

Making a significant difference in the lives of young children and families is the “why” that motivates and inspires the Network's practices and innovations. For this reason, the Network encourages research inquiry that elucidates the paths and best practices that lead to children's and families' improvement on the outcomes that truly matter in their welfare and success. As the model indicates, the Educare Learning Network believes that data utilization, embedded professional development, high-quality teaching practices and intensive family engagement drive outcomes in two key areas: (1) child outcomes and (2) parent and family outcomes. The Network strives to understand and improve these

outcome areas across the developmental trajectories of children and parents—following their progress while in Educare, understanding their school readiness at their exit from Educare and tracking their progress into the elementary years and beyond. Evaluating the impact of practices on child and family well-being and progress demands the careful selection of measures with an eye for how they align with the goals of the research. It also may require the field to address needs in psychometrics and measurement development for capturing some child and family outcomes that are more difficult to measure.

The framework for this research agenda positions the Network to pursue new or expanded research at the heart of its practice expertise. Many researchers and programs throughout the Network are already engaged in studies and analyses that explore these four core domains of Educare’s model, though deeper inquiry is needed. It is the committee’s intent that this framework not only catalyzes research and analysis within the Educare Learning Network but also within the broader field. Our hope is that the agenda will encourage the field and new partners to join us in the exploration of these critical early childhood education research questions and practices and their relationships to child and family outcomes.

## EDUCARE KEY OUTCOME AREAS

### **Child Outcomes**

In defining and promoting children’s achievement and kindergarten readiness, Educare takes a whole child approach, supporting all domains of young children’s development: social-emotional, cognitive, behavioral, physical and motor. To this end, the Network monitors a child’s progress in each of those domains and engages in research and evaluation to link positive outcomes to beneficial program features. Educare Schools use data on children’s progress to inspire or improve practices that effectively promote children’s learning. Yet the Network and the early education field have more work to do to capture all domains of the whole child. The field should more intentionally focus on measuring the health outcomes associated with early education and capturing developmental domains for which measurement is less well-developed, such as in the areas of executive function, mental health, noncognitive traits and skills, and STEM skills (science, technology, engineering and mathematics). We also must improve efforts to track the progress of subgroups of children, such as dual-language learners, children with special needs or children who have experienced trauma, with the goal of using data to identify effective strategies and practices that meet children’s unique circumstances and needs.

### **Parent and Family Outcomes**

The Educare Learning Network Strategic Plan has a foundational priority to “engage and empower parents as a force for change in their families, schools and communities.” Parents are children’s most important supports and advocates, and as such, the Educare Learning Network believes that parents are essential partners in building a solid foundation for their children’s learning and life success. To help parents build their capacity to best scaffold their children’s learning and growth, the early education field must understand

the conditions that promote strong parent-child relationships, school-family partnership and parent support for learning. Thus, we must engage in research that illuminates the trajectories of parents and the indicators of their children's, and their own, achievement and well-being. The Network has convened a work group dedicated to articulating the parent and family outcomes that they believe are associated with the core domains of practice in the Educare model.



## AREA OF INQUIRY 1: DATA UTILIZATION

### **What Data Utilization Means at Educare**

Educare Schools engage in a regular cycle of reciprocal data feedback and utilization for continuous program improvement and individualized planning for children, families and staff. This cycle includes not only collecting and sharing data but also regular engagement in dialogues that identify strategies and interventions, based on the data, for improvement of program and teaching practices.

All quality improvements—in the classroom, in individual work with families, for program policies and systems, and for professional development—are informed by data collected under the structure and system of data utilization established by each Educare School as part of its research program partnership (RPP). The RPP includes the local evaluation partner (LEP), usually from a proximal university, Educare leaders, program staff and parents. The LEP plays an integral role in the RPP, striving to make the data understandable and useable by the school. The Educare leaders create a culture of data utilization on site, leading the program-driven practices. Educare program staff participate in interdisciplinary data meetings to ensure that everyone uses data to inform their practices and interactions with children and parents. Parents are engaged in ongoing communication concerning their child's screenings and assessments and are provided with activities designed to enhance their child's development based on their child's assessment results.

Data collected by the Educare Learning Network supports policy development and initiatives at both the state and national levels. Educare's high-quality early childhood programming can be used as a place-based strategy to advance policy priorities. State advocates and Educare leaders work together to effectively communicate Educare outcome data to policy-makers and business leaders, in collaboration with the Ounce of Prevention Fund's national policy team and the First Five Years Fund.

The Educare Learning Network embraces the principle that data utilization is a critical component in advancing children's learning and developmental outcomes, and in partnering with families to achieve their goals. In recent years, the early childhood field and the systems that support and govern it have placed an increased emphasis on data collection and data use for purposes of program monitoring and improvement. Indeed, the proliferation of quality rating and improvement systems in states across the country, and the Head Start Act reauthorization in 2007, have pushed early childhood programs to embrace a new culture of data-driven decision-making.<sup>1</sup> In addition, nationwide trends such as the development of preschool-through-3rd-grade initiatives and statewide data systems heighten the need for better understanding of how to effectively facilitate data alignment and sharing.

But despite this growing expectation of data utilization, there is as yet only an emerging body of evidence on effective models of data utilization in early childhood education settings. While recent publications and research have highlighted unique programs in the field—including Educare’s data-utilization structures—there remains a gap in the literature on both effective models and the associated outcomes of data use.<sup>2</sup> It is not surprising that coupled with this still emerging evidence base, the majority of early education programs also lack the capacity, resources and ongoing support needed to effectively establish data-use processes.<sup>3</sup>

The Educare Learning Network can serve as one such model for the field of embedded, collaborative data utilization in support of continuous learning and improvement of practice. We propose to engage in and encourage others to join us in research that can help enhance data use in a variety of early education settings, contributing to the development and scaling of sustainable data-utilization practices in the early childhood field. The Network’s commitment to data-utilization research echoes the Head Start Research and Evaluation Advisory Committee’s increased emphasis on promoting research that examines using data to drive continuous improvement.<sup>4</sup>

**Recommended areas of research and evaluation for Educare and the field:**

- Variation in data-utilization processes and partnerships across settings, and how the variation relates to differences in classroom and child outcomes
- How leaders can develop and support the organizational culture and conditions needed to facilitate ongoing data utilization within early childhood programs
- How data is used to inform professional development, teaching and family-engagement practices and impact specific classroom, child and family outcomes
- The effectiveness of different assessments and measures in informing practice with children and families, including the development, testing and innovative use of new assessment tools in early childhood classrooms
- The knowledge and skills early childhood professionals need to become motivated, confident and competent in using data in their everyday practice in early care and education
- Data alignment and sharing between early education and K-12 programs and systems
- Promising practices in data sharing, such as utilizing new technologies and sharing data with families and, as appropriate, with community partners
- The use of data and research findings to influence policy and the utility of various types of data with policymaker audiences
- What systems, policies and funding, as well as governance and accountability structures, best support data-utilization practices

## AREA OF INQUIRY 2: EMBEDDED PROFESSIONAL DEVELOPMENT

### **Embedded Professional Development at Educare**

Embedded professional development at Educare happens every day and is ongoing, defined by what you are doing to enhance your work and grow as a practitioner. Embedded professional development opportunities are built into the program structure to occur routinely and are grounded in teachers' and family support staff's day-to-day practice. They are designed to enhance teachers' inquiry and learning about content-specific interactions and instructional practices for the intent of improving children's kindergarten readiness, and children and families' learning and development.

Educare's model of embedded professional development focuses on:

- **Intensive staff development** that is interactive, collaborative, experiential, focused on application to practice and skills-based
- **Interdisciplinary approach** that encourages communication and collaboration among all the professionals who touch the life of a child
- **High staff qualifications** supported by systems and collaborations that motivate staff to pursue degrees in early childhood education or social work
- **Reflective practice and supervision** that create an environment for continuous learning about one's professional self in relation to work with children, parents and colleagues

As the early childhood field strives to improve practice and classroom quality, sustainable and effective professional development will be a critical lever in ensuring the early childhood workforce has the support and capacity to improve outcomes for young children and families. Indeed, there is an increasing and important emphasis in early education policy on improving the quality of teaching and family-engagement practice through new state and federal standards, accountability structures and competency requirements. But to achieve this bold vision for improving quality, the field requires an equally robust focus on the supports and professional development (PD) provided to early childhood leaders and staff to meet and surpass these increased expectations.

Decades of research on adult learning articulates that effective PD must occur in multiple contexts that build knowledge, support the transfer of that knowledge to practice and support ongoing collaboration to examine and improve that practice.<sup>5</sup> Yet in spite of these findings, typical PD for early childhood practitioners is delivered through one-time workshops and trainings.<sup>6</sup> Indeed, studies of workforce quality and development indicate that early childhood teachers and leaders are far less likely than K-12 teachers to receive effectively designed and delivered PD.<sup>7</sup> At the same time, new research on teaching efficacy documents the critical role of staff well-being and organizational conditions (e.g., routines, supports) in scaffolding effective classroom practice and promoting student achievement.<sup>8</sup>



Yet there remains a dearth of research examining the relationships between adult learning and work environments, PD models, and teaching and child outcomes in early education settings.

This research agenda therefore underscores a commitment to measuring and monitoring the impacts of effective and sustainable embedded professional development models on improving teacher pedagogical knowledge and practice. Due to the fact that many Educare Schools provide PD opportunities for early childhood professionals in their surrounding communities and states, the Network has a strong interest in identifying the most effective contexts and delivery mechanisms to improve the quality of PD for thousands of early childhood educators nationwide. The committee recommends the pursuit of research that can be used to better understand and support practices that have the greatest positive impact on promoting leader and teacher effectiveness and child and family outcomes—and that can be used to advance early childhood professional development in a variety of settings. Analyses and research into embedded PD should be used to identify and build an evidence base for best practices and policy, and published findings will help guide the professional advancement of the broader early childhood workforce.

**Recommended areas of research and evaluation for Educare and the field:**

- The effectiveness of PD practices with staff in various roles—including leadership, teacher aides, lead teachers, family-support staff and master teachers—and with staff who have differing levels of preparation and experience
- Variations in the roles of master teachers, education coordinators and program leaders and in models of embedded coaching across schools, and how they relate to differences in practice and child outcomes
- How adult learning environments and organizational conditions and culture in early childhood schools influence teacher and family-support staff well-being, beliefs, practices and classroom quality
- Variations in the content and context of professional development opportunities (e.g., reflective supervision, coordinated PD with K-12) received by leaders and staff and their relationships to specific practices and outcomes
- How leaders can develop and support the organizational culture and conditions needed to facilitate embedded professional development
- Effective evaluation processes for continuous improvement of practices
- Differences in the content and delivery of teacher and staff education and training, and how those differences relate to practice and child and family outcomes
- The extent to which PD prepares educators to recognize when children are engaged in self-guided activities that offer windows of opportunity to scaffold children’s knowledge, skills and practices
- The effectiveness of PD practices at preparing and supporting new staff during the onboarding process
- What systems, policies and funding, as well as governance and accountability structures, best support embedded PD

### AREA OF INQUIRY 3: HIGH-QUALITY TEACHING PRACTICES

#### **Educare Demonstrates High-Quality Teaching Practices**

Educare teachers engage in high-quality teaching practices that focus on child-initiated instruction, analysis of age-appropriate assessment data, an individualized approach to lesson planning, intentional program and classroom practices, secure attachment and relationships between children and teachers, and a supportive classroom environment and materials.

These high-quality teaching practices are supported by:

- **Full-day, full-year services** such that Educare Schools are open 10–12 hours per day and 48–51 weeks per year to provide the greatest opportunity for educational experiences. Children are encouraged to attend Educare Schools a minimum of six hours per school day.
- **High staff-child ratios and small class sizes** of three adults to eight children for infants and toddlers and three adults to 17 children for preschool classrooms.
- **A continuity of care model** so that children stay with the same teaching team and cohort of children from birth to age 3 and from ages 3 to 5 to promote secure attachments and enhance social-emotional and cognitive development.
- **A research-based curriculum approach** that is focused on the development of skills as they relate specifically to language and literacy, social-emotional development, problem solving and early math, and motor development. Educare Schools use the arts to strengthen and support the development of these skills.

A large body of evidence demonstrates that effective early education teaching practices include emotionally supportive, organized and instructionally challenging interactions—and that such practices can contribute to reducing or preventing the achievement gap at kindergarten entry and promoting positive life outcomes.<sup>9</sup> In addition, the field has developed many high-quality, evidence-based curricula that are comprehensive, developmentally appropriate and thoughtfully and intentionally planned, and that promote positive child outcomes.<sup>10</sup> But despite the mounting evidence on the characteristics of effective practice, the field continues to struggle to dramatically improve classroom quality, replicate and export successful programs and practices, and, thus, improve child outcomes.<sup>11</sup>

Even with the strong evidence base on effective teaching practice, research gaps remain. For instance, research is needed to explore differences in the instructional practices most suited for the developmental stage of birth to age 3, as compared with the preschool years. The Advisory Committee on Head Start Research and Evaluation called for the field to explore quality teaching over the entire birth-to-five developmental continuum, prioritizing questions about sequencing—when particular interventions are most effective—and dosage—in what quantity.<sup>12</sup> Furthermore, in spite of decades of implementation science and school-improvement research that demonstrates the importance of organizational dynamics on teaching quality in the elementary school years,<sup>13</sup> the early childhood field has yet to fully capture the organizational factors—the routines, supports, structures, beliefs, etc.—that influence educators’ effectiveness in an early education setting.

Educare Schools represent a model for the field in implementing high-quality classroom practices and environments. Indeed, the Educare Implementation Study (see page 29) documents that Educare Schools have among the highest scores on measures of infant-toddler and preschool classroom quality in the country (as measured by the Infant/Toddler and Early Childhood Environment Rating Scales and the Classroom Assessment Scoring System<sup>14</sup>). The Network's research agenda, therefore, identifies high-quality teaching practices as an ongoing priority for our research and evaluation efforts. It is the committee's recommendation that research in this area be focused on generating findings that can be used to help early childhood educators identify and implement the highest-quality teaching practices that improve children's learning and outcomes. Such research may also explore the efficacy of teaching practices with particular subgroups for the purposes of identifying and improving practices that support their specific learning needs. Publications of results should be disseminated to share evidence-based best practices and lessons learned with the field and policymakers.

**Recommended areas of research and evaluation for Educare and the field:**

- Program dosage (e.g., attendance, number of hours attended per day, time of day, number of years in the program) and its impact on child and family outcomes
- Trajectories of students (including children who are dual-language learners, have special needs or have experienced trauma) and the relationships between various classroom approaches and child-level outcomes
- Evaluation and development of research-based early education curricula, especially for infants and toddlers, and aligned curricula for the entire birth-to-five continuum
- The effectiveness of innovative approaches for promoting or measuring early science, math, literacy and executive function skill development, social-emotional development and the development of other important skills and traits among various subgroups of children
- How staff characteristics and experiences, such as stress levels, depression and other factors, may impact the classroom environment, teaching practices, the child-teacher relationship and child outcomes, and how these staff characteristics interact with families' characteristics
- How organizational factors such as leadership, community partnerships and other program-level conditions influence classroom practice
- Documentation and measurement of variations in teacher qualifications, length of employment and quality instructional practices (e.g., continuity of care, transition supports) and their relationships to child and classroom outcomes
- Diversity within classrooms and its relationship to instructional approaches and classroom and child outcomes
- The strengths and weaknesses of community partnerships and linkages and their impact on high-quality instruction
- What systems, policies and funding, as well as governance and accountability structures, best support high-quality instruction

## AREA OF INQUIRY 4: INTENSIVE FAMILY ENGAGEMENT

### What Intensive Family Engagement Looks Like at Educare

Family engagement in Educare Schools is defined as partnering with families to build mutually respectful, goal-oriented relationships that support strong parent-child relationships, family well-being and ongoing learning and development for both parents and children. To achieve positive outcomes, the Educare model is based on the principle that practitioners can only address a child's needs within the context of the entire family. Educare Schools use the Head Start Parent, Family and Community Engagement Framework with a primary focus on three guiding principles: (1) promoting the parent-child relationship; (2) promoting the parents' critical role in the emotional and cognitive development of their children; and (3) promoting the parent as an effective advocate on behalf of their child's education.

Educare applies these principles to support intensive family engagement by:

- **Offering on-site family-support specialists** who have small caseloads, averaging 30 or fewer families. Staff members develop strong relationships with community organizations to facilitate referrals for services not available on-site, such as mental health services.
- **Starting early, with an emphasis on prenatal, infant and toddler services** that promote maternal and child health and well-being, enrolling infants as early as families require and offering doula services to build relationships with families and between parent and child as early as possible.

Extensive research documents how parent-child relationships and parent engagement in learning help lay the foundation for the lifelong social-emotional, academic and life success of young children. The critical importance of healthy, warm and responsive relationships between parents and children is well-established in the developmental psychology, health and neuroscience literature.<sup>15</sup> And research confirms that parent engagement is one of the most powerful predictors of a child's educational trajectory, influencing a child's school readiness, motivation to learn and long-term academic achievement, among many other long-term effects.<sup>16</sup>

The early childhood field has long understood this critical importance, with parents, programs and systems working together to support and advance children's development. Scores of interventions have been developed to support and increase parent engagement, and in recent years, the field has sharpened its focus, encouraging programs to adopt more "systematic, integrated and comprehensive" approaches.<sup>17</sup> Indeed, in 2011, the Administration for Children and Families Office of Head Start set forth a new Parent, Family, and Community Engagement Framework that outlines seven core family-engagement outcomes for programs to work toward. But there remains a gap in the research in several areas critical to achieving this vision.

In support of a larger effort to advance the field's understanding and implementation of effective models of family engagement, the Educare Learning Network's research agenda prioritizes new inquiry in this area. Educare families are diverse, and the Network's family-engagement efforts necessarily are driven by their profiles of characteristics, strengths and needs. But importantly, developing and implementing effective interventions requires a more nuanced understanding of parents' own development. The field has not yet clearly defined the stages of parents' own learning trajectory as nurturers and educators of their young children.

The Network also endorses the Advisory Committee on Head Start Research and Evaluation in its commitment to expanding the research base on effective family engagement and using data to continuously improve work with families, thus ensuring that program efforts are effective and responsive. This includes engaging families in the research itself: effectively fostering families' involvement in identifying research priorities, informing inquiry and using data. In order to achieve this, we must address the gap in the field in effective measurement of family-support services and their relationships to family engagement and outcomes. Researchers must also gather information from families and create opportunities for parent-driven innovation so that program improvements are guided by families' diverse strengths, needs and perspectives.

**Recommended areas of research and evaluation for Educare and the field:**

- Documentation of family-support services (e.g., prenatal services, home visiting, mental health consultation, variations in staff roles and responsibilities, transition supports for families as they move into elementary school systems) and their impacts on child and family outcomes
- Families' use of family-support services and how they are benefiting from them, and analysis of subgroups of families' use of those services and their characteristics
- The developmental trajectories of parents as nurturers and educators of young children prenatally through age 5 and into the K-12 years, and the relationships between parents' development and children's outcomes
- The development of measures that capture family engagement and various aspects of the caregiver-child relationship and examining the associations between these family characteristics and child outcomes
- Evaluations of innovative family interventions and parent-driven efforts
- Profiles of family strength and risk, including family mental health; their relationship to child outcomes; and early education programs' role in buffering against adverse experiences or outcomes, such as emotional and psychological trauma or poor health
- Retrospective studies of parents' own early experiences, both beneficial and adverse, and their later life trajectories
- The strengths and weaknesses of home-school connections
- The strengths and weaknesses of community partnerships and linkages and their impact on family engagement

- How leaders can develop and support the organizational culture and conditions needed to meaningfully engage families
- Documentation and measurement of variations in family-support staff qualifications and credentials, tenure of employment and family-engagement practices, and their relationships to key family outcomes of interest (e.g., the development of strong, trusting relationships between parents and staff)
- What systems, policies and funding, as well as governance and accountability structures, best support intensive family engagement



# V. Conclusion: Advancing the Research Agenda

Creative, collaborative approaches are needed to explore and address pressing questions about the most effective ways to support young children’s learning and development, sustain early gains and pave the way for later academic and life success. That’s why this research agenda prioritizes expanding partnerships with researchers from early childhood and allied fields and strengthening connections with K-12 leaders, families and other close partners to explore together the key areas of inquiry put forth in this agenda: data utilization, embedded professional development, high-quality teaching practices and intensive family engagement. By leveraging diverse, cross-disciplinary expertise, we hope to learn from new knowledge, technologies and approaches to create novel solutions that narrow the achievement gap. Cross-disciplinary partnerships—among researchers, families, practitioners, research-granting philanthropic organizations, schools, and other stakeholders—will create opportunities for lateral thinking about new research questions and innovative, data-informed practices.

## **We highlight the following partnership priorities for the Network and the field:**

- Research-practitioner partnerships. We call for strong partnerships between researchers and practitioners. Practitioner-generated research questions are richly informed by practice knowledge and textured understanding of the day-to-day aspects of Educare programs, the local communities in which they operate and the families they serve.<sup>18</sup> Thus, practitioner-generated research questions have clear applications for continuous improvement and innovation within early education programs.<sup>19</sup> Educare’s research-program partnership model is designed to ensure that all research activities that take place in Educare are collaborative, practice-informed and perceived as mutually beneficial to practitioners and researchers alike; we highlight Educare’s research program partnership as a model for the field of practitioner-guided inquiry.
- Research-family partnerships. Essential to our vision for the future of early education research are strong partnerships with early education programs’ participating families. At the heart of Educare’s family engagement philosophy is the core belief that parents are their children’s first and most important teacher, and experts on their unique learning style, strengths and needs. Parents and families have been invaluable partners in all of Educare’s research to date, and their perspectives guide inquiry, practice improvements and innovations. Research should reflect parents’ ideas about what research questions

are most important and have the potential to illuminate the conditions and practices that are fruitful to their children's success. In addition, research should be effectively communicated with families and they should be empowered to interpret and use data to improve learning opportunities in the home. In support of these principles, we are developing a research agenda brief particularly for parents that summarizes the key areas of inquiry and provides information about ways parents can learn about, support and influence research in their child's school.

- Partnerships to broadly implement and evaluate promising practices. We invite the field to join us in documenting and evaluating innovative practices in the four core areas of inquiry. For those practices that research suggests are most promising, we encourage the field to join us in broad implementation and evaluation. In this way, we can build the evidence base for effective approaches across diverse settings and disseminate and scale quality practices.
- Partnerships with K-12 researchers, policymakers and practitioners. We invite and encourage K-12 researchers and local and national policymakers, educators and administrators to partner with us in exploring the best ways to prepare young children for elementary and high school and sustain children's success in early learning over the long term. In light of trends toward greater preschool-through-3rd-grade alignment and data sharing, we foresee great potential to explore how to best support young children's learning and success as they transition through the entire school system, starting in early education.
- Partnerships with policy researchers. We call for policy researchers to help build understanding of the systems, structures and policies at the local, state and national levels that are most effective at promoting and sustaining quality practices and ensuring child and family success. Building the evidence base will help us make the case for high-quality early education and guide policymakers at all levels to implement effective policies to support our youngest citizens.

The key areas of research inquiry outlined in this agenda offer the opportunity for researchers, community organizations, schools and families to work together to build knowledge about effective practices with proven potential to impact the lives of young children and their families—particularly those living in low-income communities. The Educare Learning Network is committed to delving into these areas of inquiry in coming years, and we invite others to join us in exploring questions about how to provide the highest quality early learning and life experiences for each and every child, prenatally through age five.

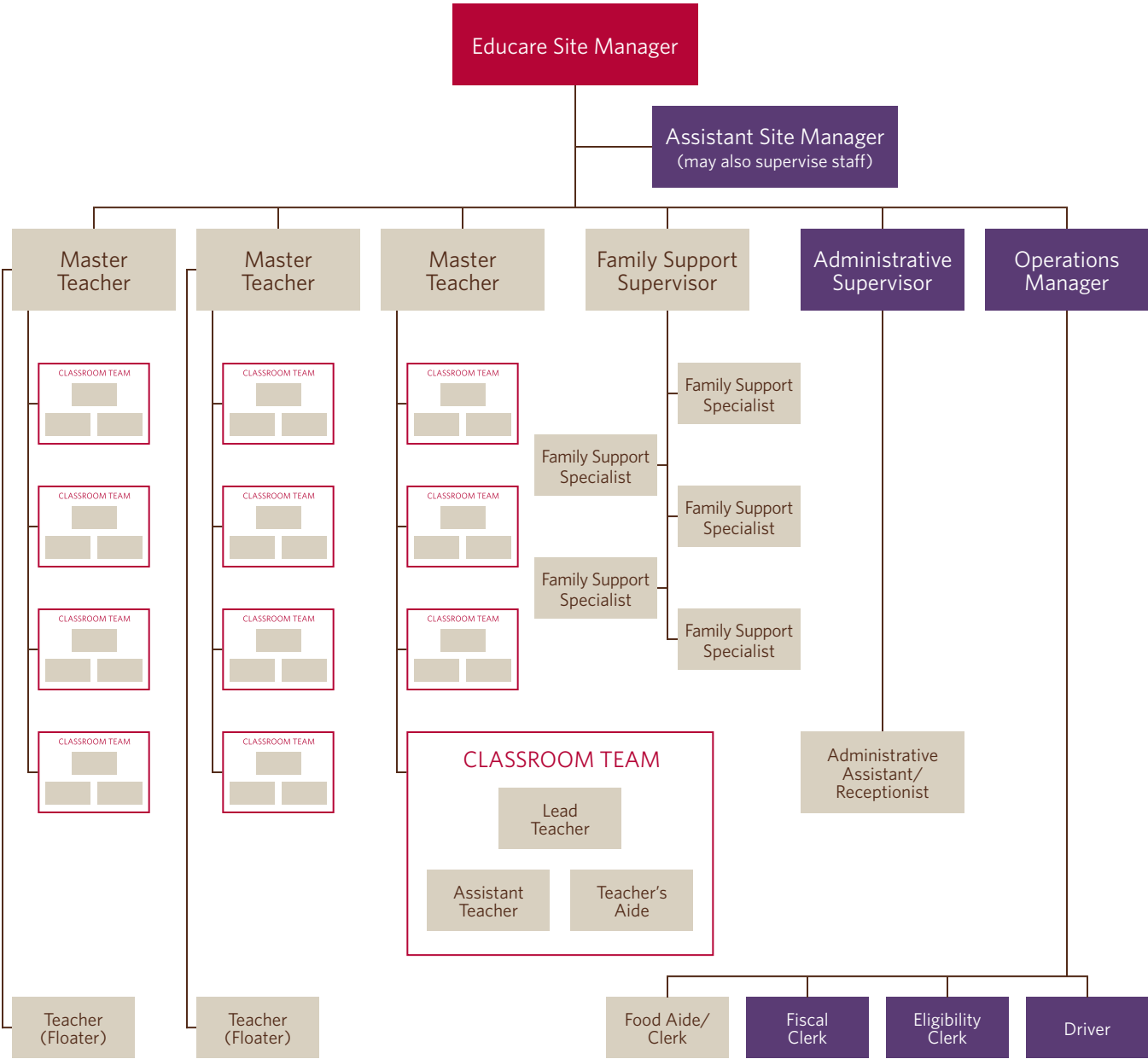


# Notes

- <sup>1</sup> Improving Head Start for School Readiness Act of 2007, Pub. L. No. 110-134, 121 Stat 1363.
- <sup>2</sup> Norris, D. J., & Horm, D. M. (2012). Introduction to the special issue on the use of data to inform early childhood practice and policy. *Early Education and Development, 24* (1), 1-3.
- <sup>3</sup> Yazejian, N., & Bryant, D. (2013). Embedded, collaborative, comprehensive: One model of data utilization. *Early Education and Development, 24*, 68-70.
- <sup>4</sup> Advisory Committee on Head Start Research and Evaluation (2012). *Advisory committee on Head Start research and evaluation: Final report*. Washington, DC; Administration for Children and Families.
- <sup>5</sup> Whitebook, M., & Ryan, S. (2011). *Degrees in context*. New Brunswick, NJ: National Institute of Early Education Research; Landry, S., Anthony, J., Swank, P., & Monseque-Bailey, P. (2009). Effectiveness of comprehensive professional development for teachers of at-risk preschoolers. *Journal of Educational Psychology, 101* (2), 448-465; Hord, S. (Ed.) (2004). *Learning together, leading together: Changing schools through professional learning communities*. New York, NY: Teachers College Press.
- <sup>6</sup> Hord, S. (Ed.) (2004). *Learning together, leading together: Changing schools through professional learning communities*. New York, NY: Teachers College Press; Landry, S., Anthony, J., Swank, P., & Monseque-Bailey, P. (2009). Effectiveness of comprehensive professional development for teachers of at-risk preschoolers. *Journal of Educational Psychology, 101* (2), 448-465.
- <sup>7</sup> Whitebook, M. & Ryan, S. (2011). *Degrees in context*. New Brunswick, NJ: National Institute of Early Education Research.
- <sup>8</sup> Bryk, A. S., Sebring, P. B., Allensworth, E., Luppescu, S., & Easton, J. Q. (2010). *Organizing schools for improvement: Lessons from Chicago*. Chicago, IL: University of Chicago Press; Whitebook, M. & Ryan, S. (2011). *Degrees in context*. New Brunswick, NJ: National Institute of Early Education Research.
- <sup>9</sup> Sabol, T. J., Hong, S. L. S., Pianta, R. C., & Burchinal, M. R. (2013). Can rating pre-K programs predict children's learning? *Science, 341* (6148), 845-846; Mashburn, A. J., Pianta, R. C., Hamre, B. K., Downer, J. T., Barbarin, O. A., Bryant, D. B., ... Howes, C. (2008). Measures of classroom quality in prekindergarten and children's development of academic, language, and social skills. *Child Development, 79* (3), 732-749; La Paro, K. M., Hamre, B. K., Locasale-Crouch, J., Pianta, R. C., Bryant, D., Early, D., ... Burchinal, M. (2009). Quality in kindergarten classrooms: Observational evidence for the need to increase children's learning opportunities in early education classrooms. *Early Education and Development, 20* (4), 657-692; Pianta, R. C., & Hamre, B. K. (2009). Conceptualization, measurement, and improvement of classroom processes: Standardized observation can leverage capacity. *Educational Researcher, 38* (2), 109-119; Dealy, K., Pacchiano, D., & Shimpi, P. (n.d.) The language of babies, toddlers, and preschoolers: Connecting research to practice. Chicago, IL: Ounce of Prevention Fund; Dealy, K. (2006). *Foundations: How states can plan & fund programs for babies & toddlers*. Chicago, IL: Ounce of Prevention Fund; Miller, S. R. (2008). *Secure attachment*. Chicago, IL: Ounce of Prevention Fund.
- <sup>10</sup> Advisory Committee on Head Start Research and Evaluation (2012). *Advisory committee on Head Start research and evaluation: Final report*. Washington, DC; Administration for Children and Families.

- <sup>11</sup> Aikens, N., Tarullo, L., Hulsey, L., Ross, C., West, J., Xue, Y. (2010). A year in Head Start: Children, families, and programs (HHSP23320052905YC). Washington, DC: U.S. Department of Health and Human Services, Administration for Children and Families, Office of Planning, Research and Evaluation;
- Burchinal, M., Vandergrift, N., Pianta, R. C., & Mashburn, A. (2010). Threshold analysis of association between child care quality and child outcomes for low-income children in pre-kindergarten programs. *Early Childhood Research Quarterly*, 25, 166-176;
- Early, D. M., Maxwell, K. L., Burchinal, S. A., Alva, S., Bender, R. H., Bryant, D., ... Zill, N. (2007). Teachers' education, classroom quality, and young children's academic skills: Results from seven studies of preschool programs. *Child Development*, 78, 558-580;
- Ross, C., Moiduddin, E., Meagher, C., & Carlson, B. (2008). The Chicago program evaluation project: A picture of early childhood programs, teachers, and preschool-age children in Chicago (MPR 6264-601). Retrieved from Mathematica Policy Research website: <http://www.mathematica-mpr.com/publications/PDFs/EarlyChildhood/chicagoearlychildhood08.pdf>
- <sup>12</sup> Advisory Committee on Head Start Research and Evaluation (2012). *Advisory committee on Head Start research and evaluation: Final report*. Washington, DC; Administration for Children and Families, 48-49.
- <sup>13</sup> Bryk, A. S., Sebring, P. B., Allensworth, E., Luppescu, S., & Easton, J. Q. (2010). *Organizing schools for improvement: Lessons from Chicago*. Chicago, IL: University of Chicago Press.
- <sup>14</sup> Pianta, R. C., La Paro, K. M., & Hamre, B. K. (2008). Classroom Assessment Scoring System (CLASS). Baltimore, MD: Paul H. Brookes;
- Harms, T., Clifford, R. M., & Cryer, D. (1998). *The Early Childhood Environment Rating Scale: Revised Edition*. New York, NY: Teachers College Press ;
- Harms, T., Cryer, D., & Clifford, R. M. (2006). *Infant/Toddler Environment Rating Scale: Revised Edition*. New York, NY: Teachers College Press.
- <sup>15</sup> National Research Council & Institute of Medicine (2000). *From neurons to neighborhoods: The science of early childhood development*. J. P. Shonkoff & D. A. Phillips (Eds.). Washington, D.C.: National Academy Press.
- <sup>16</sup> Fantuzzo, J., McWayne, C., Perry, M. A., & Childs, S. (2004). Multiple dimensions of family involvement and their relations to behavioral and learning competencies for urban, low-income children. *School Psychology Review*, 33 (4), 467-480;
- McWayne, C., Hampton, V., Fantuzzo, J., Cohen, H. L., & Sekino, Y. (2004). A multivariate examination of parent involvement and the social and academic competencies of urban kindergarten children. *Psychology in the Schools*, 41 (3), 363-377;
- Downer, J. T., & Mendez, J. L. (2005). African American father involvement and preschool children's school readiness. *Early Education and Development*, 16 (3), 317-340;
- Duch, H. (2005). Redefining parent involvement in Head Start: A two-generation approach. *Early Child Development and Care*, 175 (1), 23-35;
- Leibhaman, M. E., Alexander, J. M., Johnson, K. E., Neitzel, C. L., & Reis-Henrie, F. P. (2005). Parenting behaviors associated with the maintenance of preschoolers' interests: A prospective longitudinal study. *Applied Developmental Psychology*, 26 (4), 397-414;
- Ou, S. R. (2005). Pathways of long-term effects of an early intervention program on educational attainment: Findings from the Chicago longitudinal study. *Journal of Applied Developmental Psychology*, 26 (5), 578-611.
- <sup>17</sup> U.S. Department of Health and Human Services, Administration for Children and Families, Office of Head Start (2011). *The Head Start Parent, Family, and Community Engagement Framework: Promoting family engagement and school readiness, from prenatal to age 8*. Arlington, VA: Head Start Resource Center.
- <sup>18</sup> Ravitch, S. M. (2014). The transformative power of taking an inquiry stance on practice: Practitioner research as narrative and counter-narrative. *Perspectives on Urban Education*, 11 (1): 5-10.
- <sup>19</sup> Ravitch, S. M. (2014). The transformative power of taking an inquiry stance on practice: Practitioner research as narrative and counter-narrative. *Perspectives on Urban Education*, 11 (1): 5-10.

# Appendix A. Educare model organizational chart



**NOTES**

- This chart is based on a center with 150 children and 12 classrooms. For larger Educare Schools, additional staff positions will be necessary to maintain appropriate supervisory and classroom ratios.
- Purple staff boxes may not exist at all sites and are locally defined.
- An Educare School may also have a facilities manager, other Early Head Start and Head Start coordinators, and consultants.
- All Educare Schools also have a local evaluation partner.
- Master teachers supervise lead teachers.

# Appendix B. Educare Learning Network strategic plan visual

## EDUCARE LEARNING NETWORK VISION, STRATEGIC DIRECTIONS AND PRIORITIES

### Vision Statement

The Educare Learning Network will demonstrate that research-based early childhood education prevents the persistent achievement gap for our nation’s most at-risk young children. The Network’s evidence, practice expertise and dynamic partnerships will help ensure that all children and families, especially those at greatest risk, will have access to effective early learning and that the first five years will be an integral part of our country’s education system.

#### STRATEGIC DIRECTION 1

Model best program practices, generate strong evidence for high-quality early learning and communicate it to the broader field

#### PRIORITIES

1. Identify, support and share ongoing collective learning and innovation in Educare’s core components and practices
2. Expand and leverage the Network’s potential in research and evaluation

#### STRATEGIC DIRECTION 2

Expand access to high-quality early learning by extending best practices and promoting policy change and increased investments

#### PRIORITIES

3. Coordinate and leverage extending quality efforts at the national, state and local levels
4. Contribute to policy change at the national, state and local levels
5. Strategically and intentionally expand the Network and its partnerships

#### STRATEGIC DIRECTION 3

Build strong connections with K-12 education and influence broader education efforts

#### PRIORITIES

6. Partner to increase K-12 leaders’ engagement and investment in 0-8 education
7. Partner effectively with teachers and school leaders in K-12 at the local level to sustain children’s success in early learning over the long term

#### FOUNDATIONAL PRIORITIES

8. Engage and empower parents as a force for change in their families, schools and communities
9. Position the Network for greater impact through strategic communications
10. Address sustainability issues at individual schools and at the Network level

**NOTE:** Priority numbers do not indicate level of importance or rank

# Appendix C. Educare Learning Network research studies

The Educare Learning Network Research Framework articulated in section IV sets forth a new vision for how the Network can uniquely contribute to early childhood research and invites others in the field to join us in advancing the four critical areas of inquiry. The research framework articulated in this agenda builds on nearly a decade of research and evaluation that the Educare Learning Network has advanced to capture many program features and practices and rigorously examine outcomes of children and families in their time at Educare and as they progress into the elementary school years. Currently, three types of studies are under way that track the outcomes of children and families while at Educare, at their exit from Educare and into the elementary years:

- Educare Implementation Study
- Educare Randomized Control Trial
- Educare Follow-Up Studies: Chicago (ongoing), Omaha (ongoing) and Tulsa (completed)

The section that follows provides background on the objectives and structures of these studies.

## EDUCARE IMPLEMENTATION STUDY

Since 2005, researchers from the Frank Porter Graham Child Development Institute (FPG) at the University of North Carolina at Chapel Hill and local evaluators from each Educare School have been evaluating classroom quality and child and family outcomes through the Educare Implementation Study. Every Educare School in the Network participates in the Implementation Study as part of its ongoing program operations and improvement efforts. In the 2012–13 school year, the study included 15 Educare Schools—Arizona, Atlanta, Central Maine, Chicago, Denver, Kansas City, Miami-Dade, Milwaukee, Oklahoma City, Omaha at Kellom, Omaha at Indian Hill, Seattle, Tulsa at Kendall-Whittier, Tulsa at Hawthorne and Washington, DC. In the 2013–14 school year, the Implementation Study will include 19 Educare Schools, adding Lincoln, New Orleans, Tulsa at MacArthur and West DuPage; over 2,000 children and their families; and more than 600 teachers and staff.

### Key Objectives

The Educare Implementation Study was planned and designed as a high-quality, rigorous evaluation designed to meet three primary needs:

1. Provide program staff with information for continuous program improvement and families with information to help them better support their children’s learning
2. Provide information about how well the Educare Learning Network as a whole and

individual programs in particular are making progress toward the goal of implementing Educare’s core domains of practice

3. Describe and understand the progress children and families are making longitudinally while in Educare

### **Structure**

FPG acts as the national evaluation partner, leading and designing the study with significant collaboration from Ph.D.-level local evaluation partners (LEPs). Every Educare School engages an LEP, usually affiliated with a local university, to independently collect school-level data for the Implementation Study. The common cross-site battery of measures includes well-known child assessments of language and vocabulary, social-emotional development and school readiness; direct classroom observation tools; parent interview items; and a staff questionnaire. Much of the cross-site data collected through the Implementation Study will help facilitate analyses of the research topics advocated in this agenda; indeed, researchers throughout the Network are already engaged in analyses that fall within these four key areas of inquiry. The FPG team receives and processes data from each school, conducts cross-site and longitudinal analysis of data and ensures that high standards for training and reliability of data collection are maintained. A technical work group of experts advises the national evaluator in this work.

The Implementation Study measures the following domains:

- The core components of the Educare model
- Dosage, intensity, content and quality of child and family services
- Child and family status at baseline and progress over time

### **Implications**

The evaluation provides internal stakeholders—Educare Schools staff and Network leadership—with the information they need to do their best work. Indeed, the study generates the child, family and classroom data and information that local Educare Schools use to implement one of Educare’s four core domains of work: data utilization. Most of the data collected in the Implementation Study are useful for this purpose of continuous program improvement, and each school has designed a feedback loop to share relevant data with families and staff (e.g., teachers, family-support specialists, directors). For Network leadership, documentation of the extent of programs’ implementation of the Educare model allows for Network technical assistance to be tailored to help each school attain its quality goals. At the Network level, the Implementation Study helps answer the questions, “Are we doing what we said we would do?” and “Are we having the impact we expected to achieve?”

The evaluation provides external stakeholders, including policymakers, practice leaders, funders and others in the larger early childhood field, with information and data to help demonstrate the impact of high-quality early learning experiences for low-income children and families. The Educare Learning Network’s strategic plan emphasizes the need to expand

access to high-quality early learning, and the evidence generated by the Implementation Study is a critical lever in making the case for increased investments in early education programs.

In addition, the Implementation Study data provide a unique opportunity to study and disseminate research relevant to improving practice in the field writ large. The longitudinal dataset includes thousands of children using well-known measures, allowing comparisons to existing national data. And with FPG and LEPs collaborating with every Educare School, the Implementation Study benefits from the expertise and experience of a network of scholars across the country dedicated to studying Educare and supporting its continuous improvement. This network of researchers collaborates to analyze data and publish findings that will further the field's understanding of a range of early childhood issues, including family processes and parent engagement, associations related to timing and dosage, and outcomes for specific populations such as dual-language learners or children with special needs.

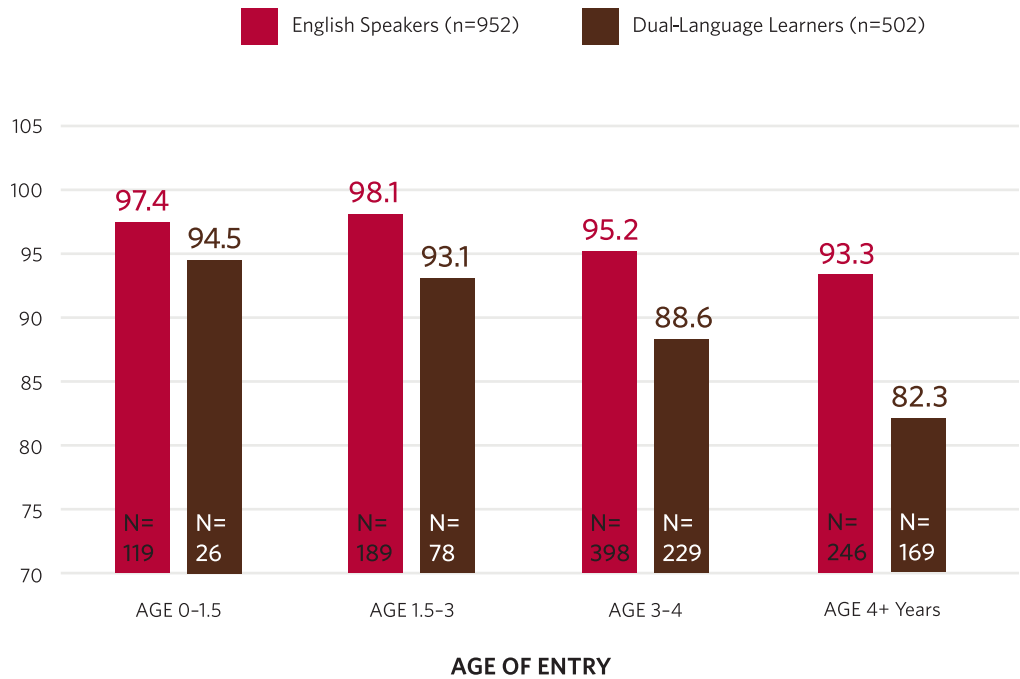
### **Results Summary**

The Implementation Study data document that Educare's theory of change is operating as predicted, with the majority of children entering kindergarten ready for school. Critically, these data also show that the ages at which children enter the Educare program is related to their later achievement scores—and the earlier the better. High-needs children, including children with limited English proficiency, who enroll in Educare as infants or toddlers enter kindergarten ready for school and score within their developmental range on assessments of both cognitive and social-emotional skills.

Educare children's school readiness and vocabulary scores are at or near the national average, considerably higher than is typical of children from low-income families. Correlational evidence shows that after adjusting for covariates such as gender, race, disability status, teen motherhood and maternal education, Educare children with more years of intervention have higher scores. Age of entry into Educare is a significant predictor of Peabody Picture Vocabulary Test receptive language scores for all children and is a significant predictor of Bracken School Readiness Assessment scores for dual-language learners. The language and school readiness scores of Educare children far exceed typical achievement levels for children living in low-income households. The Implementation Study findings are significant because the achievement gap between children living in low-income households and their higher-income peers—a gap that we know begins early and persists through life—is substantially narrowed at kindergarten entry for Educare children.

## THE EARLIER THE BETTER

Children who enter Educare before age 3 have higher vocabulary scores.



Language Scores (PPVT) of Kindergarten-Bound Children by Entry Age and Home Language, All Sites, 2007-12 Data. Educare Implementation Study Results from the 2011-12 School Year. Frank Porter Graham Child Development Institute, University of North Carolina at Chapel Hill

### Dissemination

Educare Learning Network program leaders, researchers on the FPG team, and LEPs have made dozens of Educare presentations using the cross-site data at professional meetings across the country, including the Society for Research in Child Development and American Educational Research Association national conferences, Zero-to-Three's National Training Institute and Head Start research conferences. Site directors and LEPs have presented their own schools' data at numerous local and state conferences. In addition, Network researchers using Implementation Study data have published articles in books and peer-reviewed academic or professional journals:

Guss, S. S., Horm, D. M., Lang, E., Krehbiel, S. M., Petty, J. A., Austin, K., ... Holloway, S. (2013). "Using Classroom Quality Assessments to Inform Teacher Decisions." *Young Children*, Vol. 68, No. 3, 16-22.

Guss, S. S., Norris, D. J., Horm, D. M., Monroe, L. A., and Wolfe, V. (2013). "Lessons Learned About Data Utilization From Classroom Observations." *Early Education and Development*, Vol. 24, No. 1, 4-18.



Norris, D. J., and Horm, D. M. (2012). "Introduction to the Special Issue on the Use of Data to Inform Early Childhood Practice and Policy." *Early Education and Development*, Vol. 24, No. 1, 1-3.

Yazejian, N., Bryant, D., and Kennel, P. (2013). "Implementation and Replication of the Educare Model of Early Childhood Education." In T. G. Halle, A. J. Metz, and I. Martinez-Beck (eds.), *Applying Implementation Science in Early Childhood Programs and Systems*. Baltimore, MD: Brookes.

Yazejian, N., Bryant, D., Freel, K., Burchinal, M., and the Educare Learning Network Investigative Team (submitted 2013): "High-Quality Early Education: Age of Entry or Time in Care Differences in Educare Student Outcomes." *Early Childhood Research Quarterly*.

### EDUCARE RANDOMIZED CONTROL TRIAL

The promising results of the Educare Implementation Study, noted above, motivated the Educare Learning Network and FPG to begin in 2010 a Randomized Control Trial (RCT) of infants and toddlers entering five Educare Schools. Educare Schools in Chicago, Milwaukee, Tulsa and the two in Omaha are participating in the RCT. These five schools are among the longest operating schools in the Network, are implementing the Educare model to fidelity, had wait lists for enrollment and therefore could randomize children to receive Educare services or not, and were therefore prepared to participate in this rigorous scientific study.

#### Key Objectives

The RCT allows researchers to examine the efficacy of Educare in promoting student achievement and school readiness. The experimental design allows comparison of Educare child outcomes to those of a control group of children within the same communities. The sample includes 239 children across the treatment and control groups. The first phase of the RCT is currently being conducted and uses random assignment of infants, toddlers and their families to treatment or control conditions and assessment of outcomes through age 3. The last child in the study will turn 3 in September 2015. The Educare Learning Network is seeking funding to continue the RCT through the preschool years to 1st grade. This second phase of the study will assess children's academic, language and social-emotional functioning and health status at ages 5 (near the end of preschool) and 7 (1st grade). The current phase of the Educare RCT addresses two main questions:

1. Compared to a group of children cared for at home or in other settings, do children in Educare score higher at age 3 on cognitive, language, executive function and social emotional measures?
2. Are Educare treatment effects larger for children from Spanish-speaking homes?

### Constructs Measured

The RCT utilizes a large battery of instruments, including direct child assessments and parent reports, parent-child interaction and examiner ratings. These constructs currently being measured are:

Child Outcomes	Child language, cognitive, school-readiness abilities; child social-emotional development
Family Partnerships and Parent Support for Learning	Sensitive and engaged parent-child interactions, parent learning support, school-family partnerships
Family Covariates	Demographics, risk and protective factors, beliefs

### EDUCARE FOLLOW-UP STUDIES

Educare’s oldest cohorts are preparing to enter 9th grade, carrying with them the potential to test our hypothesis, through follow-up studies, that children and families who attend Educare achieve greater success in their academic pursuits and in life than other comparable low-income children who do not attend Educare. There have been three locally driven Follow-Up Studies, with differing structures but a common goal: to follow the progress of Educare children and families as the children move into elementary school. These three Follow-Up Studies, summarized below, have been conducted at Educare Schools in Chicago, Educare Omaha and Educare Tulsa.

### EDUCARE CHICAGO FOLLOW-UP STUDY

Since 2005, researchers have been following Educare Chicago students into elementary school to gauge the progress these students make as they transition from a high-quality Educare School into the K-12 system. There are currently 276 children in this Follow-Up Study, spanning nine cohorts of children, with the oldest cohort transitioning to 8th grade in fall 2013.

The Follow-Up Study continues to be one of Educare Chicago’s most important and effective methods of gauging the progress that Educare children and families make as they transition into elementary and middle school. Data and information obtained from the Follow-Up Study also remain vital in strategic planning and continuous quality improvement efforts for both Educare Chicago and the broader Educare Learning Network.

### Results Summary

Longitudinal data from the Educare Chicago Follow-Up Study confirm that Educare children transition to kindergarten with the skills necessary for them to learn and thrive. Moreover, direct assessments of children at the end of 3rd grade reveal no fade-out, or diminishing, of their social-emotional or concept-development skills. The study also confirms that Educare effectively engages parents in supporting their children’s development, learning

and academic readiness, and provides parents with opportunities to further build their capacities in this area.

### **Dissemination**

Stein, A., Freel K., Hanson A. T., Pacchiano D. , and Eiland-Williford, B. (2013). "The Educare Chicago Research-Program Partnership and Follow-Up Study: Using Data on Program Graduates to Enhance Quality Improvement Efforts." *Early Education and Development*, Vol. 24, No. 1, 19-41.

### **EDUCARE OMAHA FOLLOW-UP STUDY**

Educare Omaha's Follow-Up Study is designed to evaluate the long-term impact of participation in the Educare program by analyzing how older cohorts of Educare alumni (3rd through 7th grades) who are attending Omaha Public Schools performed on state standardized reading, writing and mathematics assessments in the 2010-11, 2011-12 and 2012-13 school years. Data collection and analysis has already been completed for the 2010-11 school year, with a sample size of around 260 students. Educare Omaha is planning to collect and analyze the 2011-12 and 2012-13 data in 2014.

Dosage analyses will examine whether length of participation in Educare results in differences in student outcomes by comparing groups as follows: (1) students who attended Educare for one or fewer years, (2) students who attended Educare for one to two years and (3) students who attended Educare for two or more years. Overall outcomes for Educare students will be compared to Omaha Public Schools outcomes and the district's averages for low-income children eligible for the free and reduced-lunch program on the same assessments in the same year.

### **Results Summary**

The Educare Omaha Follow-Up Study found that children who attended Educare for two or more years had considerably higher average reading scores than those of the children in the district's free and reduced-lunch program, and that their scores far exceeded the state proficiency standard. Among children who attended Educare for one to two years, the average reading score approached proficiency. The average reading score of children who attended Educare for less than one year was below proficiency, demonstrating the potential benefits of increased Educare dosage. The study found a similar pattern between dosage and mathematics scores, though in that case children with two or more years of Educare were approaching, rather than exceeding, the state's proficiency standard. These findings helped Educare Omaha understand that it needed to focus more on supporting early math, and the school increased its efforts to improve students' math performance.

### **EDUCARE TULSA FOLLOW-UP STUDY**

Conducted over 2011-2012, the Educare Tulsa Follow-Up Study followed children who completed their preschool year at Educare Tulsa at Kendall-Whittier in the spring of 2010

(cohort 1) and 2011 (cohort 2) into their kindergarten year in Tulsa Public Schools. Researchers assessed them in the spring of their kindergarten year on measures of vocabulary, school readiness, letter and word identification, applied problems and social skills. The researchers also conducted teacher and parent surveys and collected special education and retention data. Parent exit surveys conducted in the spring of their child's kindergarten year were compared with exit surveys from their preschool year at Educare. The study examined several research questions:

1. At the end of their kindergarten year, what cognitive differences, if any, exist between English- and Spanish-speaking children who attended Educare Tulsa at Kendall-Whittier preschool?
2. What are the differences, according to kindergarten teachers, between English- and Spanish-speaking graduates of the Educare preschool in social-emotional skills, school readiness and classroom behavior?
3. How did the parents of English- and Spanish-speaking Educare children participate in their children's kindergarten experience? How did this participation compare with their expectations for involvement in their children's kindergarten year at the time they left Educare?
4. What are the differences in the activities they engage in with their children at home in the spring of their children's kindergarten year compared with their activities at the time they left Educare?
5. What differences, if any, exist between English- and Spanish-speaking parents on these measures?

### **Results Summary**

Analysis of the Educare Tulsa Follow-Up Study found that English-speaking children outperformed Spanish-speaking children at both the end of the Educare preschool year and at kindergarten follow-up on all measures except behavior problems and social skills, for which there were no significant differences between the groups. While the achievement gap persisted between the Spanish- and English-speakers, the Spanish-speaking children did make gains on the vocabulary measure that closed the gap slightly. On the measures of parent involvement, the study found a decrease in parent home activities between their children's Educare preschool and kindergarten years, and also a statistically significant decrease between the level of school involvement parents hoped for in preschool and their actual level of involvement in kindergarten. Finally, the study found statistically significant differences between English- and Spanish-speaking parents' patterns of involvement in home activities, with English-speaking parents reporting higher levels of engagement in teaching letters, words and numbers; doing arts and crafts activities; playing sports, games, or with toys together; and talking about school, television shows or videos. These findings are being used to guide the development of parent-engagement strategies to enhance the K-12 participation and home activity levels of both groups of parents.

# Appendix D. Lead local and national evaluation partners

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## **Arizona**

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## **Central Maine**

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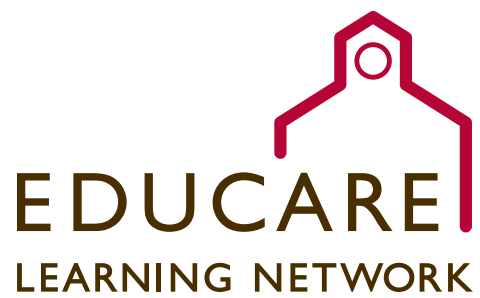
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