The Educare Chicago Research-Program Partnership and Follow-Up Study: Using Data on Program Graduates to Enhance Quality Improvement Efforts

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Early childhood education programs that have succeeded in raising the quality and outcomes of their programs have done so, oftentimes, by championing a culture of continuous improvement. This includes comprehensive formative evaluation and routines of data feedback and discussion that support teaching staff to use child growth and classroom quality data to inform daily instructional decisions and interactions with families. This article provides a case illustration of how leaders and staff at 1 high-quality early childhood education program (Educare Chicago) use data and feedback from graduate children and families to inform and drive continuous quality improvement through a Research-Program Partnership, which is a dynamic interchange between researchers, program leadership, and practitioners. Research Findings: This article focuses on the utilization of longitudinal Follow-Up Study data obtained from Educare Chicago children and families as they transitioned into the elementary school system to inform early childhood program quality enhancement efforts. Quantitative data on school type, school quality, and teacher ratings of children and parents are included. The utilization of findings from qualitative data obtained from parents and Educare program staff are also discussed. Practice or Policy: Follow-Up Study key findings and program responses are described, in addition to the role of the Research-Program Partnership in fostering both these exchanges and a deeper understanding of how to use data from program graduates and their families. Implications for program practices specific to children and families’ transition to kindergarten, early mathematics instruction, and family engagement are discussed.

In the fields of early learning and education, the demand for the utilization of research-based practices, data-driven decision making, and accountability is clear. These expectations not only permeate the dialogue and debates of policymakers, administrators, and even frontline practitioners but also pervade federal and state policies and the regulations and standards that provide guidance on carrying out such mandates. For example, the No Child Left Behind Act of 2001 (PL 107-110) and the Improving Head Start for School Readiness Act of 2007 (PL 110–134) both require the implementation of curricula, policies, practices, observational instruments,
and other strategies that have demonstrated effectiveness stemming from research. The Obama Administration has declaratively pronounced program evaluation as a priority across agencies to determine whether “programs are achieving their intended outcomes as well as possible and at the lowest possible cost” and to further “strengthen the design and operation of programs” (Orszag, 2009, para. 1). In general, there is a growing expectation that early childhood programs collect and report child-level results as a basis for individualizing services and documenting their program-wide impact and improvement processes, in addition to using such data at all levels to guide decision making (Snow & Van Hemel, 2008; U.S. Department of Education and U.S. Department of Health and Human Services, 2011).

WHAT COUNTS AS RESEARCH, EVIDENCE, OR DATA IN EARLY CHILDHOOD PROGRAMS?

The demand for data and evaluation is unprecedented, yet research indicates that education stakeholders disagree on how evidence or research should be defined, acquired, interpreted, and effectively utilized (Tseng, 2012). For example, in their review of 52 studies, Honig and Coburn (2008) examined the ways in which school district staff responded to federal and state policies mandating the use of research and data. They found that district personnel defined “evidence” as inclusive of social science research, student and school achievement data, program evaluation findings, practitioner knowledge, expert opinions, and parent and community input. Yet other researchers have found that education leaders and policymakers most readily associate “scientifically based research” with gold-standard randomized controlled trials (Nelson, Leffler, & Hansen, 2009). A joint position statement from the National Association for the Education of Young Children (NAEYC) and the National Association of Early Childhood Specialists in State Departments of Education (NAECS/SDE) indicated that this view is too narrow, stating that sources of usable evaluation data in early childhood should include child or family progress monitoring measures or assessments, administrator ratings, program self-assessments, implementation checklists, observational measures of practice, staff input, and constituent feedback (NAEYC and NAECS/SDE, 2003).

WHY USE RESEARCH, EVIDENCE, OR DATA IN EARLY CHILDHOOD PROGRAMS, AND HOW IS IT DONE?

According to Fuchs, Mock, Morgan, and Young (2003), data-based decision-making or problem-solving approaches in education are grounded in the principle that “no student characteristic (e.g., disability label, race, [socioeconomic status], neighborhood) dictates a priori what intervention will work. Nor will a given intervention be effective for all students of a particular group” (p. 160). A variety of models exist to guide early childhood educators and administrators in this effort to implement data-driven decision making at the individual child level (e.g., Coleman, Buysse, & Neitzel, 2006; Gresham, 2007) and at the program, district, and state levels (e.g., Rous, McCormick, Gooden, & Townley, 2007; Stedron, 2009). Even with these models, early childhood educators tend to rely on intuition and informal observations rather than the collection and systematic use of data to guide decision making (Sandall, Schwartz, & LaCroix, 2004).
Furthermore, research has shown that even when assessment data are available, early childhood professionals often lack the preparation necessary to effectively interpret and use it (Horton & Bowman, 2002; Scott-Little, Kagan, & Clifford, 2003; Stiggins, 1999). Yet optimal outcomes for children and families will not be realized unless early childhood leaders and staff have the capacity to understand and implement effective data utilization practices, including selecting the appropriate type and format of data, to inform routine decision making about classroom practice, work with families, professional development, and environmental and program supports (Fuligni, Howes, Lara-Cinisomo, & Karoly, 2009; Kagan, 2003; Kincaid, Childs, Blasé, & Wallace, 2007; Schwartz & Olswang, 1996).

It is therefore critical to define the conditions and processes that facilitate the collection, understanding, and use of formative assessment and evaluation data to make data-driven quality improvement a consistent component of early childhood practice. This article provides a description of how one program, a national model of high-quality early childhood education emphasizing research-based practice and functional program evaluation, used data and feedback from graduate children and families to inform and drive program change.

THE EDUCARE SCHOOL MODEL

In 2000, the Ounce of Prevention Fund opened the first Educare School on Chicago’s south side to prepare vulnerable children and their families for success in school and in life. Now a national network of 17 schools in diverse communities, Educare provides high-quality, full-day and full-year early childhood education for children from birth to 5 years old (for more information, see www.educareschools.org). The primary aim of each school is to prevent the achievement gap between children in poverty and their more advantaged peers that is evident long before kindergarten entry (Halle et al., 2009; Hart & Risley, 1995; National Center for Education Statistics, 2001). Educare leaders therefore have a strategic focus on children’s achievement and organize their systems, programmatic approaches, and professional development to support effective teaching and family engagement. Each Educare School meets Early Head Start and Head Start program performance standards and also implements a comprehensive set of evidence-based core components that intentionally support high-quality teaching and family engagement (see Table 1). Ongoing, independent evaluation of the nationwide network of Educare Schools demonstrates that children in poverty who participate in the program, including dual language learners, enter kindergarten ready for school, achieving near national norms on measures of vocabulary, social-emotional development, and school readiness and well above typical scores for children at risk of school failure (West, Malone, Hulsey, Aikens, & Tarullo, 2010; Yazejian & Bryant, 2012).

EDUCARE CHICAGO RESEARCH-PROGRAM PARTNERSHIP (RPP)

Most relevant to the current article is that each Educare School—as part of the core feature of using research-based practices and strategies (see Table 1)—establishes a local RPP. The original design of Educare’s RPP was informed by the local evaluation partnerships developed for the Early Head Start Impact Study (Love et al., 2005) and the principles of utilization-focused evaluation (Patton, 2008) and participatory evaluation (Ryan & DeStefano, 2000).
Although there is variation in the structure and processes of local RPPs, each RPP connects interdisciplinary program leadership and staff with a PhD-level Local Evaluation Partner, and they together implement a dynamic, reciprocal data feedback and utilization cycle. Each RPP supports routine, frequent examination of systems, practices, and attainment of goals for program monitoring and continuous quality improvement at the child, family, program, and agency levels (see Figure 1).

TABLE 1
Core Features of the Educare School Model

1. Provide full-day, full-year services.
2. Maintain high staff-to-child ratios and small class sizes.
3. Use research-based practices and strategies.
4. Provide continuity of care beginning at birth to help children develop secure relationships.
5. Provide onsite family engagement and support services to families.
6. Maintain high staff qualifications and embedded, intensive professional development.
7. Emphasize social-emotional development to promote positive approaches to learning and school readiness.
8. Provide an enhanced focus on early oral language and literacy.
9. Provide an enhanced focus on problem solving and numeracy.
10. Integrate the arts.
11. Start early, with an emphasis on prenatal services.
12. Implement an interdisciplinary approach.
13. Implement reflective supervision and practice throughout the program.

FIGURE 1 Educare Chicago Research-Program Partnership data feedback and utilization cycle.
RPP Membership and Roles

At Educare Chicago, the Local Evaluation Partner and the school’s Director of Program and Curricula colead the RPP, together championing the importance of data gathering and utilization for continuous improvement. Supervisors—including master teachers, curriculum specialists, and family support leaders—also participate in the Chicago RPP, playing a critical role in the dialogue and utilization of data to create and implement quality improvements across the Educare School. In particular, these program leaders supervise, coach, and support the classroom teaching teams and family support specialists who directly implement the program and educate children and families.

RPP Data Feedback and Utilization Process

As noted in Figure 1, the RPP implements Educare’s data feedback and utilization cycle, including monitoring data collection and assessment; discussing available data and identifying new analyses or questions; and addressing implications for intervention planning, goal setting, and staff and program development. Based on research noting the importance of providing data “with sufficient frequency and in contexts that will inspire educators to develop, utilize, and disseminate effective interventions” (Downs & Strand, 2006, p. 678), the RPP utilizes data from a variety of quantitative and qualitative sources (e.g., standardized measures to compare children’s skills to national norms, curriculum-based assessment, progress-monitoring tools, teacher/parent ratings, interviews, focus groups) to provide a fuller picture of program functioning and impact (Scott-Little et al., 2003).

The relationships forged and knowledge developed through the Educare Chicago RPP provide a unique opportunity to monitor the continued progress of children and families after they graduate from Educare. The following case example moves beyond the analysis of current program data and focuses on how data about child and family experiences and outcomes during the transition to kindergarten and through the third grade have led to change in Educare Chicago program practices and policies.

CASE EXAMPLE: EDUCARE CHICAGO ELEMENTARY SCHOOL FOLLOW-UP STUDY

A unique feature of the Educare Chicago RPP is the collection of data to track the progress of Educare children and families as they transition to kindergarten and advance through the primary grades. This ongoing Educare Chicago Elementary School Follow-Up Study is a case illustration of how researchers, practitioners, and school leaders can work collaboratively to use data for program quality improvements. In the current article, we highlight aspects of the design, implementation, and impact of the Educare Chicago Elementary School Follow-Up Study, emphasizing how this unique, ongoing study has enhanced the effectiveness of early learning experiences in Chicago’s Educare School.

The Educare Chicago Elementary School Follow-Up Study (henceforth, the Follow-Up Study) was conceived as, and continues to be, an exploratory, descriptive study aimed at examining the experiences and outcomes of children and families after they graduate from the
Educare Chicago program. An interest in following children into elementary school has long been shared by Educare leadership and executives, board members, and staff from the Ounce of Prevention Fund. In particular, these stakeholders were interested in whether the social-emotional and academic gains children made during their enrollment at Educare were sustained and grew through their primary school years.

With the research knowledge that gains made in early learning are more likely sustained when children experience higher quality primary school environments and instruction (Reynolds, 2003), members of the Educare Chicago RPP team (which includes us) were also eager to learn more about the kindergarten and primary grade expectations and environments that Educare graduates experienced and how well parents were supported in partnering with primary grade educators. Thus, the three main goals of this study were (a) to examine how effectively Educare Chicago prepared young children and their families from low-income backgrounds for school success, (b) to learn about the school environments and expectations of the primary grade teachers, and (c) to discover implications from these findings to inform program improvement decisions.

Based on these collaboratively developed aims, we designed the Follow-Up Study to explore the following issues and questions:

1. Given the vast range of both school options and quality in Chicago’s urban public school landscape, what schools did Educare parents explore for enrollment, and what elementary schools did children attend? Information on the number of schools, types of schools (e.g., neighborhood, charter, magnet, private), and quality of schools (i.e., the Illinois State Board of Education publishes an annual School Report Card with quality indicators, including annual yearly progress percentages) was known anecdotally, but there had been no systematic collection or analysis of this information prior to the formalization of the Follow-Up Study.

2. How did children and their parents experience the transition into kindergarten? Although the RPP team and Educare staff members knew that the kindergarten classroom was likely to be quite different from an Educare School early learning classroom, we did not know how well children would adjust or what difficulties children might have in their adjustment to the new environment. Similarly, we sought to understand how well parents adjusted to the elementary school environment and whether they would continue to initiate communication with their child’s educators—a practice emphasized at Educare. In addition, we knew that parents would have insights helpful to Educare’s program improvement efforts that would be based on their perceptions of their child’s transition to kindergarten and what the kindergarten teacher was communicating about their child’s readiness for school.

3. How prepared for kindergarten were Educare Chicago graduates academically, socio-emotionally, and behaviorally? Prior to the Follow-Up Study, contact with parents once their children transitioned to kindergarten was sporadic and infrequent. Even when parents still had younger children enrolled in the Educare program, conversations about the older child who had graduated Educare were informal and not recorded. Program staff therefore had no systematic information about the academic achievement, social-emotional competence, or behavior of Educare Chicago graduates in elementary school.
4. How prepared for kindergarten and elementary school were Educare Chicago parents? Did parents continue to be involved in supporting their child’s learning and development? Did parents continue to engage with their child’s elementary school and communicate with educators about the child’s progress? Even with some contact with parents of Educare Chicago graduates, it was difficult to gauge whether parents retained and put into practice the value of remaining engaged with supporting their child’s learning, staying involved in their child’s education, and actively communicating with educators and other school staff to support their child’s school success.

METHOD

To answer these questions and provide a rich description of the issues, we designed the Follow-Up Study using a combination of quantitative and qualitative data. Quantitative data included teacher surveys that asked for ratings of a child’s readiness at grade entry and exit as well as level of parent participation, grades, type of school attended, and standardized assessments. Qualitative data included parent interviews and focus groups. We did not build a comparison/control group into this exploratory study. The primary purpose of this study was not to contrast the elementary school progress and achievement of Educare graduates with that of children who had not attended Educare Chicago but rather to examine issues related to school readiness and the transition from early education to the K–12 school system, to follow the course of Educare children’s achievement, and to learn from parents about their perceptions and experiences of their child’s school readiness and continued efforts to support their child’s learning and development.

Participants

The study population consisted of children who attended and transitioned into kindergarten from Educare Chicago starting in the fall of 2005 and their parent(s). Each year thereafter, children and families were recruited for participation in the Follow-Up Study at the time of their transition to kindergarten and were then followed longitudinally with data collected on an annual basis. The first cohort of graduates that transitioned to kindergarten in the fall of 2005 included 45 children, 34 of whose parents consented to participate in the Follow-Up Study. Although cohorts of children and families continue to be added to the Follow-Up Study sample as they transition out of Educare Chicago, this article focuses on six cohorts of children whose parents consented to their participation and provided data \( n = 172 \). In Spring 2011, the sixth cohort of children finished their kindergarten year and the first cohort of children finished fifth grade in elementary school. The second column of Table 2 provides the initial cohort sample size, defined as the number of children whose parents consented to participate in the Follow-Up Study during their transition or last year in Educare Chicago. The third column lists the recruitment percentage, which was calculated by dividing the number of children whose parents consented by the total number of Educare children transitioning to kindergarten in that particular year. Throughout the study, the research team worked with Educare family support staff to obtain up-to-date contact information on participating families, which resulted in the relatively high retention rate of 74% or more as shown in the fourth column of Table 2. Contact with families
in the Follow-Up Study is annual (at a minimum), with the level of participation fluctuating within a cohort from year to year.

Educare Chicago is also an Early Head Start and Head Start program; therefore, all families eligible for enrollment were at or below the federal poverty level for each year of program participation. Educare Chicago is located in a primarily African American community, and all children in this Follow-Up Study sample were African American (with the exception of one child of Hispanic ethnicity) and spoke English as their primary language. Table 3 details the demographic information on the Follow-Up Study sample of children and families from Cohorts 1 through 6. We collected these data while children were enrolled in Educare. The data include only those children whose parents provided consent for participation in the study. We did not collect archival data on children whose parents did not consent to participate in the Follow-Up Study.

Design and Procedures

Table 4 presents the study design and data collection schedule. Additional details are provided here.

**Kindergarten through second grade.** During the kindergarten, first-, and second-grade years, we individually interviewed the parents once in the fall/winter. In addition, we asked children’s teachers to fill out a short survey about the child’s and family’s preparedness for the current grade; the child’s and family’s readiness for the following school year; the child’s general level of functioning in literacy, math, and social skills; as well as information about parent involvement. We collected information about grades, special education status (i.e., whether the child had an individualized education program), retention, and attendance from the school district and via school report cards.

**Third grade.** At the end of the child’s third-grade year, we asked parents to come to the study offices with their child. We typically scheduled between three and five parents and children to arrive at the same time. During this visit, research staff members administered the standardized assessments listed in Table 4, which had previously been administered with each
child soon before he or she left Educare for kindergarten. While the children were being individually assessed, other research staff members conducted a focus group with the parents and also asked parents to complete a rating of their child’s social-emotional competencies. We asked third-grade teachers to fill out the annual teacher survey and complete a rating of students’ social skills identical to the survey completed by parents. We then obtained school performance data, including scores on the state-required Illinois Standards Achievement Test. In the fourth, fifth, and subsequent grades (upcoming), we obtained school performance data only. Because of resource and budget limitations, we did not continue interviews with parents, direct child assessments, and teacher surveys and ratings beyond the third-grade year.

Measures

**Parent interviews and focus groups.** The parent interviews and focus groups used a semi-structured interview guide that focused on parents’ perceptions in a variety of areas, including their child’s transition and adjustment to kindergarten, experiences with their child’s elementary school and teachers, involvement in school activities, ways in which they supported their child’s education and learning, how well they thought their child was prepared for school, and what

<table>
<thead>
<tr>
<th>Cohort number (Kindergarten Year)</th>
<th>Maternal education level (%)</th>
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<tbody>
<tr>
<td>Child gender (% male)</td>
<td>Children on an IEP</td>
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<tr>
<td>----------------------------------</td>
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</tr>
<tr>
<td>Cohort 1 (2005–2006)</td>
<td>36</td>
</tr>
<tr>
<td>Cohort 2 (2006–2007)</td>
<td>42</td>
</tr>
<tr>
<td>Cohort 3 (2007–2008)</td>
<td>42</td>
</tr>
<tr>
<td>Cohort 6 (2010–2011)</td>
<td>31</td>
</tr>
</tbody>
</table>

*Note. IEP = individualized education program.*
thoughts they had about how Educare Chicago could better prepare its graduates and their families for elementary school and the transition into kindergarten. We conducted one-on-one parent interviews annually from kindergarten through second grade. We structured parent focus groups

<table>
<thead>
<tr>
<th>Measure</th>
<th>Construct</th>
<th>Source</th>
<th>Timing</th>
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</thead>
<tbody>
<tr>
<td>Devereux Student Strengths Assessment</td>
<td>Standardized assessments of student achievement</td>
<td>Parent and teacher</td>
<td>Spring of third grade&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Rating of student’s social-emotional competence and behavior</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peabody Picture Vocabulary Test–4</td>
<td>Receptive vocabulary and concept development</td>
<td>Reliable assessor</td>
<td>Spring of third grade&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Woodcock–Johnson III Tests of Achievement:</td>
<td>Early math skills development</td>
<td>Reliable assessor</td>
<td>Spring of third grade&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Applied Problems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illinois Standards Achievement Test</td>
<td>Illinois standardized test—math and reading beginning in the third grade and each year thereafter</td>
<td>School</td>
<td>Annually</td>
</tr>
<tr>
<td>Individual parent interview</td>
<td>Child’s preparedness for kindergarten, transition to kindergarten; parent’s focus on and engagement with child’s learning, parent–child relationship</td>
<td>Parent</td>
<td>Annually, kindergarten through second grade</td>
</tr>
<tr>
<td>FFocus group</td>
<td>Parent’s focus on and engagement with child’s learning, parent–child relationship</td>
<td>Parent</td>
<td>Spring/summer of third grade</td>
</tr>
<tr>
<td>Teacher survey</td>
<td>Child’s readiness for current and upcoming grade in school, special education identification, grade retention, parental involvement</td>
<td>Teacher</td>
<td>Annually, kindergarten through third grade</td>
</tr>
<tr>
<td>School performance data</td>
<td>Grades, IEP status, retention status, attendance</td>
<td>School</td>
<td>Annually</td>
</tr>
</tbody>
</table>

*Note. IEP = individualized education program.*

<sup>a</sup>In the fall and spring prior to kindergarten entry, Educare teachers completed the Devereux Early Childhood Assessment (a preschool companion measure to the Devereux Student Strengths Assessment).

<sup>b</sup>This measure was also completed in the fall and spring prior to kindergarten entry, before the child transitioned from Educare Chicago.
During the first year of interviews, parents expressed that they also wanted to tell us about significant events in their lives—some positive and some negative. Recognizing that these events had a bearing on parents’ abilities to focus on their children’s education and on child outcomes, we added questions to the interview protocol that invited parents to tell us about their lives, about specific events that might have occurred in the past year, and about whether these events affected their ability to support their children in school.

**Teacher survey.** We adapted the Teacher Survey from the Chicago Child-Parent Center Longitudinal Study (Reynolds, Bezruczko, & Hagemann, 1997) for use in the Educare Chicago Elementary School Follow-Up Study. The annual Teacher Survey was used to collect teacher ratings of children’s school readiness overall and in specific academic areas, for the current grade and the next grade.

**School administrative data.** We collected child grades, special education status, retention, attendance, and Illinois Standards Achievement Test scores at all grade levels directly from the child’s school/teacher or parent (e.g., usually from a report card) or via a data request to the primary school district serving Educare Chicago graduates, which was most often Chicago Public Schools.

**Direct child assessments.** Mirroring the assessments given in the spring prior to Educare students transitioning to Kindergarten, research staff directly assessed children at the end of third grade with the Peabody Picture Vocabulary Test–4 (Dunn & Dunn, 2007) and the Woodcock–Johnson III Tests of Achievement: Applied Problems (Woodcock, McGrew, & Mather, 2001). Parents and teachers completed the Devereux Student Strengths Assessment for children (LeBuffe, Shapiro, & Naglieri, 2009).

**RESULTS AND PROGRAM RESPONSE**

This section is organized by the four major research questions. For each research question, we present findings followed by a discussion of the resulting Educare program response or quality improvement effort. The Educare Chicago RPP team partnered with and supported school leadership and staff in generating these program responses through its data feedback and utilization process, which included summarizing, analyzing, and reviewing both current program data and Follow-Up Study data; discussing the implications and meaning of the data; generating a plan for modifications or program quality improvements; and monitoring and evaluating implementation. The cohorts with available data and the sample size for each type of data collected are reflected in the findings discussed here.

**What Elementary Schools Did Educare Children Attend?**

**Key findings.** Analysis of the first cohort of children in the Follow-Up Study highlighted several characteristics of the elementary schools that Educare Chicago graduates attended. Most notably, 45% of the 29 different schools that Educare children attended were on the State of
Illinois’s Academic Watch List, with 57% of Educare graduates attending these low-performing elementary schools. We were able to use several proxy variables to obtain data about the quality of schools attended by Educare Chicago graduates. Table 5 compares these Chicago Public Schools neighborhood schools to charter and magnet schools attended by the first five cohorts of Educare Chicago graduates and illustrates how charter and magnet schools surpassed neighborhood schools on every quality indicator. It is important to note that Table 5 also shows that the annual yearly progress for the neighborhood schools that Educare Chicago graduates attended was quite poor at just 4%. Reynolds, Ou, and Topitzes (2004) found that the most significant factor predicting later positive educational attainment and lower juvenile arrest was attendance at a high-quality elementary school following participation in preschool.

**Program response.** Educare program staff significantly bolstered their transition activities and efforts with parents before the second cohort of children transitioned into kindergarten in order to increase the number of children attending high-quality elementary schools. In ensuing years, the transition into kindergarten became a year-long process that included several connected events scheduled throughout the school year. These new transition activities were based on the quantitative Follow-Up Study findings described previously, as well as qualitative data from parent interviews and on-the-ground knowledge of parent experiences from Educare program staff. New transition activities included the following:

- contact with charter and magnet schools in the area, with a focus on those attended by previous Educare graduates, regarding specific directions on application and enrollment processes so that parents had multiple options to select appropriate, higher quality schools for their child to attend;
- several transition events with parents that explained the array of school types available to them, provided information on the schools parents were considering, helped parents

<table>
<thead>
<tr>
<th>School quality indicator</th>
<th>CPS neighborhood schools</th>
<th>CPS charter and magnet schools</th>
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<tbody>
<tr>
<td>Attendance (%)</td>
<td>93.2</td>
<td>95.1</td>
</tr>
<tr>
<td>Poverty &lt;sup&gt;a&lt;/sup&gt;(%)</td>
<td>96.6</td>
<td>77.3</td>
</tr>
<tr>
<td>Student mobility rate&lt;sup&gt;b&lt;/sup&gt;</td>
<td>30</td>
<td>13.9</td>
</tr>
<tr>
<td>Special education&lt;sup&gt;a&lt;/sup&gt;(%)</td>
<td>12.1</td>
<td>10.8</td>
</tr>
<tr>
<td>Meeting adequate yearly progress (%)</td>
<td>4% (1 out of 25 schools)</td>
<td>50% (7 out of 14 schools)</td>
</tr>
<tr>
<td>Meets ISAT in reading&lt;sup&gt;c&lt;/sup&gt;(%)</td>
<td>50.1</td>
<td>74</td>
</tr>
<tr>
<td>Meets ISAT in math&lt;sup&gt;c&lt;/sup&gt;(%)</td>
<td>67.8</td>
<td>85.5</td>
</tr>
</tbody>
</table>

*Note.* ISAT = Illinois Standards Achievement Test.

<sup>a</sup>The percentage of students living in poverty and the percentage of students receiving special education services are important because those students generally have greater educational and supportive needs that may require additional resources.

<sup>b</sup>The student mobility rate is based on the number of students who enroll in or leave a school during that particular school year. In schools with high mobility rates, all children may be affected because of continual readjustments of school staff to accommodate the influx of new students.

<sup>c</sup>The ISAT measures elementary school students’ performance against the Illinois Learning Standards using both multiple choice and open-ended items. Starting in third grade, students complete the Reading and Math ISAT annually.
identify high-quality elementary schools that best met their child’s and family’s needs, provided comparisons between schools based on indicators of quality data, and assisted parents with application and enrollment forms for their chosen school options; and

- an annual special event for parents whose children would be transitioning to kindergarten in the fall to have the opportunity to engage with kindergarten teachers, other elementary school leaders and staff, and already-transitioned families (specifically, families in the Follow-Up Study) to hear about kindergarten learning expectations, get tips on how parents can support their children during this transition, and hear ideas for sustaining learning at home.

Follow-Up Study data from subsequent cohorts indicated that a decreased number of parents enrolled their children in local Chicago Public Schools neighborhood schools and an increased number of families enrolled their children in higher quality schools such as magnet, charter, or gifted center schools. Table 6 shows the change in school choice and enrollment across the six cohorts.

How Did Educare Children and Their Parents Experience the Transition Into Kindergarten?

**Key findings.** Parents in the Follow-Up Study highlighted how their children transitioned from Educare with excitement for kindergarten, a positive attitude toward learning, and the ability to get along with classmates. They also reported that Educare Chicago was instrumental in ensuring that their child was prepared for kindergarten socioemotionally, behaviorally, and academically. However, the interviews also uncovered many of the challenges families and children face in adjusting to a new school environment. Once the kindergarten year was in full swing, parents and children experienced a stressful and long-term adjustment period stemming from the contrasts between the kindergarten academic environment and the Educare child- and family-centered environment. Specifically, parents reported that the kindergarten classroom

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<tbody>
<tr>
<td>CPS neighborhood school</td>
<td>21 (66%)</td>
<td>14 (54%)</td>
<td>16 (47%)</td>
<td>18 (56%)</td>
<td>11 (39%)</td>
<td>10 (38%)</td>
<td>90 (51%)</td>
</tr>
<tr>
<td>CPS charter, contract school</td>
<td>3 (9%)</td>
<td>7 (27%)</td>
<td>11 (33%)</td>
<td>8 (25%)</td>
<td>9 (32%)</td>
<td>15 (58%)</td>
<td>53 (30%)</td>
</tr>
<tr>
<td>CPS magnet, gifted, classical school</td>
<td>5 (16%)</td>
<td>5 (19%)</td>
<td>5 (17%)</td>
<td>6 (19%)</td>
<td>6 (21%)</td>
<td>1 (4%)</td>
<td>28 (16%)</td>
</tr>
<tr>
<td>Private, religious, non-CPS school</td>
<td>3 (9%)</td>
<td>0 (0%)</td>
<td>1 (3%)</td>
<td>0 (0%)</td>
<td>2 (7%)</td>
<td>0 (0%)</td>
<td>5 (3%)</td>
</tr>
</tbody>
</table>

*Note. CPS = Chicago Public Schools.*
routine required substantial self-direction and that teachers had extremely high expectations for independent learning and sustained focus.

**Program response.** The alignment of preschool to kindergarten and through third grade has enjoyed a recent focus in research and policy (Bogard & Takanishi, 2005; Reynolds, 2003; Reynolds & Temple, 2008). Such alignment has the potential to mitigate the wrenching transitions parents described (Reynolds, Magnuson, & Ou, 2010) and has been associated with better student outcomes (Marietta, 2010). Alignment efforts in which the early childhood programs and elementary schools are not co-located, such as in the Child-Parent Centers (Reynolds, 2003), requires dedicated time between willing and committed partners (e.g., see “A Cohesive Educational Experience and Other Challenging Issues,” regarding efforts between Educare Chicago and two charter elementary schools). Such an alignment with the many Chicago public elementary schools attended by Educare graduates was unfeasible; thus, the program response focused on preparing parents for the transition and incorporating age-appropriate methods in the classroom that would better prepare children for the elementary school environment. Educare Chicago staff used the key findings from the Follow-Up Study to create more focused and useful transition materials, workshops, activities, and experiences for children and parents. New transition strategies in the year prior to kindergarten included the following:

- explaining to parents the differences between kindergarten’s more academically centered environment and Educare’s more child-centered environment;
- describing to parents the demands and stressors these differences will place on their child (e.g., increased levels of self-direction, independence, and sustained attention);
- highlighting specific ways in which parents can interact with and support their child both directly and through partnership and regular communication with the child’s teacher and other school staff;
- enhancing Educare classroom instruction and activities to better promote children’s abilities to sustain attention, focus on detail, and gain exposure to and practice with the types of expectations of their future kindergarten classroom (e.g., independent learning and work); and
- offering exposure to and practice with the similarities and differences between the child’s current classroom and future kindergarten classroom.

Through this process of examining data to develop processes that facilitate children’s and families’ transitions to kindergarten, Educare leadership identified the need to seek out opportunities to engage in dialogue and learn from leaders and staff at nearby elementary schools to better understand the school’s educational programming and family engagement practices, thus continuing to build the knowledge necessary to design the most helpful transition supports. Such transition supports offered as a result of data from the Follow-Up Study have been shown to build long-term patterns of parent involvement (Kraft-Sayre & Pianta, 2000) and have been associated with higher academic achievement at the end of the kindergarten year (Schulting, Malone, & Dodge, 2005). The RPP team and Educare staff continue to consider strategies to incorporate this important and substantive feedback in age-appropriate and family friendly ways at Educare.
How Prepared for Kindergarten Were Educare Graduates Both Academically and Behaviorally?

**Key findings.** Data from the first two cohorts’ kindergarten grades indicated that math proficiency was not as high as literacy proficiency (see Table 7). Although kindergarten teachers rated Educare Cohorts 1 and 2 as prepared “overall” on the teacher survey, the proficiency scores (generated from grades on report cards) told a slightly different story. Table 7 reflects the literacy and math proficiency levels in kindergarten for Cohorts 1 and 2. Parent interviews reinforced this early finding, in that parents reported that children struggled more with math in kindergarten than with other subjects.

**Program response.** A meta-analytic study by Duncan et al. (2007) showed that early math skills had the greatest predictive power for later academic success, followed by reading and then attention skills. Furthermore, a report for the National Research Council (Cross, Woods, & Schweingruber, 2009) on early math concluded that although all young children have the capability to become competent in mathematics, that potential was not realized because opportunities to learn mathematics were lacking in early childhood settings, homes, and communities. It was clear that a program response to math learning was needed, equal to efforts being made to boost and strengthen literacy instruction and outcomes. Furthermore, the Follow-Up Study demonstrated that the math proficiency levels in kindergarten for the first two cohorts reinforced what the Educare classroom teachers and leadership staff were discovering from their classroom curriculum-based assessment data: the need to launch a new initiative to increase math achievement. The resulting multiyear Early Math Initiative focused on achieving this through family engagement and professional development. The family engagement component included (a) helping parents understand the importance of early math, (b) working with parents to incorporate math learning into their home activities to enhance classroom math learning, and (c) providing parents with guided take-home math activities.

The Early Math Initiative’s professional development component included a partnership with the Erikson Institute, a leading graduate school in early childhood education, to implement a set

<table>
<thead>
<tr>
<th>Subject area</th>
<th>Grades indicating meeting or exceeding proficiency (%)</th>
<th>Grades indicating approaching or below proficiency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literacy</td>
<td>54</td>
<td>46</td>
</tr>
<tr>
<td>Math</td>
<td>27</td>
<td>73</td>
</tr>
<tr>
<td>Cohort 2 (N = 18)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Literacy</td>
<td>67</td>
<td>33</td>
</tr>
<tr>
<td>Math</td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>

*Note. As there are different grading methods at different elementary schools, Follow-Up Study research staff developed a coding system for grades that resulted in the categories of exceeding, meeting, approaching, and below proficiency.*
of activities focused on strengthening the mathematical pedagogical content knowledge and math instruction skills of Educare teaching staff. Activities included the following:

- engaging in an intensive, year-long training of preschool teachers and family support staff on core math concepts;
- using core math concepts in lesson planning;
- monitoring children’s progress in mathematical knowledge and skills;
- providing coaching support for teachers on the use of new math content knowledge, instructional skills, and the use of children’s progress data to plan and execute high-quality math lessons across teaching formats (e.g., individual, small group, large group); and
- collecting and analyzing the current research literature to conceptually extend core math concepts for children younger than 3, including pilot teaching and coaching of birth-to-3 math core concepts in infant and toddler classrooms.

The Early Math Initiative continues with intensive staff training, coaching of preschool teachers, and the development of the birth-to-3 core math concepts as well as math materials and activities for families.

How Prepared for Kindergarten and Elementary School Were Parents? And, Did Parents Continue to Be Involved with Their Child's Elementary School and with Communicating with Educators about Their Child's Progress?

Key findings. A substantial majority of Educare parents were consistently rated—across time and grade levels—as supportive of their child’s learning and involved in their child’s learning at school, as documented by teacher survey ratings of parent involvement. Teacher ratings indicated that the majority of Educare parents participated in activities at the school, returned forms and communications, picked up their child’s report card, and initiated a visit to the school and conversation with the teacher. What is interesting is that qualitative findings from the parent interviews and focus groups indicated that, in general, parents experienced fewer opportunities to be involved or engaged at their child’s elementary schools as they experienced at Educare. Furthermore, there was often a stark contrast between the close, open relationships they had had with Educare Chicago staff (both teaching and family support staff) and the interactions and communication they experienced with staff at their child’s current school.

Another key finding was that the majority of Educare parents described positive parenting attitudes, practices, and beliefs. The parents reported a willingness to communicate with teachers about their child and described specific ways in which they tried to support their child’s learning in the home. The interview and focus group data indicated that the majority of parents continued to reflect on their parenting style and how it affected their child in elementary school. For example, parents reported concerns for their child’s social-emotional development given the stressors in their families, schools, and communities and provided examples of how they tried to buffer their child from those stressors to protect the child’s development. Parents described how they valued education as a “way to a better future” for their child, tried to support their child’s learning by being available to assist with homework, and recognized the positive impact
on their child of communicating with their child’s teacher. Parents credited learning these values and strategies for supporting their child—and, in particular, how to effectively communicate with educators and school personnel—to their experiences with Educare staff. A large body of evidence now exists that demonstrates the role of strong home–school connections and parent responsibility for children’s learning in promoting positive outcomes for children (Harvard Family Research Project, 2006; Rodriguez & Tamis-LeMonda, 2011), which gives even greater value to the Follow-Up Study findings and Educare staff efforts with families (described below).

The parent interviews and focus groups also identified common and persistent stressors that families experienced. Financial and relationship stresses (including loss of extended family or coparenting support through death or incarceration) were pivotal in that, if relieved, parents reported a strengthened focus on parenting and supporting their child in school. Isolated parents who experienced these stressors were less likely to navigate them successfully, less able to be supportive of their child or advocate for their child when needed, and less likely to attend to their parenting behavior. These findings provided evidence of the importance of connecting parents to one another in hopes of forming long-lasting bonds and social networks (Small, 2009). Furthermore, Reynolds et al. (2010) noted that many children are entering schools at higher risk than students entering 10 years ago and recommended a decade, starting at birth, of continuous services, including a strong parent support component in order to provide the optimal level of support for children’s learning and development. They further pointed out that intervention at any stage of development (infancy, preschool, school age) alone cannot prevent children from future underachievement.

Qualitative findings from the Follow-Up Study indicated that parents of children with special needs often experienced time delays and other barriers that prevented their children from continuing to receive the needed special education services in elementary school. When these children were attending Educare, Educare staff assisted parents through the process of qualifying for and accessing special education services and supports as well as establishing an individualized and appropriate education plan. After their children’s graduation from Educare, many parents with children with identified special needs felt that they continued to need additional support and advocacy to get needed services, a trend confirmed in the research literature (Healy, Keessee, & Smith, 1985; Kayama, 2010).

**Program response.** Educare Chicago staff and the RPP team recognized that these Follow-Up Study findings gave further credence to the family-centered approach and onsite family engagement and support opportunities offered by Educare. Therefore, program activities centered on continuing to bolster partnerships with families, supports to help families be better able to navigate multiple life stressors, and opportunities for continued learning. Specifically, these included the following:

- increased family engagement efforts, including more opportunities for parents to learn about specific strategies to support and develop the knowledge and skills necessary for their child to be school ready;
- training in the Brazelton Center’s Touchpoints approach to parent–professional interactions, which orients program staff to view parents as equal partners with knowledge and skills to be shared with the program (Sparrow, 2011);
- a plan for Educare’s Disabilities Coordinator to become more involved in planning transition activities, in searching for schools that have adequate special education resources,
and in finding advocacy and parent support networks and organizations that can assist parents in elementary school and beyond; and

- the provision of learning opportunities for current and graduate Educare parents to learn about the six protective factors that can help build stronger families (Horton, 2003).

With a growing literature base and a clearer understanding of the “how” of family engagement and its associated outcomes (Barnard, 2004; Fantuzzo, McWayne, & Perry, 2004; Harvard Family Research Project, 2006), an exploration and planning process across the Ounce of Prevention Fund is under way to develop and implement a comprehensive new framework focused on family, school, and community engagement. The Ounce and Educare Chicago leadership are also exploring innovative strategies for parents to connect with and learn from one another—to form social networks that provide parents with a broader set of resources and social capital (Small, 2009). The finding related to continued, persistent stressors and isolation for families is a challenging and complex issue with few easy solutions. Continued analysis of this pattern with further cohorts and larger sample sizes may help isolate other factors that could help identify families who need more targeted strategies and interventions while at Educare.

**DISCUSSION**

**A Cohesive Educational Experience and Other Challenging Issues**

An overarching lesson learned from the cumulative experiences of Educare families as they transitioned to kindergarten and beyond was the importance of providing students with the highest levels of need with a cohesive educational experience, beginning at birth and continuing into elementary school and beyond, mirroring the efforts of preschool to elementary school alignment (Bogard & Takanishi, 2005; Marietta, 2010; Reynolds, 2003; Reynolds & Temple, 2008). To help address this need, the Ounce of Prevention Fund and its directly operated Educare Chicago School, including members of the Educare Chicago RPP team, formed a new partnership with the University of Chicago’s Urban Education Institute (UEI), which operates two nearby University of Chicago Charter Schools (UCCS) to align standards, curriculum, pedagogy, assessments, and family engagement practices from birth to college, with an initial focus on the first 8 years of life.

In 2010, the Ounce of Prevention Fund, Educare Chicago, UEI, and UCCS staff began this important new work through a series of professionally facilitated meetings and site visits to build mutual understanding of shared vision and goals and the trust among staff to pursue them. UCCS and Educare Chicago also successfully arranged to coordinate admissions policies and procedures in a way that allowed kindergarten-bound Educare students to transition directly into one of UCCS’s two elementary charter schools if the parent chose either of these schools for their child’s elementary education. Almost 90% of Educare families with age-eligible children chose to participate in this coordinated admissions process and have the option of enrolling in one of the two UCCS schools in Fall 2014. The Follow-Up Study indicated that prior to the development of coordinated admissions processes, 37 Educare graduates had enrolled at UCCS via the charter school lottery system. This partnership will also allow school staff involved in this birth-to-college partnership to intentionally focus on aligning supports and services for...
children with special needs or children who have been identified as potentially benefitting from special education services in the primary grades.

Although this will be a multiyear, intensive collaboration, the combined vision is to build a seamless demonstration model of public education for children and their families that begins at birth and creates success in school, college, and life. The overarching goal is to align and create instructional approaches and academic and social supports to accelerate student learning while honoring and building upon the strengths of the families served. As this model continues to be developed, we will analyze Follow-Up Study data for the subgroup of children who transition from Educare to the two UCCS schools to provide data and insights on the impact of this birth-to-college model.

Despite this promising new model, Educare Chicago staff recognize that there are too many low-performing schools in local neighborhoods and that some graduates will continue to transition into schools that will not adequately support the academic, social, and behavioral gains children have made at Educare. The partnership with University of Chicago’s UEI and UCCS programs offers just one solution to this stark reality but will not reach all of Educare’s kindergarten-bound children and families. It is important to note that a primary objective of the birth-to-college partnership is to document and disseminate both written and video-based products that clearly describe components of this work, delineate lessons learned, and articulate implications for best practice and systems and policy change with the ultimate goal of advancing the replication of this model. Nonetheless, Educare program staff recognize the necessity of locating additional elementary schools interested in working to create deeper transition alignments that will support the successful growth and development of children and their families from birth through elementary school and beyond.

Educare program staff also realize that a part of the difficulty with transitioning from an early childhood program to an elementary school setting stems from entering classrooms that have more children per teacher and subsequently less individualized teacher guidance and interaction than in Educare classrooms. Dedication to maintaining a high-quality birth-to-5 program and school cannot necessarily mitigate these two factors. In addition, early education pedagogy informs them that children learn best in environments that offer choices; incorporate a variety of learning opportunities; and provide individual, small-group, and large-group experiences throughout the day (Copple & Bredekamp, 2009). Leadership and teaching staff struggle with how to keep that learning environment intact and still prepare children for the demands of sitting longer and attending independently to classroom assignments and activities in kindergarten.

Alumni Parents as a Resource

The sample of graduate parents, or alumni, as they are increasingly called, has become an unintended resource and opportunity for Educare Chicago and the Ounce of Prevention Fund. Through the study, this sample of families has remained connected to Educare long past their child’s tenure in the school. Most parents credited Educare with helping their child and themselves be better prepared for elementary school and weathering the challenges they encountered. The parents also retained many fond memories of the staff, events, and other parents while their child or children attended Educare. During the interviews and focus groups, many parents voiced a desire to give back, to volunteer in ways that could help current parents and children, from
helping to orient new parents to Educare to supporting transitioning parents. Continued contact with the parents through the interviews, focus groups, and the annual parent event also reinforced the Educare message of staying connected to their child’s school and teacher and staying informed about how the child is experiencing school and achieving in school. Providing support in elementary school that builds on the foundation established during the birth-to-5 years at Educare can be effective in supporting student gains among low-income children (Layzer, Goodson, Bernstein, & Price, 2001). Plans to incorporate alumni parents into activities at Educare with current parents and to capitalize on their desire to offer their expertise and experience to other parents are still in development. Whatever activities result, they will be another example of quality improvements to Educare Chicago as result of data from the Follow-Up Study.

CONCLUSION

The requirement for data-based decision making in education and, more recently, in early childhood education, is ubiquitous (Orszag, 2009; Snow & Van Hemel, 2008). The RPP model practiced at Educare Chicago was described, and the Educare Chicago Elementary School Follow-Up Study illustrated how the partnership worked to improve program practices by using data collected on the elementary school experiences and progress of children who had graduated from Educare. Exploratory and largely descriptive, the Follow-Up Study benefitted Educare Chicago in many ways and informed specific areas of program improvement, including activities to support parents’ knowledge about school quality and the application process to apply for enrollment in higher quality options; classroom activities and explorations for children in the months prior to their transition to kindergarten; an early math professional development initiative for teachers of infants, toddlers, and preschoolers; and an understanding of the need to better support children’s approaches to learning and how to partner more effectively with parents during critical transition points. The Educare program leadership views the Follow-Up Study as a constructive catalyst for new thinking and practices.

The Follow-Up Study data also revealed areas that continue to challenge Educare’s program improvement. Identification of services and specialized supports for families with limited resources to navigate complex life stressors, continued advocacy support for special needs children, and the provision of a cohesive educational experience into elementary school and beyond for all Educare graduates continue to be challenges with no simple solutions. However, the RPP serves as a venue in which these issues can be discussed and clarified. Resultant strategies and interventions can then be attempted and analyzed for results that will lead to further refinements or other solutions.

Findings from the Educare Chicago Elementary School Follow-Up Study and the associated program responses generated through a collaborative, data-driven RPP offer a useful model for early childhood education practitioners, programs, and policymakers for effectively evaluating and utilizing data on students and families who have entered elementary school. This can serve as a model for how to use both K–3 student program data and parent qualitative data to inform practices in the early years.

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REFERENCES


