

# *Early Ed Essentials*: Testing New Surveys to Inform Program Improvement

High-quality, well-implemented early childhood education (ECE) positively affects the learning trajectories of children who start school with lower skills than their peers, according to decades of evidence. Yet studies on ECE programs across the country reveal that too few offer high-quality programming. To date, the ECE field has focused most improvement efforts on *classroom* materials and interactions. Broadening these efforts to an *organization-wide* focus can better support quality improvement. The University of Chicago Consortium on School Research (UChicago Consortium) and the Ounce of Prevention Fund (Ounce) designed teacher and parent surveys, the "Early Education Essential Organizational Supports Measurement System" (*Early Ed Essentials*), to help ECE sites diagnose organizational strengths and weaknesses.

The current study tested whether the newly-adapted and designed *Early Ed Essentials* teacher and parent surveys capture reliable and valid information about the organization of ECE programs—information that is also associated with existing indicators of program quality.

# Data Used in This Study:

### Quantitative Data

- Sample: 81 sites in Chicago
  41 school-based and 40 community-based
- Data: Early Ed Essentials surveys, collected winter-spring 2016:
  - 745 teacher surveys
  - 2,464 parent surveys
- Outcomes Used: Observational measures of teacher-student interactions (using the CLASS Pre-K) and student attendance

### Qualitative Data

- Sample: 4 sites (from the quantitative sample)
   2 sites with high & 2 sites with low *Early Ed Essentials* survey scores; 1 school- and 1 community-based site for each
- Data: Site-visits lasting 3 consecutive days in May-June 2016, using protocols to capture in-depth information about what the essential supports look like and how they are experienced by staff and family members in ECE site
- Data collection included:

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- Individual interviews of leaders and teachers, and group interviews of family members;
- Observations of common area environments, activities, and interactions;
- Photographic documentation of common area spaces and displays.

on School Research



# **Research Findings**

## **Essential Supports Framework**

The *Early Ed Essentials* tool was created using the five essential supports framework<sup>1</sup> and existing K-12 *5Essentials* surveys.<sup>2</sup> Researchers adapted the teacher survey and created a new parent survey for ECE settings, then tested for reliability and validity.

### **Snapshot Figure 1**

Early Ed Essentials and 5Essentials Surveys are Comprised of Essentials, Measures, and Items

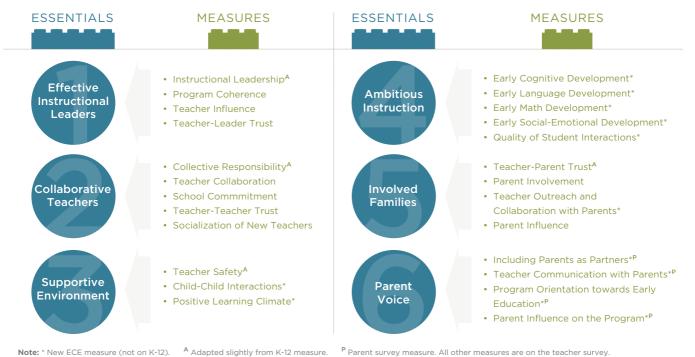
ESSENTIALS	<ul> <li>Higher-order categories of organizational supports that are essential for improving student learning</li> <li>Comprised of multiple measures</li> </ul>
MEASURES*	<ul> <li>Capture survey respondents' beliefs or experiences of a single construct</li> <li>Comprised of multiple items</li> <li>* Researchers used Rasch models to create the measures from sets of items; see http://bit.ly/RaschOverview for details.</li> </ul>
ITEMS	<ul> <li>Individual survey questions that capture a range of beliefs and experiences</li> </ul>

## The Measures Are Grouped into 6 Essentials for This Study

- In many ways, these align with the placement of measures into essentials on the K-12 5Essentials survey.
- However, parents' responses to the survey indicated different perspectives from teachers' responses.
- Therefore, we created a sixth essential to test in our validation analyses: parent voice.

### **SNAPSHOT FIGURE 2**

Measures Included in the Early Ed Essentials



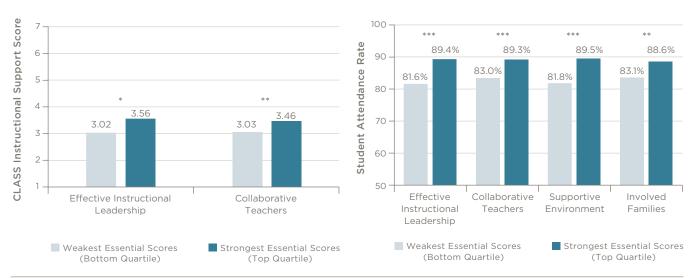
1 Bryk, Sebring, Allensworth, Luppescu, & Easton (2010).

2 https://uchicagoimpact.org/tools-training/5essentials



If the *Early Ed Essentials* surveys do measure organizational constructs that research suggests are important for ECE programs, then survey results should be positively related to established measures of ECE quality. On the other hand, we do not expect the survey data to map perfectly onto these other measures—the surveys should be providing consistent information while also identifying practices and experiences that other tools do not yet capture.

- Most, but not all, essential scores were significantly related to site-level outcomes.
- Neither **ambitious instruction** nor **parent voice** scores were significantly related to either outcome measured.



**SNAPSHOT FIGURE 3** 

Essential Scores Related to CLASS Pre-K

#### **SNAPSHOT FIGURE 4**

Essential Scores Related to Student Attendance

**Note:** Each pair of bars compares average CLASS scores/attendance rates between sites with essential scores in the bottom vs. top quartiles. Each site's average CLASS score/ attendance rate was obtained by fitting unconditional 2-level HLMs with either classrooms (for CLASS) or students (for attendance) nested within sites; these model-fitted scores were then used to produce the top/bottom quartile average score. \* indicates that the relationship between the essential score and the outcome is statistically significant at the p<0.05 level; \*\* indicates significance at the p<0.01 level; \*\*\* indicates significance at the p<0.001 level.

# Reliability

It is critical to ensure that the measures on the *Early Ed Essentials* capture the true response (i.e., beliefs or experiences) of the respondent and do not have large amounts of random error. This tells us they are measuring what they're intended to measure. Analyses showed:

- All the measures on the surveys were reliable; we can trust they are accurately measuring people's beliefs and experiences on the construct being asked about.
- Many measures were sensitive enough to detect differences between sites; the surveys are welldesigned to effectively capture site-wide beliefs or experiences with organizational essential

supports. Measures that were less sensitive fell under the ambitious instruction and parent voice essentials.

- The surveys did not have strong bias toward either :
  - School- or community-based ECE sites; or
  - English or Spanish speakers (parent survey only).
  - This means the surveys can be used and compared across different types of sites.

## "Practical" Validation: Observations and Interviews

To provide additional evidence of discriminant validity and "practical" validation that the Early Ed Essentials are able to differentiate across sites, researchers asked: Are there qualitatively different climates, structures, and practices between ECE sites with high vs. low *Early Ed Essentials* survey scores?

Interview and observation evidence confirmed that the Early Ed Essentials differentiates between ECE programs:

• Staff and families in sites with high and low survey responses provided qualitatively different descriptions and experiences of organizational climate and conditions, summarized in Table 1.

#### **SNAPSHOT TABLE 1**

**Reports of Organizational Climate and Conditions** 

At ECE Sites with High Essential Support Scores:	At ECE Sites with Low Essential Support Scores:
<b>1. Staff held common understandings of their goals</b> as an ECE program that were guided by their leader's strong, purpose-driven vision rooted in child developmental science and developmentally-differentiated practice.	<ol> <li>Staff articulated that their primary aim was making sure they complied with the myriad of program regulations consuming the focus of their leaders, including that children achieve program-established kindergarten- readiness goals.</li> </ol>
2. Leaders built emotionally-encouraging relationships with staff, set up structures that protected time for cross- classroom collaboration, and used these relationships and routine discussions of practice to build a unity of purpose.	2. There was an absence of leadership practices and organizational structures that advanced a pedagogical vision, coherently guided instruction, or allowed staff time to focus together on the work of teaching and learning.
<b>3.</b> Leaders, teachers, and staff emphasized the importance of children's social-emotional learning as the foundation for all learning. All staff worked diligently to create supportive learning environments for children and their families.	<ol> <li>Leaders, teachers, and staff emphasized rote learning as the key strategy for preparing children for kindergarten. Staff described how children's lack of self-regulation was a barrier to their teaching and children's learning.</li> </ol>
<ol> <li>Leaders, teachers, and staff believed that partnerships with families were critical for effective teaching and children's success, including the input of families on high-level instructional decisions.</li> </ol>	<ol> <li>Leaders and teachers believed that family involvement in the program was not critical to teaching and learning. A subset of teachers believed families caused children's difficulties adjusting to the classroom.</li> </ol>
<ol> <li>Interactions and conversations among staff, and between staff and parents, were frequent, warm, and focused on offering one another encouragement around endeavors— both professional and personal.</li> </ol>	<ol> <li>Teachers and staff kept to individual classrooms, inter- acting minimally with one another and families in the common areas and through brief, perfunctory exchanges.</li> </ol>
IN THE WORDS OF A TEACHER:	IN THE WORDS OF A TEACHER:
"I feel like it's empowering [here]it's not just from the top down. We believe in this stuff and I have something to share and it's valued by your administrator. Then, your co-teachers and your colleagues also buy in, too, and you have that energy and you have that love and then you have an administrator that pushes you in that way and supports you and guides you and nudges you a bit farther."	"That's one thing that gets to me [here]: <b>There is no collaboration.</b> I am used to going to another classroom and saying, 'Hey, I couldn't do it this way. Can you tell me how I can do it that way, or didn't that way work for you?' [But here] everybody is not even on the same plan. Everyone is not even using the same curriculum [name]. That's what gets me because <b>if I have a</b> <b>problemand I want to compare, I can't."</b>
— Teacher A	— Teacher B

# Implications

A fter several years of development and testing, the *Early Ed Essentials* now has evidence that it provides valid and reliable data to educators, families, policymakers, and researchers. In the near future, the valid portions of these surveys will be available for use in early education settings. Other areas will continue to be under development. There is considerable promise for this measurement system in the years ahead. Key considerations for practice, policy, and research include:

- Expanding the definition of "quality." The Early Ed Essentials and the theoretical framework underlying the tool can help broaden the definition of "quality" in ECE to include organizational conditions and the important role of leaders as instructional guides. This work underscores the critical role leaders play in shaping the quality of teaching through professional collaboration and community. These changes to the definition of quality could influence how programs are incentivized and resourced to galvanize improvement.
- Actionable data for improvement. Survey
  results can provide ECE programs with actionable data that leaders can use to focus attention
  on strengthening the organizational supports for
  teaching, learning, and family engagement. The
  Ounce is also producing tools to guide leaders in
  using the survey data to identify what steps they
  can take collaboratively with staff to improve
  weak areas.
- ECE-K-12 alignment. The Early Ed Essentials provides language about ECE program quality that aligns with language that practitioners in elementary schools use to discuss quality improvement. The alignment between the Early Ed Essentials and K-12 5Essentials tools provides a common lens, language, and metric for understanding and promoting instructional improvement across the educational continuum. Leaders from both sectors can strengthen alignment of structures and practices, and thus the experiences children and families have as they transition from prekindergarten into early elementary grades.
- Research potential. The *Early Ed Essentials* has the potential to grow new areas of ECE research that can expand our understanding of program effectiveness, and how organizational climate and

conditions are related to characteristics of ECE settings, staff, leaders, students, families, and/or communities. With few ECE measures currently available to understand organizational supports, these surveys provide a cost-effective way to gain staff and parent perspectives on the organization's climate and conditions. The *Early Ed Essentials* can also provide contextual information about programs that may shed light into other long-standing ECE research questions, such as why some programs seem to thrive and others do not, even when similar structural conditions exist.

- Limitations in the field. Because this study is the first of its kind on these surveys, there will be more to study and learn over time. When considering use of the *Early Ed Essentials* in the field, it's important to recognize that:
  - The surveys and outcomes (CLASS and attendance) are related to each other, but we do not yet know whether essential supports in early education settings *cause* changes in outcomes.
  - Because these surveys were tested in ECE settings with education-focused classrooms serving 3- to 5-year-olds, we cannot assume they will work similarly in other settings, such as in infant/toddler classrooms.
  - Some areas of the surveys will continue to be refined and tested, including ambitious instruction on the teacher survey and the full parent survey.
  - We are in the early stages of developing measures and researching the relationships between organizational conditions and outcomes within ECE programs. The authors therefore caution against using the *Early Ed Essentials* surveys as an accountability metric itself—at least until there is ample opportunity for the field to understand its use as an improvement tool.

### ABOUT THE RESEARCH

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### ABOUT THE UCHICAGO CONSORTIUM

The University of Chicago Consortium on School Research conducts research of high technical quality that can inform and assess policy and practice in the Chicago Public Schools. We seek to expand communication among researchers, policymakers, and practitioners as we support the search for solutions to the problems of school reform. The UChicago Consortium encourages the use of research in policy action and improvement of practice, but does not argue for particular policies or programs. Rather, we help to build capacity for school reform by identifying what matters for student success and school improvement, creating critical indicators to chart progress, and conducting theory-driven evaluation to identify how programs and policies are working. The UChicago Consortium is a unit of the Urban Education Institute.

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### ABOUT THE OUNCE OF PREVENTION FUND



The Ounce of Prevention Fund is dedicated to giving all children, especially those from low-income communities and families, the best

chance for success in school and in life. We provide, research, and advocate for high-quality early childhood education from birth to age 5, giving young children the physical, cognitive, social and emotional development they need to develop and learn. As a public-private partnership working at the intersection of practice, policy, and research, the Ounce aims to be the nation's most trusted resource for early childhood knowledge.

Views expressed in this document are those of the authors and do not necessarily reflect those of the UChicago Consortium, the University of Chicago, or the Ounce of Prevention Fund.



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