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Evaluating Leadership Development in Early Care and Education

Research has shown that leadership is a key driver of organizational performance and quality outcomes (Pacchiano et al., 2016), making it an essential component of a field's infrastructure. The early care and education (ECE) field is still in the early stages of building the infrastructure it needs to attract, support, and sustain strong leadership (Austin, 2014; Goffin & Daga, 2017; Kirby et al., 2021; Pacchiano et al., 2016).

This brief presents the findings from a review of research on ECE leadership development initiatives from the Early Care and Education Leadership Study (ExCELS) that focuses on leadership in center-based ECE settings. It examines seven ECE leadership development initiatives that have been the focus of one or more evaluations, describes the features and intended outcomes of each initiative, and considers how they might continue to be implemented and evaluated to further strengthen ECE leadership development.

Leadership is not limited to those with a formal leadership position or job title— any staff who influence positive change or contribute to decision making can be leaders. Research suggests that leadership from teachers may be particularly essential to fostering a culture of continuous quality improvement in ECE center-based settings (Arbour et al., 2016; Douglass et al., 2021; Dunlop, 2008). We therefore use a definition of leadership that includes teaching staff and center directors.

This brief highlights several key findings: 1) evidence about leadership development in ECE is not yet widely available or accessible, 2) the field needs a deeper understanding about what effective leadership looks like, how to develop and measure it, and

Key definitions

Center leaders: can be one or more persons who hold formal responsibility for overseeing administrative, operational, and instructional activities within an ECE center

Teacher leaders: teaching staff (lead, head, or co-teachers and assistant teachers) who carry responsibilities in the classroom and hold formal responsibilities to supervise and support other teaching staff or informally contribute to decision making and improvement

Leadership: the combination of center and teacher leaders that exist within an ECE center

what outcomes it can produce, and 3) descriptive studies of seven leadership development initiatives suggest that continued use and evaluation can increase our understanding of the structures and supports that are needed to develop ECE leaders. A new measure of ECE leadership could be a useful tool in evaluating leadership development.

The leadership development landscape in early care and education

Leadership development can influence who engages in leadership; the knowledge, skills, and mindset they bring to it; and the practices they implement to achieve positive outcomes (Douglass, 2017; Lee et al., 2022; Whalen et al., 2016; Talan et al., 2014; Shivers, 2008; Shivers, 2012). Compared with other sectors—such as K–12 education and health—there may be fewer opportunities to develop leaders in the ECE sector. For example, half of all states had no ECE leadership development programs in 2018 (New Venture Fund 2018). The ECE sector has historically lacked the dedicated and sustained funding sources and infrastructure necessary to provide broad, consistent access to leadership development (Austin, 2014; Kirby et al., 2021; Pacchiano et al., 2016). ECE leadership development programs tend to operate in local contexts, on a small scale, and independently of ECE state or federal systems for training and technical assistance (Goffin & Daga, 2017). These programs have varying goals, objectives, delivery models, and target audiences.

Leadership development initiatives are typically designed to strengthen leaders' knowledge, skills, and mindsets or dispositions; and they can also be designed to attract and develop new leaders. In summarizing what we know about leadership in ECE settings, the ExCELS literature review (Kirby et al. 2021) identified several factors that could help develop leaders in center-based ECE settings serving children ages birth to 5—for example, networks, cohort-based models, and peer learning opportunities can build social capital and bolster leaders' confidence and self-efficacy (Douglass, 2018; Ely et al., 2011; Shivers, 2008; Talan et al., 2014). Mentors or external coaches may increase the application of knowledge and skills, facilitate use of new tools and strategies, and improve the quality of administrative practices (Talan et al., 2014; Shivers, 2008; Shivers, 2012).

Identifying leadership development initiatives with some evidence base

As the ECE field builds its leadership development infrastructure, it is important to understand how to develop the kind of leadership that can drive improvement in ECE programs and practices. This brief is not an overview of all the work being done to develop leadership in ECE. The focus is on initiatives with research and evaluation evidence, identified either during the ExCELS literature review search or by consulting select experts who recommended initiatives with research evidence. We identified seven ECE leadership development initiatives that have been implemented with administrators and/or teaching staff who work in U.S. child care or Head Start center-based settings that serve children from birth to age 5, and that have published research or evaluation studies.

Characteristics of the selected leadership development initiatives

We found that the seven initiatives focused on developing leadership in different types of staff (Exhibit 1). Specifically, four focused exclusively on developing leadership qualities in administrators while the other three included teaching staff and administrators, with one also including parents. All seven sought to strengthen leaders' knowledge, skills, mindsets and/or practices; however, the specific set of practices varied based on the focus or purpose of each initiative. Most included development of leadership and management skills. For example, the P-3 Executive Leadership Certificate focused on alignment between (1) programs serving children from birth to age 5 and (2) early childhood programs or systems in public schools. In contrast, the Chase Emergent Leaders program focused on early language and literacy, and the Ounce of Prevention Fund (now known as Start Early) Professional Development Initiative (PDI) focused on instructional leadership.[1]

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[1] This initiative has been refined and renamed over time. In this brief, we refer to it with its original name (Ounce PDI) to reflect the name used in the research studies in our analysis.

Exhibit 1. Initiatives with published research or evaluation

Model	Developer	Year established	Designed for	Stated purpose	Duration, dosage, format
Aim4 Excellence	McCormick Center for Early Childhood Leadership	2009	ECE directors, administrators	Improve leadership and management competencies; credential directors	Average of 8 months long; 9 modules (16 hours each), delivered online
Breakthrough Series Collaborative (BSC)	Boston Public Health Commission	2003 in health care sector; 2012 in ECE sector	ECE directors, administrators, teaching staff, parents	Develop trauma-informed leaders in ECE, focusing on awareness, knowl-edge, skills for continuous quality improvement	12–18 months long, with 50–75 hours total participation in collaborative learning and group coaching sessions
Chase Early Education Emergent Leaders	State of Arizona	2004	ECE directors, administrators	Develop leadership at local and state levels; support leadership development as way to improve ECE program quality, with focus on early language/literacy	12 months long; cohort learning model with monthly workshops (1–2 days each)
Leading for Change in ECE	University of Massachusetts Boston	2012	ECE directors, administrators, teaching staff	Build capacity of early childhood educators to lead improvement initiatives in their work settings and in the early care and education sector more broadly	Delivered over 4–12 months; core curriculum is 40 hours delivered half online and half in person, followed by access to 8+ hours of leadership network supports/year
Ounce Professional Development Initiative (PDI)—Lead, Learn, Excel/ Essential Fellowship	Start Early (formerly The Ounce of Prevention Fund)	2012	ECE directors, administrators, teaching staff	Boost ECE leaders' capacity to help educators deliver high quality instruction and outcomes for children, including readiness for school	Two years long, with directors participating about 38 hours/year and educators 67.5 hours/year; consists of in-person training sessions, ongoing coaching, and peer learning communities
P-3 Executive Leadership Certificate	University of Washington[a]	2013	ECE directors, elementary school principals	Support ECE and elementary school leaders to provide high quality contin-uum of aligned early childhood education	10-month course of study, about 100 hours total; delivered in blended in-person and online format
Taking Charge of Change	McCormick Center for Early Childhood Leadership	1993	ECE directors, administrators	Support directors to refine administrative practices, acquire new competencies, and become more confident and effec-tive leaders in their communities	10 months long, with 80 hours of small/ large group instruc-tions, plus 20 hours of individual feedback

Source: ExCELS literature review conducted January and February 2019; updated review of leadership development programs conducted in November and December 2020.

[a] In June 2021, the University of Colorado Denver launched a new version of this initiative, now called the P-3 Leadership Certificate.

Types of leadership development programs

A field's leadership development infrastructure can include a range of approaches and program types. We used the main types of educational leadership development approaches found in the K–12 education sector (Daugherty et al., 2017) to categorize the seven initiatives. These types of approaches include pre-service preparation and in-service supports and professional development, as well as interventions focused on systems that may influence leadership, such as performance evaluation of leaders, recruitment and pipelines for new leaders, leaders' working conditions in relation to factors such as the level of autonomy or incentives, and organizational quality improvement interventions with a leadership component (Exhibit 2).

The seven initiatives primarily represent the professional learning type of leadership development approach (Exhibit 2). All seven initiatives focus on professional learning for leaders, which includes professional development of current leaders—administrators or teaching staff—often through training workshops, coaching, mentoring, peer learning opportunities, or similar kinds of programs (Exhibit 2).

In addition to this primary focus, several of these initiatives align with one or more other types of approaches. Two initiatives are categorized as leadership preparation. Aim for Excellence is an administrative credential program that serves existing leaders as well as people seeking future roles as program administrators, so it also falls under pre-service preparation for that segment of its participants. Similarly, Leading for Change engages existing leaders as well as those who are not yet leaders and who choose to participate in leadership development.

Two initiatives are categorized as developing leadership for program improvement, which includes quality improvement initiatives that are directed to whole organizations but have a defined leadership development component as part of the program model. The Ounce PDI initiative engages program administrators in professional learning, and also includes program improvement by training administrators to engage teachers in continuous improvement and using the Essentials 0–5 survey that measures organizational conditions to inform improvement. The Breakthrough Series Collaborative (BSC) is a program improvement model that delivers professional learning supports for leadership and

Exhibit 2. Types of ECE leadership development in the seven selected initiatives

Type of leadership development (Daugherty et al., 2017)	Description	Number of initiatives
Professional learning	Initiatives such as professional development supports for current leaders; e.g., workshops, coaching, peer learning communities, mentoring	7
Leadership preparation programs	Pre-service preparation for leadership	2
Program improvement	Initiatives such as leadership development embedded within program improvement models as part of a larger quality improvement intervention	2
Working conditions	Initiatives to improve working conditions for leaders, such as using incentives to recruit and retain them, and promoting leader autonomy	1
Strategic staff management	Initiatives to improve recruitment and selection of leaders	None
Leader evaluation systems	Initiatives such as performance measurement approaches for accountability or developmental purposes	None

also supports participants in establishing organizational structures and processes to promote the leadership of teaching staff. This focus on structures and processes to engage teacher leadership enhances working conditions for teacher leaders, placing the BSC initiative as the only one that falls in the working conditions type.

No initiatives in this analysis were categorized as either the strategic staff management or leader evaluation types. Because the specific scope of this current analysis focused on the small number of leadership development initiatives for which we identified research findings, there may be ECE leadership development initiatives of other types that do not have published research studies available. This suggests the ECE leadership development ecosystem could still be developing, and warrants further exploration of the types of leadership development initiatives that are needed to recruit, prepare, develop, and sustain leadership in ECE (Douglass, 2017).

Assessing the level of evidence and next steps for evaluation

We looked at the qualities and status of each of the seven leadership development initiatives to consider next steps for a rigorous evaluation of their effectiveness in achieving intended outcomes. We used the Hexagon tool (Exhibit 3) to assess what is known about the initiatives on six key dimensions: (1) need, (2) fit, (3) resource availability, (4) evidence, (5) readiness for replication, and (6) capacity to implement (Blase et al., 2013). The Hexagon tool is a framework for evaluating and selecting interventions that helps to identify how well an intervention might work in a specific context.

For each of the six Hexagon dimensions, we assigned the seven initiatives to one of three classifications to reflect the degree of information that supports that dimension, or the level of alignment with the dimension: (1) None/limited: There is no or very limited information to support this dimension; (2) Emerging: There is information to support some aspects of this dimension; or (3) High: There is information that supports most or all aspects of this dimension. The results are shown in Exhibit 4.

All seven initiatives were specifically developed to build leaders for the ECE field and are well aligned with both (1) the needs of those working in center-based ECE settings (Need) and (2) child care and Head Start priorities to promote quality standards and quality improvement (Fit).

Exhibit 3. Assessment framework for ECE leadership development initiatives

Hexagon dimension	Guiding questions we asked (application of Hexagon dimensions)
Need	How well does the model meet the needs of educators and leaders working in center-based child care and Head Start settings?
Fit	In what ways does the model fit with child care and Head Start priorities to promote quality standards and quality improvement?
Resource availability	Are resources readily available, such as curricula and materials, trainers, and data systems?
Capacity to implement	Is there capacity in the field to implement the model as intended and sustain and improve implementation over time?
Readiness for replication	How ready is the model for replication, including expert assistance available, number of replications accomplished, exemplars available for observation, and how well the program is operationalized?
Evidence	What outcomes can be expected if implemented well? What evidence of outcomes and/or impact exists? What kind of evidence is available? How many studies? What types of studies?

Source: ExCELS review of leadership development programs conducted in November and December 2020.

Exhibit 4. Initiatives' readiness for replication based on Hexagon dimensions

Hexagon dimension	Need	Fit	Resource availability	Capacity to implement	Readiness for replication	Evidence
Aim4Excellence	High	High	High	High	High	Emerging
Breakthrough Series Collaborative (BSC)	High	High	High	Emerging	Emerging	Emerging
Chase Early Education Emergent Leaders	High	High	None/limited	None/limited	None/limited	Emerging
Leading for Change in ECE	High	High	High	Emerging	Emerging	Emerging
Ounce Professional Development Initiative (PDI)— Lead, Learn, Excel	High	High	High	High	High	Emerging
P-3 Executive Leadership Certificate	High	High	None/limited	None/limited	None/limited	Emerging
Taking Charge of Change	High	High	High	High	High	Emerging

Source: ExCELS review of leadership development programs conducted in November and December 2020.

Five of the seven initiatives have high resource availability—they all have resources readily available to support their implementation, including curricula and materials and training. Three of these five— Aim4Excellence, the Ounce PDI, and Taking Charge of Change—also have high capacity to implement and high readiness for replication, meaning they have all been delivered across multiple states and have built the capacity to expand the delivery of their model to more participants. The BSC and Leading for Change initiatives are both emerging in their capacity to implement and replicate because each has conducted one or two replications but has not yet been implemented widely across multiple states. Chase and the P-3 initiatives are not currently in operation and are categorized as having no or limited resource availability, capacity to implement, and readiness for replication. The P-3 initiative was relaunched in 2021 at the University of Colorado in Denver; this could change the way the initiative's readiness would be assessed in the near future.

All seven of the initiatives have emerging evidence (the last dimension) from one or more descriptive studies that they can achieve the outcomes they were designed to achieve. However, none of the seven have been tested through a rigorous study of effectiveness, and we turn to this issue next.

Evaluation approaches and considerations

To inform next steps for building a leadership development infrastructure in the ECE field, we must continue to evaluate and test how the field is developing leaders. These seven initiatives are a focus for next steps because some information in evaluations reveals that these initiatives are developing leaders in the ways they were designed to. We can think about whether each initiative is suited for early-stage or later-stage evaluation methods/approaches based on (1) evidence of imple-mentation status, (2) strength of the logic model, and (3) impact evaluation evidence (Exhibit 5). *Later-stage* initiatives include those for which there is already evidence of a fully developed program

model and theory of change and, therefore, provide an opportunity to measure dosage and implementation fidelity (Ross et al., 2018). ***Early-stage*** initiatives have not yet developed all of these components. We identified whether each initiative is best suited for: (1) a descriptive study to support its further development and specify implementation as an emerging model, (2) an implementation study to help develop the logic model or theory of change, for assistance with refining the model and its intended impact, or (3) an evaluation with enough rigor to study effectiveness in achieving outcomes.

We found that two initiatives, Aim for Excellence and Leading for Change, are still in the early-stage of evaluation and are candidates for implementation studies that can inform and further specify the

program's logic model, theory of change, and measurement of implementation fidelity. Three others are more fully developed and, therefore, are ready for later-stage evaluation: the BSC, Ounce PDI, and Taking Charge of Change. These three initiatives all have evidence of a well-specified program model and theory of change, with evidence to support the associations between elements of the model, capacity to measure fidelity, and replication or scaling of the program model. The Chase and P-3 initiatives are not candidates for further study at this time. The Chase initiative is not currently in operation; the P-3 initiative has not been in operation since 2017. It relaunched in 2021 and could therefore become a candidate for an early-stage implementation study.

Exhibit 5. Assessment of readiness for further evaluation of select ECE leadership development initiatives

	Step 1: Evidence of implementation status/ fidelity (specification that would enable program replication)	Step 2: Evidence for strength of program logic model/ theory of change	Step 3: Evidence from an impact evaluation
Aim4Excellence	Descriptive evaluation study of fully online curriculum/ director credential model that included analysis of participant satisfaction, completion, and learning outcomes	None	None
Breakthrough Series Collaborative (BSC)	Descriptive implementation study to identify the core elements of the model and outcomes; a new feasibility study of the BSC recently completed with results forthcoming (Culture of Continuous Learning Project)	Based on the Model for Improvement theory of change and a "driver diagram" of key levers and outcomes for change, but a single, complete logic model was not included; a new BSC study in ECE includes a detailed theory of change.	None in United States Note: One experimental study of BSC in preschools in Chile (Arbour et al., 2016) found statistically significant improvement in some but not all outcomes of participating children.
Chase Early Education Emergent Leaders	Descriptive study includes some aspects of implementation but not fidelity assessment; pre/post measures of classroom quality included, as well as participant experiences; model not currently in operation	Brief description of a broad theory of change focused on importance of mentoring relationships as driver of leadership development, but did not include a well-specified logic model.	None
Leading for Change in ECE	Descriptive study of the model to identify core components and outcomes, but no fidelity measure	Study identifies some elements of theory of change, but did not present well-specified logic model.	None

(continued)

	Step 1: Evidence of implementation status/ fidelity (specification that would enable program replication)	Step 2: Evidence for strength of program logic model/ theory of change	Step 3: Evidence from an impact evaluation
Ounce Professional Development Initiative (PDI—Lead, Learn, Excel	Implementation fidelity study and identification of core components of the model; model has been replicated in multiple states	Study presents detailed logic model and theory of change.	One quasi-experimental design study (Whalen et al., 2016) found changes in organizational structures and processes and children's social-emotional development.
P-3 Executive Leadership Certificate	Descriptive study of model to explore participant experiences and outcomes; no fidelity measure; model not in operation since 2017 but about to be relaunched	Study describes framework that contains some elements of theory of change.	None
Taking Charge of Change	Descriptive study of participant characteristics, experiences, and outcomes, along with organizational changes; model has been studied and delivered to 20+ cohorts since 1993	Study includes detailed theory of change.	None

Source: ExCELS review of leadership development programs conducted in November and December 2020.

Initiatives ready to be evaluated for effectiveness

Three later-stage initiatives—the BSC, Ounce PDI, and Taking Charge of Change—are ready to be evaluated for effectiveness in ways that could advance our understanding of leadership development in ECE. This is also an opportunity to learn more about how leadership might influence quality improvement and staff, child, and family outcomes. The first step is to establish evidence of implementation effectiveness for the initiatives—that is, does each initiative effectively deliver the content it intends to and achieve its intended outcomes? Then, ECE researchers could take advantage of the variation in the initiatives to explore their effectiveness in developing leadership and achieving positive outcomes in center-based ECE settings.

We still have much to learn about effective approaches to delivering the content and experiences that support ECE leadership development. All three later-stage initiatives rely on trained teams or individuals to work with and deliver content

to participants. These three initiatives are quite different from Aim for Excellence, for example, that offers self-paced online modules for individuals in the early stages of developing as leaders. The three later-stage initiatives are intensive models that actively engage participants for 75–130 hours over a one- to two-year period. It is not clear, based on the current research, what is the right frequency, cadence, or dosage needed to deliver the content, or how much testing the developers have done on different variations in these methods of delivery to identify the most effective and efficient implementation methods. Because these initiatives all require a significant commitment of participants' time, it could be valuable to assess ways to refine each model's core components, which might result in more scalable models. It will also be important to learn if and how these initiatives require any adaptation in local implementation contexts where participants have different characteristics and needs. Because these initiatives are currently in use in the field, there may be opportunities to learn more about how they work in various contexts.

Additional implementation studies of these three models can further ensure the initiatives effectively deliver the content and achieve the learning outcomes as intended (Exhibit 6). Rigorous study of implementation effectiveness, and potential variations in implementation, will help us better understand implementation challenges or shortfalls (when an initiative might not achieve its intended outcomes). If we are confident that these three later-stage initiatives can be implemented with fidelity to the model and thus achieve their intended outcomes, then a rigorous evaluation of intervention effectiveness of one or more of the initiatives can help build evidence about what works to develop individuals as leaders in center-based ECE settings. An experimental design that randomly assigns administrators, teaching staff, or centers to participate in one of the initiatives or to no leadership development initiative (business as usual) can tell us about an initiative's effectiveness in improving leadership as a whole in the center setting by looking at changes in who participates in leadership, what leaders bring to leadership, or how specific leadership practices improve.

Using a new measure of ECE leadership to explore leadership development

ExCELS is developing a definition of leadership and a way to measure it that will provide a common way to assess different leadership development initiatives by the changes brought about in leaders, center quality, and other outcomes. This new measure can support further evaluation of the leadership development initiatives. Regardless of the stage of evaluation an initiative is in, a common definition and measure of leadership can identify the elements each initiative can change, influence, or affect.

Relational coordination is defined as shared goals, shared knowledge, mutual respect, and high-quality communication between center leaders, teaching staff, other center staff, and families. ◢

### Exhibit 6. Variations in key elements of three leadership development initiatives

	Implementation effectiveness		Intervention effectiveness	
	For whom	**Learning outcomes specific to initiative**	**Who participates in leadership**	**Leadership practices**
Breakthrough Series Collaborative (BSC)	ECE directors, administrators, teaching staff, parents	Growth in knowledge, skills, mindsets in the areas of continuous quality improvement methods and trauma-informed care	Potential positive impact	Greater potential impact on relational coordination and strategic vision, learning, planning
Ounce Professional Development Initiative (PDI)—Lead, Learn, Excel	ECE directors, administrators, teaching staff	Growth in leader knowledge, skills, and mindsets in instructional leadership, inclusive decision making, job-embedded professional learning	Potential positive impact	Greater potential impact on instructional quality
Taking Charge of Change	ECE directors, administrators	Growth in administrative knowledge, skills, self-efficacy	No expected impact	Greater potential impact on organizational and fiscal operations

Source: ExCELS review of leadership development programs conducted in November and December 2020.

The ExCELS leadership measure (under development) reflects three key constructs that define what leadership in center-based ECE settings looks like as conceptualized in the ExCELS theory of change (Exhibit 7). This measure aims to capture information about who leaders are—the leadership roles, perceptions of leadership, and who participates in decision making. It will gather details about what leaders bring—their education, experience, values, and beliefs. Finally, it will collect information about what leaders do—their practices to create, foster, or sustain (1) children's learning and development; (2) relational coordination in the center; (3) relational coordination beyond the center; (4) strategic vision, planning, and self-reflection and learning; and (5) organizational and fiscal operations and performance management. These five categories of ECE leadership practices were identified in the ExCELS study literature review as the core domains of leadership practice in center-based ECE settings (Kirby et al., 2021).

The variations between the seven initiatives could help inform different elements of the ExCELS theory of change through rigorous testing. Our analysis of the seven initiatives reveals variation in the specific kinds of knowledge, skills, and practices that are the primary focus for leaders' growth. For example, each of the three later-stage initiative includes content that touches on four of the five leadership practice categories in the ExCELS theory of change but to different degrees. The BSC focuses on relational coordination within the center and on continuous quality improvement that is part of strategic leadership practice. The Ounce PDI emphasizes instructional quality (children's learning and development). Taking Charge of Change is distinct from the other two in its focus on organizational and fiscal operations. Because of this variation, it would be useful to have information about what leaders do in each of the five leadership practice categories. This would enable us to capture what each initiative contributes to leadership development and help the field explore

Exhibit 7. Excerpt of ExCELS theory of change of ECE leadership for quality improvement
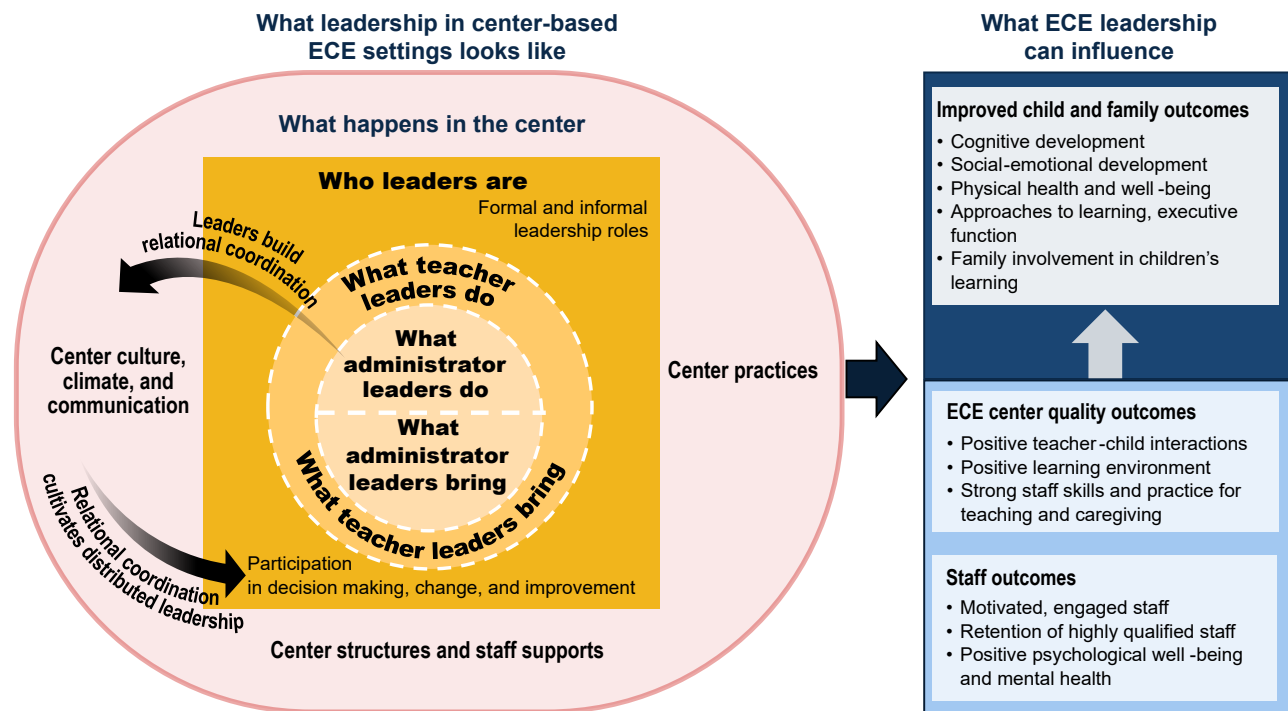
how different leadership practices—and development and growth in each leadership practice—might be associated with changes within the center and in staff, center quality, family, and child outcomes.

These initiatives also vary in the career or developmental stages of the participants. Collecting baseline scores using a common leadership measure would shed light on how each initiative contributes to growth on a continuum of a leaders' development by assessing the impact that different kinds of leadership development might have at different points in a leader's career. For example, some initiatives, such as Aim for Excellence, might contribute to development of pre-service or early career foundational knowledge, whereas others may offer more advanced leadership development in one or more specific practice areas, such as the Ounce PDI's focus on instructional leadership.

Another way to examine the initiatives is by the developmental stage of distributed leadership within center-based ECE settings. Some of the initiatives focus primarily on an individual leader's growth, whereas others engage leadership teams and cultivate both individual growth and the growth of distributed leadership across a team or a center. Taking Charge of Change, for example, develops the leadership skills of individual center administrators, whereas both the BSC and the Ounce PDI engage administrators and teaching staff together, and the BSC also includes parents. The BSC and Ounce PDI models offer the opportunity to examine how distributed leadership, as well as leadership mindsets, may be strengthened and what impact that has on outcomes of interest.

Distributed leadership involves the center administrator along with a range of staff— including teachers—in learning, decision making, and planning and implementing change for improvement. ◢

Conclusion

Carefully designed and well tested leadership development initiatives are not yet widely available or accessible in the ECE sector (Goffin & Daga, 2017; Goffin & Gager, 2021; Kirby et al., 2021; New Venture Fund, 2018). The field also needs a deeper understanding of what effective leadership looks like, how to develop it, and what can be expected from it. ECE leadership development and practice needs more empirical evidence to inform the supports and systems that are necessary to strengthen leadership at all stages of its development.

Descriptive studies reveal that the seven leadership development initiatives reviewed in this brief all show promise in aligning their content and approach with their intended goals for developing leaders. The continued use of all of these initiatives can refine their implementation, improve their readiness and capacity for replication, and contribute to our understanding of the structures and supports that are needed to develop ECE leaders.

The three later-stage initiatives recognize relational coordination and organizational culture, climate, and communication as key pathways of influence from leadership to outcomes. An impact study could examine the effect of one initiative on leadership (using a common measure of leadership), quality improvement, and outcomes (for staff, children, and families) and test the pathway of influence of leadership to outcomes. An impact study might also use the variation between the initiatives to test the effectiveness of developing different areas of leadership on outcomes. In addition, because the initiatives have several distinct features, they provide an opportunity to compare how each influences leadership, and how the resulting growth in leadership influences what happens in the center and the outcomes for staff, center quality, and children and families.

About the Project

The Early Care and Education Leadership Study (ExCELS), funded by the Office of Planning, Research, and Evaluation (OPRE) in the Administration for Children and Families, has three goals: (1) fill the gaps in definitions and measurement to understand how effective leadership can improve the quality of experiences for children ages birth to five in center-based ECE settings, (2) develop a measure of ECE leadership, and (3) identify actionable leadership development initiatives and methods of evaluating them. The project has produced a literature review describing what we know about the elements of leadership in ECE center-based settings and how leadership influences staff, center quality, and child outcomes. The literature review also informed the development of a theory of change. A descriptive study of 120 ECE centers in 2022 will test the theory of change and inform the creation of a new measure of leadership.

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References

Abel, M.B., and Magid, M. (2018). *Aim4Excellence™* program evaluation: 2014–2017. McCormick Center for Early Childhood Leadership.

Arbour, M.C., Yoshikawa, H., Atwood, S., Duran Mellado, F.R., Godoy Ossa, F., Trevino Villareal, E., & Snow, C.E. (2016). *Improving quality and child outcomes in early childhood education by redefining the role afforded to teachers in professional development: A continuous quality improvement learning collaborative among public preschools in Chile.* Society for Research on Educational Effectiveness.

Austin, L. (2014). *Early care and education leadership: Toward a theory of essential experiences, skills and knowledge for effective early care and education change agents.* [Doctoral dissertation, Mills College]. ProQuest LLC.

Bloom, P. J., Jackson, S., Talan, T. N., & Kelton, R. (2013). *Taking charge of change: A 20-year review of empowering early childhood administrators through leadership training.* McCormick Center for Early Childhood Leadership, National Louis University.

Daugherty, L., Herman, R., & Unlu, F. (2017). *Logic models for selecting, designing, and implementing evidence-based leadership interventions: Companion guide to* School leadership interventions under the Every Student Succeeds Act. RAND Corporation.

Douglass, A. (2015, December 2). *Building capacity for organizational improvement in early care and education: The Breakthrough Series Collaborative approach.* Annual meeting of the Child Care Policy Research Consortium, sponsored by the Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

Douglass, A. (2017). *Leading for change in early care and education.* Teachers College Press.

Douglass, A. (2018). Redefining leadership: Lessons from an early education leadership development initiative. *Early Childhood Education Journal, 46*(4): 387–396.

Douglass A., Chickerella, R., & Maroney, M. (2021). Becoming trauma-informed: A case study of early educator professional development and organizational change. *Journal of Early Childhood Teacher Education.* https://doi.org/10.1080/10901027.2021.1918296

Dunlop, A. W. (2008). *A Literature Review on Leadership in the Early Years.* Learning and Teaching Scotland (LTS). https://www.scribd.com/document/205363958/A-Literature-Review-on-Leadership-in-the-Early-Years.

Ely, R.J., Insead, H.I., & Kolb, D.M. (2011). Taking gender into account: theory and design for women's leadership development programs. *Academy of Management Learning and Education, 10*(3).

Goffin, S. G., & Daga, E. (2017). *Early childhood education leadership development compendium: A view of the landscape* (3rd ed.). Goffin Strategy Group.

Goffin, S. G., & Gager, E. (2021). *Early childhood education leadership development compendium: A view of the current landscape* (4th ed.). Goffin Strategy Group.

Kauerz, K., & Coffman, J. (2019). *Framework for planning, implementing, and evaluating P-3 approaches (2nd ed.).* National P-3 Center, School of Education and Human Development, University of Colorado Denver.

Kauerz, K.A., Taylor, M., & Kuhl, K. (2018). *Building cross-sector P-3 leaders: The Washington P-3 Executive Leadership Certificate program.* National P-3 Center, School of Education and Human Development, University of Colorado Denver.

Kirby, G., Douglass, A., Lyskawa, J., Jones, C., & Malone, L. (2021). *Understanding leadership in early care and education: A literature review.* OPRE Report 2021-02. Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

Lee, Y., Douglass, A., Zeng, S., Lopes, A., & Reyes, A., (2022, forthcoming). Preparing early educators as frontline leaders and change agents with a leadership development initiative. *International Journal of Child Care and Education Policy.*

New Venture Fund. (2018). *Developing early childhood leaders to support strong, equitable systems: A review of the early childhood education leadership development landscape.*

Pacchiano, D., Klein, R., & Hawley, M.S. (2016). *Reimagining instructional leadership and organizational conditions for improvement: Applied research transforming early education.* Ounce of Prevention Fund.

Ross, C., Sama-Miller, E., & Roberts, L. (2018). *Using research and evaluation to support programs that promote parents' economic security and children's well-being.* OPRE Report #2018–04, Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

Shivers, Eva M. "Early Education Emergent Leaders Program Evaluation Report Prepared for Arizona Early Education Funds." Phoenix, AZ: Indigo Cultural Center, 2008.

Shivers, Eva M. "Early Education Emergent Leaders Program Evaluation Report Prepared for Southwest Human Development." Phoenix, AZ: Indigo Cultural Center, 2012.

Talan, Teri N., Bloom, P.J., & Kelton, R.E. (2014). Building the leadership capacity of early childhood directors: An evaluation of a leadership development model. *Early Childhood Research and Practice, 16*(1–2).

Whalen, S. P., Horsley, H.L., Parkinson, K.K., & Pacchiano, D. (2016). A development evaluation study of a professional development initiative to strengthen organizational conditions in early education settings. *Journal of Applied Research on Children: Informing Policy for Children at Risk, (7)*2, article 9. http://digitalcommons.library.tmc.edu/childrenatrisk/vol7/iss2/9.

Hexagon Analysis Profiles for Each Initiative

Aim4Excellence PROFILE

Hexagon dimension	Guiding questions	Initiative: Aim4Excellence
Need	How well does the model meet the needs of educators/leaders working in center-based child care and Head Start settings?	Purpose is to improve center-based ECE leadership and management competencies
Fit	In what ways does the model fit with child care and Head Start priorities to promote quality standards and quality improvement?	● Recognized by NAEYC as alternative training pathway to meet Operational Administrator requirement of 9 higher education credits for programs seeking accreditation ● Aligned with the Program Administration Scale (PAS) ● College credit available
Resource availability	Are resources readily available such as curriculum and materials, trainers, data systems?	This is a fully online curriculum from the McCormick Institute with 9 modules accessible nationally as self-paced modules or facilitated cohorts
Evidence	What outcomes can be expected if implemented well? What evidence of outcomes and/or impact exists? What kind of evidence is available? How many studies? What type of studies?	Online modules contain assessment of participant learning, participant evaluation survey, and a study evaluated changes in 30 administrators' practices as measured by the PAS Results showed high completion rates in national sample of 1372 participants, and a study of 30 administrators showed significant changes in PAS scores on 4 of the 9 subscales and on overall PAS score
Readiness for replication	To what extent is the model ready for replication, including expert assistance available, number of replications accomplished, exemplars available for observation, and how well the program is operationalized?	● Over 2000 participants nationally have completed one or more modules since 2009, and over 1300 of them have earned the director credential ● Model has curriculum, participant learning assessments, and program evaluation results about participant characteristics and experiences
Capacity to implement	Is there capacity within the developer or the field to implement the model as intended and to sustain and improve implementation over time?	A fully online model that can be accessed across the country, administered by the McCormick Center

Breakthrough Series Collaborative PROFILE

Hexagon dimension	Guiding questions	Initiative: Breakthrough Series Collaborative
Need	How well does the model meet the needs of educators/leaders working in center-based child care and Head Start settings?	Purpose is to build organizational capacity for continuous quality improvement in center-based ECE
Fit	In what ways does the model fit with child care and Head Start priorities to promote quality standards and quality improvement?	• Aligned to continuous quality improvement and culture of continuous learning • Model can be paired with a specific focus on a priority domain of quality (such as trauma-informed practice or social-emotional learning)
Resource availability	Are resources readily available such as curriculum and materials, trainers, data systems?	• Lead trainer must be a certified Improvement Advisor by Institute for Healthcare Improvement • Curriculum has been developed
Evidence	What outcomes can be expected if implemented well? What evidence of outcomes and/or impact exists? What kind of evidence is available? How many studies? What type of studies?	• Expected outcomes include improved organizational capacity for improvement (organizational climate, leadership, work processes, organizational structures); improved knowledge and practices for participants • Evidence from descriptive qualitative research suggests the model can influence these expected outcomes
Readiness for replication	To what extent is the model ready for replication, including expert assistance available, number of replications accomplished, exemplars available for observation, and how well the program is operationalized?	• Model was implemented with six child care/Head Start centers in one city in 2012–2105 • A new feasibility study of the model (implemented with seven child care/Head Start centers in 2018–2019) is forthcoming, and a theory of change was developed for this study. Expert assistance to implement/replicate is available from several BSC Improvement Advisors who have used the model in ECE settings
Capacity to implement	Is there capacity within the developer or the field to implement the model as intended and to sustain and improve implementation over time?	Capacity to implement is currently limited to a small but growing number of trainers in several states who have implemented the model in ECE settings

Chase Early Education Emergent Leader PROFILE

Hexagon dimension	Guiding questions	Initiative: Chase Early Education Emergent Leader
Need	How well does the model meet the needs of educators/leaders working in center-based child care and Head Start settings?	Purpose is to build administrator capacity to create and advocate for quality ECE programs
Fit	In what ways does the model fit with child care and Head Start priorities to promote quality standards and quality improvement?	• Curriculum included a focus on language and literacy • Curriculum aligned with national and state professional standards and competencies for 0–5 and K–12 leaders
Resource availability	Are resources readily available such as curriculum and materials, trainers, data systems?	Model is no longer in operation
Evidence	What outcomes can be expected if implemented well? What evidence of outcomes and/or impact exists? What kind of evidence is available? How many studies? What type of studies?	• Descriptive program evaluation with 22 participants measured participant characteristics, program satisfaction, self-efficacy, program administration (PAS), and selected literacy practices (ELLCO) • Literacy practices (classroom structure, curriculum, language environment, book/book reading, as measured by ELLCO) improved. PAS scores increased from pre to post, indicating improvement in program administration quality
Readiness for replication	To what extent is the model ready for replication, including expert assistance available, number of replications accomplished, exemplars available for observation, and how well the program is operationalized?	Model is no longer in operation
Capacity to implement	Is there capacity within the developer or the field to implement the model as intended and to sustain and improve implementation over time?	Model is no longer in operation

Leading for Change in ECE PROFILE

Hexagon dimension	Guiding questions	Initiative: Leading for Change in ECE
Need	How well does the model meet the needs of educators/leaders working in center-based child care and Head Start settings?	Purpose is to build capacity of early educators and directors to be change agents and to lead improvement where they work and more broadly in the field
Fit	In what ways does the model fit with child care and Head Start priorities to promote quality standards and quality improvement?	• Participants plan a quality improvement project connected to state and/or national quality standards to apply new knowledge, skills to work contexts • College credit available
Resource availability	Are resources readily available such as curriculum and materials, trainers, data systems?	Curriculum, instructional materials available; training of trainers in development
Evidence	What outcomes can be expected if implemented well? What evidence of outcomes and/or impact exists? What kind of evidence is available? How many studies? What type of studies?	• Expected outcomes include growth in knowledge, self-efficacy and mindsets for leading change; changes in specific domains of practice; concrete action plan for quality improvement; expanded leadership networks • Three small scale descriptive studies showing growth in participant knowledge, self-efficacy, practices, networks
Readiness for replication	To what extent is the model ready for replication, including expert assistance available, number of replications accomplished, exemplars available for observation, and how well the program is operationalized?	• Model was implemented in Massachusetts starting in 2012 and has engaged over 10 cohorts and 150 participants, and was replicated starting in 2019 in Maryland with two cohorts of 12–15 participants each • Model includes a pre-post assessment of participant learning; trainers' implementation manual
Capacity to implement	Is there capacity within the developer or the field to implement the model as intended and to sustain and improve implementation over time?	Developer can deliver the model; developing training of trainers to increase capacity to implement the model more broadly

Ounce (now Start Early) Professional Development Initiative (PDI)—Live, Learn, Excel PROFILE

Hexagon dimension	Guiding questions	Initiative: Ounce PDI—Live, Learn, Excel
Need	How well does the model meet the needs of educators/leaders working in center-based child care and Head Start settings?	Improve ECE leaders' capacity to support educators to deliver high quality instruction to achieve positive developmental outcomes for children and school readiness
Fit	In what ways does the model fit with child care and Head Start priorities to promote quality standards and quality improvement?	• Aim is to improve children's learning outcomes • Model includes survey tool to measure organizational conditions that contribute to teaching quality, and uses CLASS data as the basis for improving teaching
Resource availability	Are resources readily available such as curriculum and materials, trainers, data systems?	Curriculum and materials, training of trainers, survey instrument with data system
Evidence	What outcomes can be expected if implemented well? What evidence of outcomes and/or impact exists? What kind of evidence is available? How many studies? What type of studies?	• Expected outcomes include improved organizational conditions (the "Early Education Essentials"); improved CLASS scores; improved children's learning outcomes • Evaluation research studies include two descriptive studies as well as a quasi-experimental study that found changes in organizational structures and processes, and these were associated with growth in children's social-emotional development
Readiness for replication	To what extent is the model ready for replication, including expert assistance available, number of replications accomplished, exemplars available for observation, and how well the program is operationalized?	Model was implemented and studied in Chicago with five Head Start centers beginning in 2012, and the developer has adapted and tested the model in the state of Illinois since 2014, and began to replicate it in Massachusetts in 2020 with a projected future engagement of 40–50 child care and Head Start centers over four years
Capacity to implement	Is there capacity within the developer or the field to implement the model as intended and to sustain and improve implementation over time?	Training of trainers certification course has been developed to increase capacity to deliver the model more broadly

P-3 Executive Leadership Certificate Program PROFILE

Hexagon dimension	Guiding questions	Initiative: P-3 Executive Leadership Certificate Program
Need	How well does the model meet the needs of educators/leaders working in center-based child care and Head Start settings?	Purpose is to strengthen and support ECE and elementary school leaders to provide a high quality continuum of early childhood education in Washington State
Fit	In what ways does the model fit with child care and Head Start priorities to promote quality standards and quality improvement?	• Curriculum aligned to state and national standards and competencies for educational leaders in ECE and K–12 setting • Participants complete an action research project connected to leadership standards to apply new knowledge, skills to work contexts
Resource availability	Are resources readily available such as curriculum and materials, trainers, data systems?	Developer published a Framework for Planning, Implementing, and Evaluating P-3 Approaches (Kauerz and Coffman, 2019)
Evidence	What outcomes can be expected if implemented well? What evidence of outcomes and/or impact exists? What kind of evidence is available? How many studies? What type of studies?	• Expected outcomes include growth in participant knowledge and confidence about leadership, child development, equity, and P-3 alignment; an action research project plan • One descriptive evaluation study of program participants/alumni
Readiness for replication	To what extent is the model ready for replication, including expert assistance available, number of replications accomplished, exemplars available for observation, and how well the program is operationalized?	Model has not been in operation since 2017, but authors noted that other organizations have developed similar models focused on P-3 alignment. It will be relaunched at the University of Colorado in Denver in June 2021.
Capacity to implement	Is there capacity within the developer or the field to implement the model as intended and to sustain and improve implementation over time?	Model has not been in operation since 2017 but is being relaunched at the University of Colorado in Denver in June 2021.

Taking Charge of Change PROFILE

Need	How well does the model meet the needs of educators/leaders working in center-based child care and Head Start settings?	Purpose is to support directors to improve administrative practices, acquire new competencies, and become more confident and effective leaders in their communities
Fit	In what ways does the model fit with child care and Head Start priorities to promote quality standards and quality improvement?	• Director credential • Curriculum aligned with Program Administration Scale (PAS) and Early Childhood Work Environment Scale (ECWES), and QRIS and accreditation • College credit available
Resource availability	Are resources readily available such as curriculum and materials, trainers, data systems?	Resources include curriculum, participant learning assessment tools and outcome assessment measures, and ECWES data system for analyzing and reporting ECWES results
Evidence	What outcomes can be expected if implemented well? What evidence of outcomes and/or impact exists? What kind of evidence is available? How many studies? What type of studies?	• Expected outcomes include increased knowledge and skill in leadership and management, self-efficacy, increased peer network connections, and capacity to implement organizational change • Descriptive studies of participant characteristics, experiences, and outcomes include an evaluation study of two decades of participant data showing growth in knowledge, skills, and changes in practices, based on pre-post participant survey data, pre-post ECWES scores, pre-post PAS scores on a sub-sample of participants, as well as alumni survey data
Readiness for replication	To what extent is the model ready for replication, including expert assistance available, number of replications accomplished, exemplars available for observation, and how well the program is operationalized?	• Model has been replicated widely in Illinois (more than twenty cohorts, totaling over 500 directors, over more than twenty years) • Model can be delivered fully online
Capacity to implement	Is there capacity within the developer or the field to implement the model as intended and to sustain and improve implementation over time?	• Documented capacity of developer to implement as intended and sustain/improve over time • Train the trainer available