

Massachusetts Early Childhood Support Organization (ECSO)

Year 2 Annual Implementation Evaluation Report



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Executive Summary

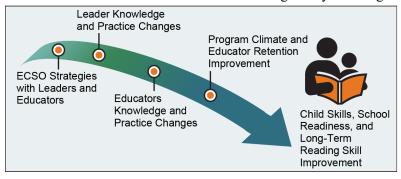
Massachusetts Early Childhood Support Organization (ECSO) Year 2 Annual Implementation Evaluation Report



Equitable access to high-quality early education programs (EEPs) is essential for supporting young children's development and preparing them to succeed in school and in life. Although leadership is recognized as a key driver of organizational performance (Senge, 2006), little rigorous evidence exists on its role in driving EEP quality and outcomes for staff and children (Kirby et al., 2021; Douglas & Kirby, 2022). Effective EEP leadership has the potential to positively influence the work environment, educators' motivation, and - crucially - children's learning. Researchers agree that EEP working conditions influence educators' decisions about whether to stay in their programs and in the field (Totenhagen et al., 2016). Relationships between EEP leaders and educators, planning time, and support for responding to children's needs can mitigate or exacerbate educator stress, depression, and burnout (Friedman-Krauss et al., 2014;

Whitebook et al., 2017). Surveys of Massachusetts EEP leaders and educators reveal a range of needs and fewer supports available for leaders compared to educators (Hanno et al., 2020; Patel, 2020; Bookman et al., 2018). Situated in this early education landscape, the ECSO initiative leverages a research-based understanding of EEP leadership to develop and test a unique model of support. The ECSO initiative seeks to improve the quality of EEPs by supporting leaders to strengthen their organizational climate, provide job-embedded professional learning (JEPL) opportunities for educators, support the use of instructional curriculum and child assessments in their program, and engage in continuous quality improvement. Ultimately, the initiative aims to empower EEP leaders to support educators in their provision of high-quality instruction that promotes positive outcomes for young children. Launched in 2020, the initiative is a public-private partnership between New Profit, a venture philanthropy organization, and the Massachusetts Department of Early Education and Care (EEC). Bridging the support of these two stakeholders allows for sustainability and opens the model to the real possibility of scaling.

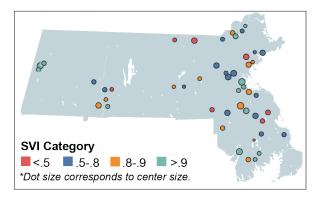
In 2020, New Profit and EEC contracted with three ECSOs to carry out the initiative: (1) The Children's Literacy Initiative (CLI), (2) Flamingo Early Learning (Flamingo) at the University of Florida's Lastinger Center for Learning, and (3) The Institute for Early Education Leadership and Innovation at UMass Boston (UMB) in partnership with Start Early. The ECSOs provide intensive supports to EEPs over two years, including coaching, training, and other support for leaders and some direct support for classroom educators. Each ECSO has its own model and set of planned services and supports, but all three models align with the initiative's overarching theory of change.



"The consistent support that is specifically for leadership [is the most beneficial aspect of participation]. I don't think I have ever had this as a leader. I cannot express how thankful we are. We are benefiting personally, the staff are benefiting, and the children are benefiting." – EEP Leader

The theory of change models the intended flow of improvements beginning with program leadership and eventually improving outcomes for children.

In the initiative's pilot year, ECSOs supported 28 EEPs across Massachusetts, beginning in March of 2021. In late summer 2021, ECSOs onboarded an additional cohort of 27 EEPs. In total, 55 EEPs across both cohorts received ECSO supports in the 2021-22 school year. All are licensed center-based childcare providers located across Massachusetts, including many in the greater Boston area. Although programs range in size from 1 to 19 classrooms, the average size is 5.5 classrooms and 65 enrolled children. In fiscal year 2022 an average of 34% of enrolled children received a childcare subsidy across EEPs.



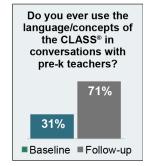
This report presents findings from an implementation study conducted by Abt Associates, an independent research firm. The findings are based on data collected from ECSOs and participating EEPs in the 2021-2022 school year, including surveys, classroom observations, and administrative data. Although the findings are descriptive and changes over time cannot be attributed to the initiative because there is no comparison group, they show promise and warrant further study.

ECSOs demonstrated that delivery of the model envisioned in the initiative's theory of change is feasible to implement. On the whole, ECSOs succeeded in providing the types and intensity of supports to EEPs as planned. They provided between 5 and 23 hours of monthly support on



average to each EEP focused on improving instructional leadership through support for using and reflecting on data, continuous quality improvement, staff support and development, and other topics. One ECSO also provided training and coaching directly to educators, with the goal of transferring these activities to instructional leaders over time. The other two ECSOs provided various supports to educators directly and via partner relationships. Moreover, ECSOs reported implementing many elements of their models with fidelity. This is a promising finding, because research shows that full implementation of an intervention often takes two to four years (Metz et al., 2015).

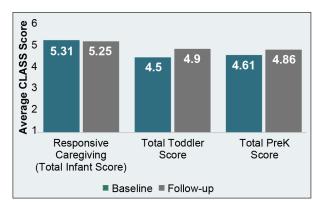
EEP leaders reported gains on several target outcomes, and leaders who had been in the program longest reported larger gains. For example, EEP leaders in the first cohort of supported programs reported feeling more confident about their



leadership and program management abilities. They also reported engaging in positive leadership practices, using quality improvement tools, and observing classrooms more often in spring 2022 than in fall 2021. Across cohorts, leaders were much more likely to engage in practices like providing on-site educator training to improve instructional practice and sharing images of highquality instructional practice with educators in the spring than they had been at the beginning of the year. Educators also reported positive changes. More than 60% of educators reported receiving some training on key quality improvement strategies, such as collaborative data collection, use of classroom observation and child assessment data. and goal development. From fall 2021 to spring 2022, more educators reported having planning time in their schedules and receiving more feedback on classroom observations. Educators who had been a part of the initiative longest reported more positive feelings of respect by and collaboration with program leaders. Overall, educators reported high levels of job satisfaction and self-efficacy in fall and spring, and their selfreported plans to stay or leave their positions did not change over time.

From fall 2021 to spring 2022, observed instructional quality in toddler and pre-k classrooms improved, especially classrooms at EEPs that had participated in the initiative the longest. Overall scores on the Classroom Assessment Scoring System® (CLASS) for toddler and pre-k classrooms increased by a statistically significant amount, and gains were larger for classrooms in the first ECSO cohort. The increase in pre-k scores was driven by gains in the Emotional Support and Classroom Organization domains. However, Instructional Support quality also increased significantly in the first cohort of EEPs served by two of the three ECSOs. Findings on CLASS scores are comparable to those of the Massachusetts Preschool Expansion Grant Evaluation (Checkoway et al., 2019).

In the coming year the ECSOs, with support from EEC and New Profit, will aim to use these



findings to improve the initiative. Abt Associates will continue conducting the implementation study. In addition, based on the promising descriptive findings, Abt will begin a quasi-experimental design study to examine program impacts on leader, education, and classroom outcomes. To date, the evaluation has focused primarily on the initial pieces of the change theory; ECSO inputs, leader and educator knowledge and mindset, and leader and educator practices. Early positive signs of improvement in these aspects support promise for the long-term positive impact of the initiative. The ECSO evaluation has the potential to produce actionable insights for instructional leadership policy and practice and contribute to the early childhood knowledge base at both state and national levels. Data from the impact evaluation will shed light on the ECSOs' impact on leaders, educators, and children and the drivers of change in practice and child outcomes. Findings from both the implementation and impact evaluations can inform scaling of an enhanced statewide system of technical assistance and training to support EEP quality.

For more information on the ECSO evaluation, please contact: ecsoeval@abtassoc.com

1. Introduction

Equitable access to high-quality early education programs (EEPs) is essential for supporting young children's development and preparing them to succeed in school and in life. Although leadership is recognized as a key driver of organizational performance and improvement (Senge, 2006), little rigorous evidence exists on its role in driving EEP quality and outcomes for staff and children (Kirby et all, 2021; Douglas & Kirby, 2022). Some evidence suggests that K-12 schools with principals who have strong leadership skills yield better student outcomes than schools with principals lacking these skills (Dhuey & Smith, 2014; Louis et al., 2010); however, how these findings translate to EEP settings is a subject of debate among researchers (Douglass, 2017, 2018). In particular, low levels of educator professional development in most EEPs suggests that instructional leadership may be more important for EEPs than K-12 schools.

Instructional leadership has the potential to influence the work environment, motivation, and children's learning. Researchers agree that EEP working conditions influence educators' decisions about whether to stay in their programs and in the field (Totenhagen et al., 2016). Relationships between EEP leaders and educators, planning time, and support for responding to children's needs can mitigate or exacerbate educator stress, depression, and burnout (Friedman-Krauss et al., 2014; Whitebook et al., 2017). Surveys of Massachusetts EEP leaders *and* educators reveal a range of needs and fewer supports available for leaders compared to educators (Hanno et al., 2020; Patel, 2020; Bookman et al., 2018).

To develop and test a new model for EEP instructional leadership in Massachusetts, New Profit, a venture philanthropy organization, and the Massachusetts Department of Early Education and Care (EEC) launched the Early Childhood Support Organization (ECSO) initiative, a public-private partnership, in 2020. A 2017 statement from The Brookings Institution (Phillips et al., 2017) — which concluded that the triad of evidence-based curricula, integrated training and coaching, and a positive, organized classroom offers a promising approach to achieving strong positive outcomes for children—informed the initiative's design. The initiative seeks to improve the quality of EEPs by helping leaders strengthen their organizational climate, provide job-embedded professional learning (JEPL) opportunities for educators, support the use of instructional curriculum and child assessments in their program, and use continuous quality improvement to improve their programs. In addition, it provides programs with supports, resources, and financial incentives, as well as coaching and training, to help program leaders use these tools in their practice. Ultimately, the initiative aims to empower EEP leaders to support educators in their provision of high-quality instruction that promotes positive outcomes for young children.

Public-Private Partnerships are useful for addressing challenges and supporting system changes.

Across the nation and internationally, interest has grown in public-private partnerships that leverage cross-sector funds to address challenges and play a catalytic role in system changes to improve the quality of early education and care (Gustafsson-Wright, Smith, & Gardiner, 2016; Administration for Children and Families, n.d.). States such as Arizona, Florida, Georgia, and Colorado have used public-private partnerships to improve early care, education, and health systems for years. For example, *Quality Rated*, Georgia's Quality Rating and Improvement System, began as a public-private partnership in which private investments helped to launch the initiative as a complement to longer-term public funding. In Massachusetts, the *Brain Building in Progress* campaign, which began in 2010, was built on a public-private partnership developed by EEC and United Way. At the federal level, in 2015 the Office of Head Start awarded 250 grants for Early Head Start-Child Care Partnership programs, which aimed to increase the supply of high-quality infant and toddler care and comprehensive services in communities across the country (Del Grosso et al., 2019).

The public-private partnership between EEC and New Profit has several attributes that are hallmarks of earlier efforts. New Profit is playing a catalytic role in supporting the development, launch, and testing of the ECSO initiative, which EEC may decide to scale with longer-term public funds if it shows promise. Ultimately, the partnership's aim is to accelerate the supply of high-quality early education and care to best meet the needs of children and families across Massachusetts.

New Profit and EEC contracted with three ECSOs with promising and flexible program support models.

In 2020, New Profit and EEC contracted with three ECSOs: (1) The Children's Literacy Initiative (CLI), (2) Flamingo Early Learning (Flamingo) at the University of Florida's Lastinger Center for Learning, and

(3) The Institute for Early Education Leadership and Innovation at UMass Boston (UMB) in partnership with Start Early. Both New Profit and EEC sought out partners that had strong organizational structure, showed a willingness to adapt and to collaborate with other groups, and offered promising models that could be adapted to the local context and scaled-up across the state. They charged the ECSOs with intensively supporting a group of EEPs for two consecutive years before stepping down to a less-intensive support model. Each ECSO would enroll an initial cohort of EEPs and then onboard an additional cohort each year for four years.

In the initiative's pilot year, ECSOs supported 28 EEPs across Massachusetts. ECSO supports began in March of 2021 (Exhibit 1) after a delay from the fall of 2020 because of pandemic-related program instability. Due to the COVID-19 pandemic, the ECSOs adapted their models to include

Three ECSOs

Children's Literacy Initiative (CLI)

Children's Literacy Initiative (CLI) was founded in Philadelphia in 1988. CLI identifies as an anti-racist organization whose mission is to provide professional development to early childhood through fifth-grade educators to help students develop critical thinking and literacy skills. During the 2018-19 school year, CLI worked with about 5,000 educators across 300 schools and early childhood education centers in Pennsylvania, New Jersey, Florida, and Chicago.

Flamingo Early Learning (Flamingo)

Developed at the University of Florida's Lastinger Center for Learning, the Flamingo Early Learning system provides early childhood educators with comprehensive professional development to support equitable, high-quality learning for children. In Florida Lastinger has provided professional development to more than 30,000 early childhood educators and has expanded its online and blended professional learning content to California, Louisiana, and Georgia as well as Massachusetts.

University of Massachusetts Boston (UMB)

The Institute for Early Education Leadership and Innovation was founded in 2016 at the University of Massachusetts- Boston to build a racially and linguistically diverse network of early education leaders. Through its work with educators, the Institute has reached over 5,000 children and their families. Recently, the Institute of Early Education Leadership and Innovation partnered with Start Early to create the ECSO.

virtual service delivery. In later summer 2021, in the initiative's second year, ECSOs onboarded an additional 27 EEPs. In total, 55 EEPs across both cohorts¹, received ECSO supports in the 2021-22 school year.

¹ 4 EEPs, 1 in Cohort 1 and 3 in Cohort 2, withdrew from the initiative in 2022 at various points during their first or second year of participation.

Exhibit 1. The ECSO Service Delivery Timeline, by Cohort

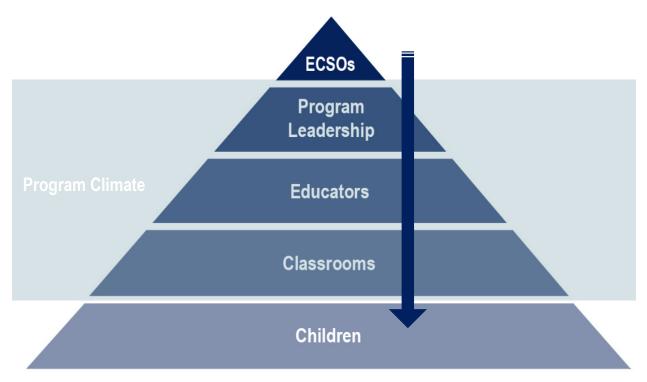
	2021											2022										
	2020-21 School Year				2021-22 School Year																	
		J	F	М	А	М	J	J	Α	S	0	Ν	D	J	F	М	А	М	J	J	А	S
Cohort 1													٠	٠						٠	٠	
Cohort 2													٠									

*Overall timeline differed somewhat by ECSO. CLI did not provide much support to Cohort 1 leaders until October of 2021. CLI and Flamingo began Cohort 2 leader supports in August 2021, and UMB began Cohort 2 leader supports in September 2021.

A flexible initiative-wide change model guided the initiative.

A unique feature of the ECSO initiative is its primary focus on providing direct support to instructional leaders, rather than educators. As shown in Exhibit 2, initiative-derived change flows from the ECSOs to EEPs and program climate through instructional leaders and down to educators, classrooms, and children. The implementation evaluation involves measuring implementation and changes in outcomes over time at each level of this model.





The ECSOs worked with New Profit, EEC, and the Harvard Center on the Developing Child to create an initiative-wide Theory of Change to guide their work (Exhibit 3 and Appendix B). Although the ECSOs—CLI, Flamingo, and UMB—each have a distinct approach to and resources for supporting EEPs, the Theory of Change is broad enough to encompass all of their activities. It displays key strategies of the model, the target of intervention for each strategy, and expected outcomes. Though three distinct organizations with unique histories and philosophies delivered services to EEPs across the Commonwealth, the initiative model accommodates their unique components but also affords them the opportunity to learn from one another and from their different approaches. The initiative's partners

support ECSOs in adapting their models to the local context and incorporating model variations into the evaluation. The Theory of Change and the ECSO's approaches also incorporate best practices for adult learning. These include making material practical and relevant, providing opportunities for individuals to contribute to others' learning, seeking input from trainees on the planning of learning opportunities, and establishing communities of practice (Knowles, 1984; Kenyon & Hase, 2001).

A high-level overview of the initiative-wide Theory of Change, provided in Exhibit 3, depicts the overall model strategies (supports provided primarily to leaders but also, less intensively, to educators), targets (leader and educator facets that the intervention expects to change), and outcomes for programs and children. The full version of the initiative-wide Theory of Change is provided in Appendix B. In the full model, target indicators are described distinctly but are conceptually related (e.g. leader commitment to the process of supporting continuous improvement and leader identity as an instructional leader).

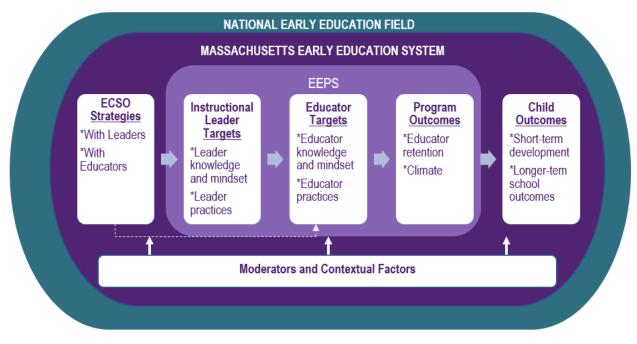


Exhibit 3. MA ECSO Initiative-Wide Theory of Change

Though the primary focus of ECSO supports is leadership, the ESCOs also provide support directly to educators to varying degrees. Exhibit 4 provides an overview of each ECSO's model and primary services.

Exhibit 4. Three ECSO Deliveries

ECSO Model Details

Children's Literacy Initiative (CLI)

• Provides instructional leaders (primarily limited to program directors) with alternating monthly training and professional learning community meetings and bi-monthly coaching.

• Covers topics such as leader identity, strategies for supporting educator practice, classroom observation, implementing curricula with fidelity, continuous quality improvement, organizational climate, using child assessment data, and educator professional learning.

• Provides weekly in-person coaching for all educators in participating programs, with the goal of shifting the responsibility of educator coaching to instructional leaders over time.

• In pre-k classrooms, supports the use of the *Blueprint for Early Literacy* curriculum.

• Supported the use of the Kaymbu software for interactively processing and sharing child assessment data.

Flamingo Early Learning (Flamingo)

• Provides support for a leadership team in each EEP of 2 to 4 leaders including the director, assistant director, education coordinator, and lead teachers for preschool and infant-toddler classrooms.

• Supports leadership teams through monthly community of practice meetings, a six-month online instructional leadership course, one-on-one coaching, and coaching certification.

• Addresses topics such as effective leadership, the role and selection of curricula, data use, classroom observation, extending educators' thinking, and supporting educator professional development.

• Leverages the Lastinger Center's online learning platform to provide online courses for leaders and educators and offers an online communication board.

• Partners with Boston Public Schools to provide classroom-level coaching and professional development to educators of 3- and 4-year old children in a subset of EEPs on implementing the *Focus on Pre-K/Focus on 3s* curriculum.

University of Massachusetts Boston (UMB)

• Uses the Essential Leadership Model, an approach to quality improvement based on the five Start Early Essentials: (1) effective instructional leaders, (2) collaborative educators, (3) ambitious instruction, (4) supportive environment, and (5) involved families.

• Provides intensive review of the Essentials 0-5 Survey through five working sessions on the survey data, root cause analysis, the plan-do-study-act cycle, planning for sustainability, and end-of-year reflection and celebrations.

• Provides monthly coaching sessions for EEP directors and often leadership teams through monthly tailored to address their specific needs.

- Hosts monthly professional learning community meetings for all leadership teams, culminating in an end-ofyear Leadership Forum.
- Partners with Boston Public Schools to provide classroom-level coaching and professional development to educators of 3- and 4-year old children in a subset of EEPs on implementing the *Focus on Pre-K/Focus on 3s* curriculum.

Both New Profit and EEC encourage ECSOs to view themselves as partners in this process, drawing on one another's successes to refine their own models. In a true spirit of collaboration, the ECSOs are creating communities of learning and viewing each other as resources rather than competitors.

"I think we work really well together, all of the groups. I think when we're all together, like working together, it's respectful. We're all in it for the same cause, all of that... I feel really blessed, they're such a smart group of people, whether it's EEC or New Profit or the other ECSOs or the people that work with the other ECSOs that are higher above, like you learn so much from the group." – ECSO Leader

The initiative involves several key local partners in addition to New Profit, EEC, and the ECSOs.

The ECSO initiative involves several partners. In addition to New Profit, EEC, and the ECSOs, the Center on the Developing Child at Harvard University supported the ECSO implementation through the fall of 2022 with a focus on the IDEAS Impact FrameworkTM. The Center fosters collaboration across ECSOs with opportunities to focus on program improvement and use of fast-cycle iteration. As the ECSOs support continuous quality improvement in EEPs, they engage in continuous quality improvement themselves. Additionally, Boston Public Schools (BPS) provides educators in EEPs working with two ECSOs with specific coaching and training on the *Focus on Pre-K/Focus on 3s* curricula. Abt Associates, an independent research organization with offices in Cambridge Massachusetts, is conducting a descriptive implementation evaluation and will conduct a quasi-experimental outcome evaluation in the coming year, sharing data with ECSOs, New Profit, and EEC. The aim of the evaluation is not to study a model as implemented elsewhere but to produce the best results possible for leaders, educators, and children in Massachusetts.

Findings presented in this report are based on data collected in the 2021-2022 school year.

This report presents findings from the implementation study based on data collection from both cohorts of EEPs in the 2021-2022 school year. Exhibit 5 describes the data sources and collection methods, and more details are provided in Appendix A.

Data Collection Activity	Participants	Timeline		
Abt-Led Activities				
Instructional Leader Surveys*	ECSO-identified leadership teams at each Cohort 1 and 2 EEP	Fall 2021 and Spring 2022		
Educator Surveys*	ECSO- or EEP-identified lead/co- educators at each Cohort 1 and 2 EEP	Fall 2021 and Spring 2022		
ECSO Leader Interviews	Executive and implementation leads from each ECSO	November-December 2021		
ECSO Coach Focus Groups	ECSO coaching staff from each ECSO	January 2022		
Instructional Leader Group Interviews	Small group of ECSO-nominated program leaders	Spring 2022		
Implementation Fidelity Matrices*	ECSO leadership	October 2021 – July 2022		
ECSO-Supplied Data				
Classroom Observations*	ECSO-collected observation data across Cohort 1 and 2 classrooms	Spring 2021, Fall 2021/Winter 2022, Spring 2022		
ECSO Support Delivery*	Monthly ECSO-provided supports data	July 2021 – July 2022		
Boston Public Schools (BPS) Support Delivery*	Monthly BPS-provided supports data	July 2021 – July 2022		

Exhibit 5. Data Collection Activities for the ESCO Implementation Evaluation

*Primary sources of data described in this report

2. What did the ECSOs provide to programs?

Highlights

- ECSOs met or surpassed their annual goals for hours of targeted support provided, although the intensity of planned supports differed widely by ECSO and cohort.
- ECSOs provided targeted supports to Instructional Leaders focused on the primary levers of change for the initiative, including a strong focus on job-embedded professional learning.
- Although the Theory of Change focuses on Instructional Leaders as the primary targets of intervention, all three ECSOs provided varying types and levels of direct support to educators.

During Year 2 of the initiative (July 2021-June 2022), ECSOs provided over 3,000 hours of support to EEP leaders and an additional 2,600 hours of support to educators. This equates to approximately 100 hours of annual support per EEP, or between 5 and 23 hours of monthly support per EEP, depending on ECSO and cohort.

2.1 ECSOs met their goals for the amount of support provided and implemented most key components of their models with fidelity.

ECSOs provided nearly as many hours of support *to EEP leaders* in Year 2 as their target goal, a hefty achievement given the pandemic-related stress and time constraints that program leaders experienced. Flamingo and CLI delivered more support hours than planned, while UMB delivered less than their respective intended hours. When we consider the addition of direct support hours for educators, ECSOs delivered more than 95% of their intended support hours to both leaders and educators combined (Flamingo provided more than intended to Cohort 1). Exhibit 6 displays the hours of intended and delivered supports for both leaders and educators by ECSO and cohort; the total percent of intended hours that were delivered is shown at the top of each column.

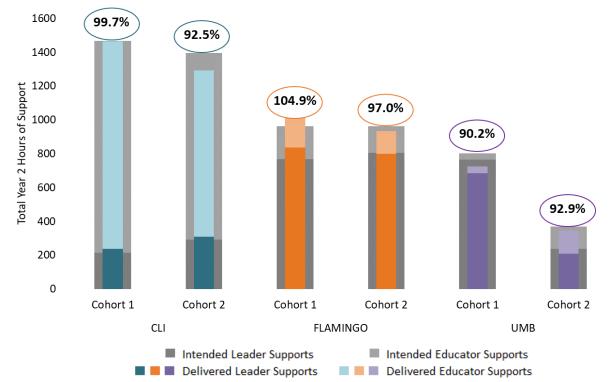


Exhibit 6. Hours of Support Intended and Delivered, by ECSO and Cohort

With Abt's support, each ECSO developed their own model-specific matrix for measuring and assessing implementation fidelity. ECSOs independently defined key model components and established expected thresholds to determine implementation fidelity. These key model components focused primarily on elements that the ECSOs controlled directly, such as whether they delivered coaching sessions as planned. Though all ECSOs did not deliver all of their key components with expected fidelity (see Exhibit 7), key levers including coaching were implemented with fidelity across ECSOs and cohorts. While some ECSOs chose to represent their model with fewer key components but multiple indicators under each, as was the case with CLI, other ECSOs organized their matrix differently; more key components is not indicative of a more intensive model. A scoring matrix displaying more details about the fidelity measurement for each ECSO is provided in Appendix B.

Exhibit 7.	Key Components of Imple	ementation Fidelity, by ECSO and Cohort
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Key Component	Implemented with Fidelity in Cohort 1	Implemented with Fidelity in Cohort 2
CLI		
Teacher Professional Development (teacher coaching + teacher training)	No	No
Leadership Training and Development (leader training + leader coaching + PLCs + collegial visits to other sites)	No	No
Financial Incentives/Materials (training stipends + literacy materials + curricular materials)	Yes	Yes
Flamingo		
Community of Practice Sessions	Yes	Yes
One-to-one Leader coaching (quantity and fidelity)	Yes	Yes
Leader development course (access and mastery)	Yes	Yes

System of data collection and analysis (sharing and discussing classroom observations)	Yes	Yes
Facilitation of Leader Coaching Certification (access and participation)	Yes	Yes
ECSO connection between programs and BPS-provided teacher training	Yes	Yes
Educator coursework	Yes	Yes
UMB		
Essentials 0-5 Survey Use Training (introduction, orientation, webinar, and work sessions)	No	Yes
Survey Administration (educator and parent survey participation)	Yes	Yes
Coaching (Technical Assistance)	Yes	Yes
Peer Learning Communities	Yes	Yes

What strategies comprise ECSO supports?

Leader coaching/technical assistance was the largest lever of support (leader coaching made up 33% of Cohort 1 support hours and 37% of Cohort 2 support hours). Program leaders frequently reported that coaching for themselves and for their educators (CLI) was the most beneficial aspect of their ECSO participation. While coaching was the primary support format in CLI, UMB relied more heavily on professional development trainings/workshops (55% of their Cohort 1 supports and 46% of their Cohort 2 supports), and Flamingo utilized online coursework (36% of their Cohort 1 supports and 37% of their Cohort 2 supports) just as much if not more than coaching/training.

How much variation was there among programs within an ECSO and cohort?

There was quite a bit of variation in the number of leader supports provided to programs assigned to the same ECSO. Generally, more programs received over the intended hours of support than less, sometimes 15-30 hours more. UMB provided fewer hours of support than planned to nearly all programs, sometimes up to 12-19 hours less. This trend matches the overall pattern for UMB, who provided less across the board than they were planning on.

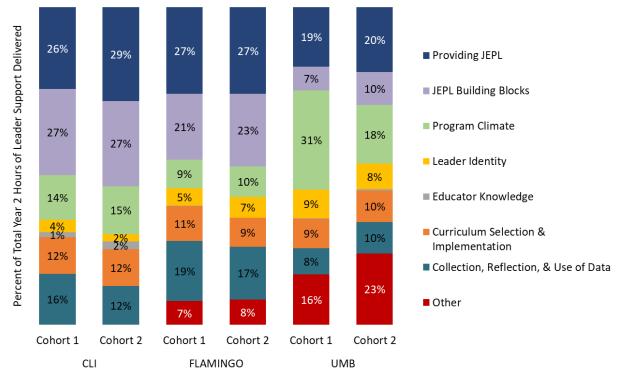
2.2 Goals for providing targeted support differed in intensity by ECSO and cohort.

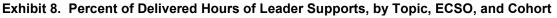
In terms of leader-specific supports, Flamingo had the most intensive plan, aiming to provide over 700 hours of support in total to programs in each cohort. UMB set a nearly equivalent goal for Cohort 1 (750 hours of support), though their plans for Cohort 2 were much less intense (236 total intended hours). CLI's goal for leader supports was between 200 and 300 hours for each cohort, though their educator supports which were unique to their model, were substantial, set at over 1,000 hours for each cohort. Differences in the mode of support delivery are detailed in the previous section, and details about the content of supports is provided in section 2.3.

2.3 ECSO supports for leaders focused initially on primary targets in the initiative-wide Theory of Change and gradually expanded as programs moved into their second year of implementation.

The topics that ECSOs focused on most were indeed the largest theorized levers of change for the ECSO initiative (Exhibit 8). ECSOs concentrated their supports for Cohort 2 programs, who were just beginning their involvement in the initiative, on establishing the 'building blocks' of JEPL (staff supervision, planning time for educators, classroom observations, etc.) and supporting leaders to provide JEPL to their educators but markedly less on topics like curriculum selection, leader identity, and educator knowledge. Cohort 1 programs, which had been part of the initiative longer, also received substantial supports on building blocks and provision of JEPL but additionally received more ECSO supports on improving

program climate (including supporting collaborative peer work among staff). All three ECSOs dedicated similar percentages of total support hours to supporting the provision of JEPL. UMB focused much more on program climate, particularly with Cohort 1 leaders, and less on program management structures (JEPL building blocks) than the other ECSOs. It is important to note the key strategies in the Theory of Change are not entirely conceptually distinct from one another but often overlap.





*Note that a single support session can cover more than one topic, so some hours are double-counted for the creation of this graphic.

2.4 Educator supports also differed in type and intensity by ECSO.

As discussed in some detail in Section 2.1, the type and amount of supports that ECSOs provided directly to educators differed dramatically by ECSO. CLI provided more monthly hours of coaching and training/professional development directly to educators per EEP (175 hours on average per EEP annually in Cohort 1; 98 hours on average per EEP annually in Cohort 2) than they provided to leaders (and much more for Cohort 1 than Cohort 2). CLI provided similar numbers of support hours to infant, toddler, and pre-k classrooms. In pre-k classrooms, CLI supported the use of their own *Blueprint for Early Learning* curriculum. Flamingo utilized BPS support for the pre-k classrooms, and they also offered optional online coursework for educators in all of their EEPs; the majority of the BPS and Flamingo educator supports were geared towards pre-k classrooms, and very few of their programs received that support. BPS educator supports were specifically focused on implementing the *Focus on Pre-K/Focus on 3s* curricula.

3. Who participated in the initiative?

Highlights

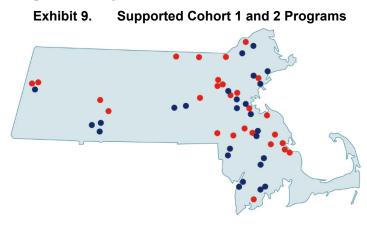
- To date, the ECSOs have supported 55 licensed childcare programs and over 300 classrooms with a range of community need and program capacity.
- Program leaders in ECSO-supported EEPs are primarily White women with demographic characteristics similar to the statewide EEP leader workforce.
- Participating educators are slightly more diverse than program leaders, with demographic characteristics similar to the EEC educator workforce across Massachusetts.

3.1 Fifty-five EEPs across Massachusetts have participated in the ECSO initiative to date; EEP selection criteria differed by cohort.

Program participants are licensed center-based childcare providers across Massachusetts, though the eligibility criteria differed slightly for the two existing cohorts. Programs in Cohort 1 have a subsidy agreement with EEC and were nominated to participate by licensors who felt that they were ready to engage in this type of quality improvement initiative, using readiness criteria developed by New Profit and EEC. Readiness criteria included evidence of an intentional approach to support educators, attention to program design and classroom practices, and a commitment to continuous improvement; readiness to engage was confirmed by ECSOs through an interview process. Programs in Cohort 2 were also

nominated by licensors based on readiness but were required to meet additional criteria; Cohort 2 programs were required to accept childcare subsidies for a minimum of 33% of enrolled children and/or have a Social Vulnerability Index (SVI²), an indicator of community need, greater than .55.

In the pilot and first full year of the ECSO initiative, ECSOs have supported 55 programs³ across Massachusetts (Exhibit 9), with similar numbers of programs in each Cohort and ECSO. Programs are located across Massachusetts but concentrated, as is the state's population, in the eastern part of the state.



Programs ranged widely in size (Exhibit 10;

average of 5.5 classrooms per EEP with a standard deviation of 3.22, a minimum of 1 classroom, and a maximum of 19 classrooms). They enrolled an average of 65 children and accepted subsidies in fiscal year 2022 for an average of 34% of their enrolled children (Exhibit 10).

Cohort 1

² https://www.atsdr.cdc.gov/placeandhealth/svi/index.html

³ 4 programs withdrew from the initiative prior to the completion of Year 2.

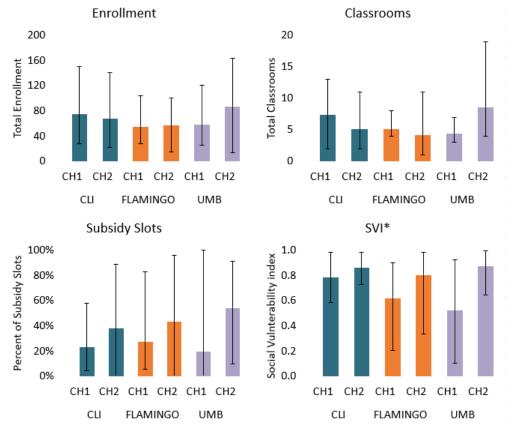


Exhibit 10. Enrollment, Classrooms, and Subsidy Slots, by ECSO and Cohort

*Columns represent averages; vertical lines display the range (minimum and maximum for any individual EEP). The SVI is the score calculated by EEC using the program zip code.

3.2 EEP leaders participating in the initiative have similar demographic characteristics as the larger state EEC leader workforce though are somewhat more diverse.

Almost all program leaders are female fluent English speakers, and 70% of them are White non-Hispanic individuals. Over half (68%) have at least a Bachelor's degree, and 96% have an Early Education and Care professional certification (most of which included a Director I or II certification). A small percentage (15%) were serving as lead/co-teachers during the year, either alone or in addition to their other roles, and nearly all of those were working with Flamingo (consistent with how Flamingo identified their leadership teams). The average years of experience as a lead Director or Administrator at any program is 10 years (range 0-34). Leaders working with Flamingo are less experienced, on average, than leaders in the programs of other ECSOs (average of 9 years as opposed to 11 in CLI and 12 in UMB). This profile of leaders is not unlike that of the statewide center director workforce, though less likely to be White and to have a college degree. According to a 2020 report detailing the Massachusetts early care and education workforce (Douglass et al.), 98.5% of leaders in Massachusetts identify as female, 90% are White, 5% are Hispanic, 64% have 15 years or fewer years of program administrator experience, and 73.4% have at least a bachelor's degree.

3.3 Participating educators reported more diverse racial and ethnic backgrounds than their leaders.

Most educators identify as female (95%) and White non-Hispanic individuals (67%) who primarily speak only English fluently. Less than half (41%) have at least a Bachelor's degree, though 69% of educators indicated that Early Childhood Education was the major field of study for them regardless of educational level. Nearly all (94%) have an Early Education and Care professional certification, though this differed by ECSO (94% in CLI, 88% in Flamingo, and 96% in UMB). Here again, the profile of educators in ECSO-supported programs is similar to the workforce in the state: 95.2% identify as a woman, 66% are White, 47% have five years of teaching experience or less, and 65% do not hold a bachelor's degree (Douglass et al., 2020).

4. What changes did Instructional Leaders report?

Highlights

- EEP leaders who participated in the initiative longer (Cohort 1) reported larger gains in confidence about their program management abilities and in the self-reported frequency of engagement in positive leadership practices.
- Leaders reported using quality improvement tools more often in the spring than in the fall.
- Leaders reported observing classrooms more intentionally in the spring than in the fall.

4.1 Leaders who had been in the initiative longer reported more confidence in their leadership skills.

At the beginning of the year, fewer leaders in Cohort 1 expressed confidence across nearly all measured facets than Cohort 2 leaders (Exhibit 11). This may reflect a phenomenon of "not knowing what you do not know" when leaders began their ECSO involvement. In the fall of this year, Cohort 1 leaders had already been a part of the initiative for several months. It is possible that they had more self-awareness at that point than did Cohort 2 leaders because of their exposure to the ECSO supports and training. In the spring, Cohort 1 leaders frequently reported higher levels of confidence in their abilities to manage their program effectively, recruit/maintain qualified staff, collect/review data, and otherwise support their educators in the spring than they did in the previous fall. We see the reverse pattern for Cohort 2 leaders who were less likely to have confidence in the spring than they had in the fall, which might suggest that, as they became involved in the initiative, they learned more about what was actually involved in aspects like review of observation data and revision of planning goals and thus rated their confidence in their ability to engage in those activities lower than they had previously; in other words, they realized in the spring that they actually had more room for improvement than they initially might have thought.

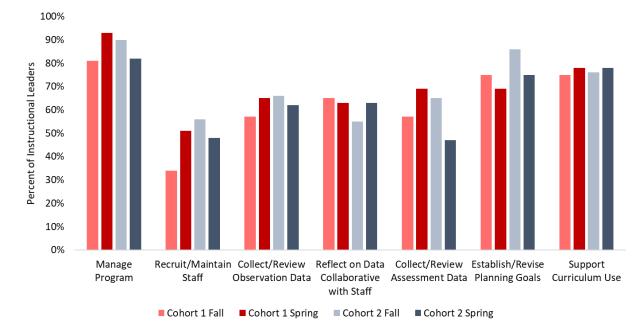


Exhibit 11. Leader Confidence Change by Cohort

Qualitatively, several leaders mentioned gaining confidence – confidence coaching, confidence in their role and how they engage staff, confidence and comfort sitting down and communicating with staff, confidence supporting a particular curriculum use, etc.

Illustrative Quotes from Program Leaders

- "I feel so much more confident! My involvement in the ECSO initiative has taught me so many new skills and has had me look at my program in a completely different light! I have more confidence in talking to my teachers, planning staff meetings that are meaningful and helpful for my staff, and just overall in my leadership skills."
- "I feel very confident in my leadership abilities- The ECSO has provided me tools to work with more focus on how to strengthen weaknesses, better time management and involve as many staff as we possibly can."
- "At the beginning of the ECSO I was feeling overwhelmed and stressed. I was not confident that I was going to be able to facilitate any work sessions and get staff on board. As the ECSO progressed I began to gain confidence. I have facilitated a few work sessions successfully. Following the protocol is extremely helpful. I now feel excited and confident facilitating the work sessions. Being able to collaborate with other centers is crucial in gaining confidence and learning from each other is priceless."

4.2 Leaders who had been in the initiative longer reported bigger increases in how often they engaged in positive leadership practices.

The Preschool Instructional Leadership Survey (PILS; Horsley & Fong, 2017) measures the frequency with which leaders engage in various leadership practices including observing instruction in classrooms, discussing Early Learning Standards with educators, spending time helping educators understand the

value of professional standards, etc. Seventeen items are measured on a scale from 1 (Never) to 5 (Every Day). The average leader score increased from fall to spring. There was a slightly larger increase in Cohort 1 than in Cohort 2 (1.9 to 2.5 in Cohort 1, 2.1 to 2.4 in Cohort 2), and certain ECSO/cohort groups had larger increases than others (Exhibit 12). The largest increases from fall to spring in leaders ever engaging in these practices were for the provision of on-site training opportunities for teachers to improve instructional practice, using the language and/or concepts of CLASS domains with pre-k teachers, and sharing images of high quality practices with teachers.

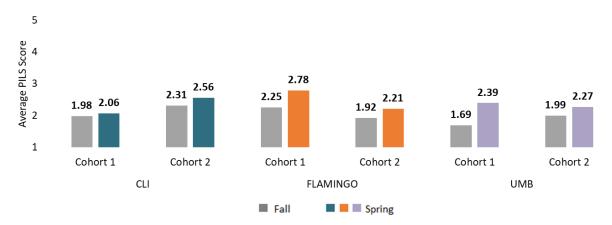
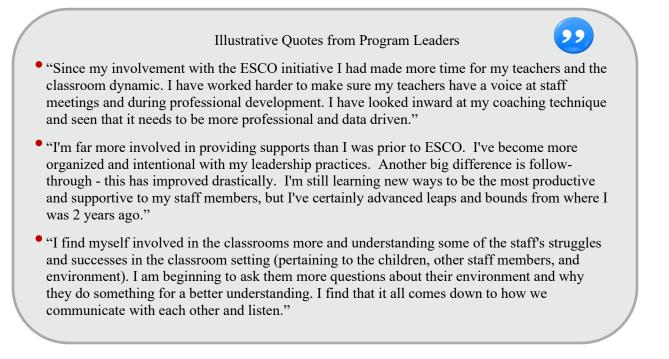


Exhibit 12. Leadership Practice Average Score, by ECSO and Cohort

Qualitatively, many leaders described a better connection between 'the office' and the classrooms, being able to coach more rather than supervise so much, effectively run staff meetings, delegate appropriately, establish shared voices, etc. Notably, several leaders mentioned that, although they have improved their practices, staff turnover and being short-staffed prohibits them from making as many changes as they would like.

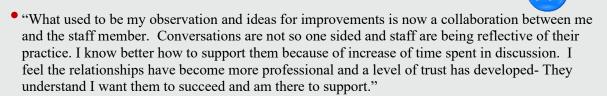


4.3 Leaders reported using Continuous Quality Improvement tools more often than they had previously.

Self-reported leader use of Continuous Quality Improvement (CQI) tools increased from the fall to the spring, particularly the use of Plan-Do-Check-Act (PDCA) cycles (39% of leaders said that they used these in the fall, and 53% in the spring), data visualization/graphics (45% in the fall, 57% in the spring), statistical analysis (52% in the fall, 65% in the spring), and protocols for Professional Learning Communities (PLCs; 48% in the fall, 89% in the spring). Protocols for PLCs was the tool reported as being most effective by leaders in the spring (89% said they were at least somewhat effective); over 70% found brainstorming, statistical analysis, and focused teaching at least somewhat effective. Leaders found PDCA cycles to be the least effective tool (52% of leaders in the spring found them at least somewhat effective).

Qualitatively, one leader talked about how the director has changed staff meetings dramatically and helped staff take a closer look at what they love about their program and what they want it to look like in the future, including reflecting on classroom quality observation feedback. Other leaders described their growing confidence in using/reviewing/presenting data themselves and with staff (as described in section 4.1).

Illustrative Quotes from Program Leaders



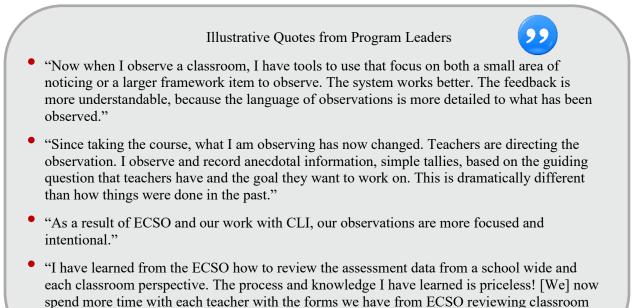
• "I have learned from the ECSO how to review the assessment data from a school wide and each classroom perspective. The process and knowledge I have learned is priceless! [We] now spend more time with each teacher with the forms we have from ECSO reviewing classroom and [child] goals and goals for the educators."

4.4 **Program leaders reported observing more often, and more intentionally, in their classrooms.**

In the fall, 10% of Cohort 1 leaders and 13% of Cohort 2 leaders never observed in their classrooms; that decreased to under 5% in both cohorts in the spring who never observed their educators in practice. Though leaders in CLI in both cohorts already observed classrooms at least once or twice per month in the fall, we saw marked increases to this percentage in Flamingo and UMB, on average increasing from 90% to 97% in Cohort 1 and 88% to 96% in Cohort 2. Leaders spend a lot more time observing in classrooms than they did before ECSO involvement, and that has increased from fall to spring. Over 60% of Cohort 1 leaders and over 40% of Cohort 2 leaders say they spend more time observing in classrooms now than they did prior to ECSO involvement, though Cohort 2 leaders in Flamingo and in both cohorts of UMB were much less likely to say this was true.

In agreement with Instructional Leaders, educators reported similar trends. Eighty percent of educators reported that someone comes into their classroom to observe them, and percentages generally increased from fall to spring (though increases were more likely with Cohort 2 educators). Nearly all CLI educators in the spring reported being observed; in Flamingo and UMB, the average was closer to 75%.

Qualitatively, leaders described using a more focused, collaborative, and productive process for observing in classrooms. Leaders also described an effort to seek out unobtrusive locations from which to observe, which can be important to understanding typical interactions in the classroom.



and child goals and goals for the educators."

5. What changes did Educators report in practices and experiences?

Highlights

- More educators reported receiving group feedback from observations and having planning time during the workday in the spring than in the fall.
- Educators reported no growth from fall to spring in the support they received on use of child screenings/assessments, their confidence in using a curriculum, or their plans to continue working at their program.
- Educators who had more experience with the initiative felt more respected by program leadership and more positively toward collaboration with leaders.
- Classroom quality scores improved significantly in toddler and pre-k classrooms, particularly in classrooms that had been a part of the initiative for longer.

5.1 Over 60% of educators in supported EEPs received training on key initiative strategies.

Relative to the fall, in the spring more educators had received training on collaborative data reflection, classroom observation data review/use, child assessment data review/use, and planning goal creation/revision (Exhibit 13). There was greater growth in Cohort 2 educators than Cohort 1, potentially reflecting the difference in timing of initiative involvement for the two groups. Indeed, more Cohort 1 educators reported having received these supports already in the fall than Cohort 2 educators. Several educators descriptively mentioned positive changes to their work environment, particularly around the effectiveness of meetings and growth in professional respect.

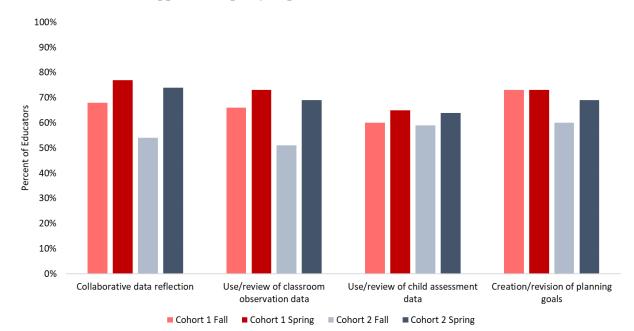


Exhibit 13. Educator Support Receipt, by Topic, ECSO, and Cohort

5.2 Educators reported receiving more feedback from classroom observations in group discussions.

Of the educators who reported that someone comes into their classroom to observe instruction (outside of licensing visits), 19% of Cohort 1 educators and 10% of Cohort 2 educators said in their spring survey responses that they were never provided feedback about the observation, which was more than had said that in the fall. However, there was an increase from fall to spring in the percent of educators who said that the person who observes them meets with them and other teachers as a group to discuss the observation, sometimes along with reports and/or individual meetings. This increased for Cohort 1 educators from 17% in the fall to 22% in the spring and for Cohort 2 educators from 9% in the fall to 21% in the spring.

5.3 More educators reported that planning time was built into their workday.

In the fall, more than half of the educators in ECSO-supported programs already reported having planning time built into their regular working hours (68% of Cohort 1 and 58% of Cohort 2), but those percentages increased from fall to spring, where 76% of Cohort 1 and 68% of Cohort 2 educators had planning time during their workday. Despite getting workday planning time, many educators are not provided with coverage during that time so that they can plan without supervising children in some way. Cohort 2 educators in CLI and in Flamingo were more likely to say they are provided coverage than Cohort 1 educators in those ECSOs (84% vs 50% in CLI; 87% vs. 38% in Flamingo); this was reversed in UMB (79% in Cohort 1 and 58% in Cohort 2).

5.4 Fewer Educators reported using child screenings/assessments in spring compared to fall, likely due to the timing of the surveys.

Nearly all educators reported in the *fall* that their program utilized child screenings/assessments, leaving little room for growth, though there was an increase of note in UMB Cohort 2, moving from 89% of educators in the fall to 100% of educators in the spring. But *use* of child assessments does not always mean that educators are taught how to use that information. In the fall, almost three-quarters of educators

had received support on a specific screener/assessment tool that they used in their classroom; these percentages fell by the spring, particularly for Cohort 1, which may be reflective of the heightened practice of administering screeners/assessments in the beginning of the year rather than the end. Educators were more likely to receive supports on *any* screener/assessment tool that they might not actually use than they were to receive support on their classroom-specific tools.

Spring survey results indicate that almost half of educators have some kind of group meeting with other teachers and/or program leadership to discuss the results of child screenings/assessments, though this was less common in CLI and with Cohort 1 educators in general. Approximately 70% use the results to inform their planning, though again this is less common with Cohort 1.

5.5 Educator reported less confidence in using a curriculum in spring compared to fall.

On average, fewer educators expressed confidence in the spring in the curricula that they used and/or had been trained on during the year than did in the fall, and this pattern held true for nearly all ECSO and cohort groups. Eighty percent of educators said that they were quite or extremely confident in using the curricula that were part of their instructional plans and/or that they had received recent training on, compared to 73% in the spring. Much like the theory that is described under Section 4.1, it might be the case that as educators receive new supports for specific curricula or for the use of curricula in general, they realize they actually had more room for improvement than they initially considered.

5.6 Educators sustained high self-reported levels of job satisfaction and selfefficacy in fall and spring.

Educator job satisfaction and self-efficacy did not change meaningfully from fall to spring, though both were fairly high already at the beginning of the year. In the fall, 90% of Cohort 1 educators and 95% of Cohort 2 educators felt that they were making significant educational differences in the lives of their students, and this moved to 95% for Cohort 1 and 90% for Cohort 2 in the spring. On a six-point scale from 1 to 6 with 6 representing the highest response, the average self-efficacy rating across 12 survey items in the fall was 4.6 for both cohorts, and 4.9 for Cohort 1 and 4.5 for Cohort 2 in the spring. Similarly, there was little change in educators' plans to stay with or leave their current program or the profession of teaching in general.

5.7 Educators who had been in the initiative longer reported more gains in feeling respected and enjoying collaboration.

Classrooms that are well-managed, have established routines, and have minimized conflicts can have increased time for learning opportunities (Adelman & Taylor, 2005). When children feel safe, respected,

	Illustrative Quotes from Educators	
•	"Staff meetings are more effective, and we were able to purchase MUCH needed supplies and replace outdated learning materials."	
•	"I feel empowered as a teacher to say this is what I need to be successful, and see this is what happens when I don't have it. I feel respected as a teacher."	
•	"I am more aware of my day-to-day interactions with children and also how I am preparing them for their future education. I have changed how I interact with children and families, and strive to keep improving and being a better teacher for my students."	

and understood, they may be more likely to take "academic risks," such as sharing their own ideas, trying new activities, and engaging with new content (Djigic & Stojilijkovic, 2011; Miller & Pedro, 2006). Though job satisfaction and self-efficacy did not change during the course of the year, Cohort 1 educators were much more likely to feel respected by their program leaders in the spring than in the fall, as well as to enjoy collaborating with their leaders. This trend was not evident for Cohort 2 educators, though that group began the year more satisfied than did Cohort 1. Further, educators often mentioned positive changes in their interactions with children, noting that the educators themselves now feel more positive and less stressed than earlier in the year. Notably, some research conducted in schools suggests that it could take three to five years to improve school-wide climate (Kane et al., 2016).

5.8 Educators reported no change in their plans to continue working at their program or in the field from fall to spring.

Before the COVID-19 pandemic, it has been reported that child care educators left programs at very high rates, and the pandemic is thought to worsen that pattern (Bassok et al., 2021). Similar to job satisfaction and self-efficacy, there was no evidence of substantial changes in the second year of the ECSO initiative to the way educators felt about staying in their program and/or in their career. Cohort 2 educators are slightly more likely to plan on leaving their program or teaching in general now than in the fall; there was no real change for educators in Cohort 1. There was a high correlation between plans to remain in teaching and plans to remain at the program (.682 in the fall, .772 in the spring). Notably, of the 209 ECSO-supported classrooms that observers visited at baseline and follow-up (described more in the following section), 78% had at least one staff member who was present at both timepoints. Qualitatively, most leaders in CLI say that they have not had much issue with staff retention/turnover in general; however, leaders in Flamingo and UMB were more likely to report managerial and programmatic challenges related to teacher turnover.

Illustrative Quotes from Leaders



- "What has been affected, with a few folks leaving, is consistently having the extra coverage for protected out of class time for planning and collaboration during center hours."
- "I feel empowered as a teacher to say this is what I need to be successful, and see this is what happens when I don't have it. I feel respected as a teacher."
- "[Staff turnover] hits the reset button a little bit...trying to navigate catching up [staff] when they can." (in reference to recruitment taking priority over ECSO activities)

5.9 Classroom quality increased significantly in toddler and pre-k classrooms, particularly in classrooms that had been part of the initiative for longer.

Teacher-child interactions have been measured as an indicator of classroom functioning (Pianta, LaParo, & Hamre, 2008). The Classroom Assessment Scoring System®, currently the primary tool for observing classroom quality, assesses the quality of *interactions* in classrooms; the Pre-K CLASS (Pianta, LaParo, & Hamre) has three domains: Emotional Support, Classroom Organization, and Instructional Support. The Emotional Support domain can help identify teachers who engage in warm interactions with children, notice when students need support or differential instruction and provide individualized support, and who show respect for and interest in student perspectives. Teachers scoring high in this domain typically focus

highly on the learning needs present in their classrooms. The Classroom Organization domain includes items surrounding routines, preparation for activities, and behavior management. Classrooms scoring high on this domain have minimized disruptions to learning and provide a variety of learning materials. It is thought that student engagement will be maximized in well-managed classrooms. Observers look for teacher behaviors that encourage the expansion of learning and understanding in the Instructional Support domain. It emphasizes the importance of language development, connections with the real world, and higher order thinking. The Toddler CLASS (LaParo, Hamre, & Pianta, 2011) has two domains: Emotional and Behavioral Support, similar to the Emotional Support domain of the Pre-K CLASS, and Engaged Support for Learning, similar to the Instructional Support domain of the Pre-K CLASS. The Infant CLASS (Jamison et al. 2014) has a single overall total score, the Responsive Caregiving domain. All versions of the CLASS include dimensions that are scored on a 1-7 scale (with 7 representing the highest quality).

We looked at 209 classrooms that were observed both at baseline (either the end of the 2020-21 school vear or the beginning of the 2021-22 school year) and again at a follow-up period (the end of the 2021-22 school year). On average, total CLASS scores, regardless of age/version, increased by 0.22 points from fall to spring (4.73 in the fall to 4.95 in the spring), a statistically significant increase (Exhibit 14). Infant scores decreased slightly, on average, from fall to spring, though both cohorts in Flamingo increased by an average of 0.44 to 0.64 points from fall (5.25 in Cohort 1, 4.91 in Cohort 2) to spring (5.69 in Cohort 1, 5.55 in Cohort 2). There was a statistically significant increase in overall Toddler CLASS scores from fall to spring (4.50 to 4.90). This increase was evenly distributed across both toddler CLASS domains. Pre-k quality also increased significantly. The average spring score (4.86) was 0.25 points higher than the average fall score (4.61). This increase was driven entirely by gains in the Emotional Support and Classroom Organization domains. However, Instructional Support quality increased significantly in Cohort 1 programs in CLI (1.45-point increase, from 2.22 to 3.67) and in UMB (0.63-point increase, from 2.82 to 3.45). Nearly across the board, we saw greater average improvements in CLASS scores for Cohort 1 than for Cohort 2 classrooms. It is worth noting that some of the classrooms had different educator staff at the two observed time points, as described in Section 5.8. However, the pattern of findings was the same when the sample of 209 classrooms was limited to the subset of classrooms where there was at least some staff stability across the time points (i.e., at least one educator was the same at baseline and follow-up).

A similar study in Massachusetts, the Massachusetts Preschool Expansion Grant (PEG) Evaluation, assessed the longitudinal classroom quality of 47 PEG-funded classrooms in five communities across Massachusetts. Average scores from those classrooms in the 2015-16 year were comparable to those represented in the ECSO study (5.2 in Classroom Organization, 5.7 on Emotional Support, and 3.2 on Instructional Support). In the PEG study, average classroom quality improved significantly across the four years of the program (2015-16 through 2018-19) in both the Classroom Organization and Emotional Support domains but not for Instructional Support, which saw little to no change over the life of the program (Checkoway et al., 2019).

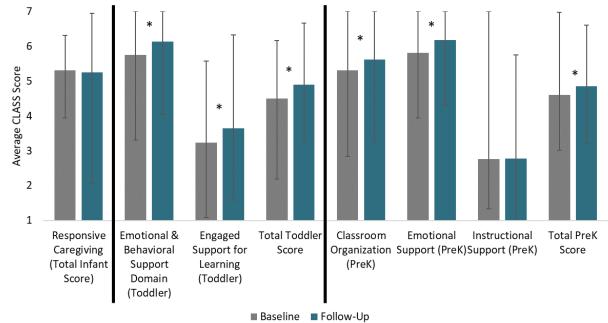


Exhibit 14. Average Classroom Quality as Measured by the CLASS®, Baseline and Follow-Up

Note. Columns represent averages; vertical lines display the range (minimum and maximum for any individual classroom). *Statistically significant growth (p<.05)

It is important to note that gains or decreases in CLASS scores did not appear to be related to staff stability; the same trends were evident in classrooms where at least one staff member was present at baseline and again at follow-up as were all classrooms regardless of staff.

From baseline to follow-up, educators reported better knowledge of early childhood development and of how to support children's learning because of ECSO participation. Further, educators reported to have higher-quality interactions with children because of the ECSO initiative. Over two-thirds (67%) of educators said that they have improved their knowledge of early childhood development and how best to support children's learning because of ECSO. This was much higher in Cohort 2 than Cohort 1 (74% vs. 61%), and much higher in CLI (Cohort 1 95%, CH2 96%) than Flamingo (Cohort 1 58%, Cohort 2 50%) or UMB (Cohort 1 45%, Cohort 2 73%). Similarly, 68% of educators said that they have higher-quality interactions with children because of ECSO. This was much higher in Cohort 2 than Cohort 1 (76% vs. 61%), and much higher in CLI (Cohort 1 89%, Cohort 2 100%) than Flamingo (Cohort 1 67%, Cohort 2 54%) or UMB (Cohort 1 45%, Cohort 2 71%). Qualitatively, educators frequently described asking more and different questions of their children and facilitating more positive interactions with them.

6. What was the perspective of participants on the initiative?

Highlights

- Instructional Leaders felt more positively about the ECSO initiative than educators, and most said that participating in the ECSO initiative allowed them to view themselves more as leaders than they had before.
- Educators had mixed reactions to participating in the initiative, although those involved with models that offered direct educator coaching viewed the initiative more positively.

6.1 Leaders were extremely positive about their participation in the initiative and planned to continue using the strategies they have learned.

Across ECSOs and cohorts, most Instructional Leaders (81%) attributed improvements to their identity as leaders to participation in ECSO, though this was lowest in Flamingo Cohort 2 (60% expressed this feeling). Similarly, 85% of leaders said their understanding of and commitment to the process of supporting continuous improvement was a result of participating in the ECSO initiative. While Cohort 2 leaders at Flamingo were least likely to respond that their understanding and commitment to CQI was a result of ECSO, 70% still answered positively. In CLI and UMB, this was true for over 75% of the leaders surveyed. Most were likely to report that participating improved their understanding of the importance of implementing a curriculum with fidelity (76%), their ability to put structures into place that support educator practice (74%), and their engagement with educators in job-embedded professional learning (74%). However, a smaller group said that the ECSO initiative helped them support their educators to integrate scaffolded curriculum with fidelity (66%), integrate child assessment data to inform or improve their instruction (64%), or manage time to effectively deliver professional development to staff (60%). Nearly all leaders that responded said that they plan to continue all of the strategies that ECSO has taught them, often expressing that the initiative was a positive experience.

Illustrative Quotes from Leaders



- "This has changed my career/love of my job!!"
- "I think it has been a great experience and something that I never would have done but I am so glad I did!"
- "Sustain, sustain, sustain. These practices and strategies are the best."
- "We don't want it to end but are VERY appreciative and thankful for ECSO!"

Several leaders were more specific about the practices they would continue to apply. Of the practices that were mentioned, leaders were especially excited to sustain the use of protocols and the curriculum (CLI). Leaders also indicated that they would continue to include more planning time for educators, and that they intend to increase collaboration with staff through brainstorming sessions, dialogue meetings, and focus teaching lessons.

Of note, 20% of leaders mentioned that being short-staffed affected their ability to make changes. (Respondents often conceptualized being short-staffed and having high staff turnover separately, indicating a potential challenge around hiring enough staff rather than teacher attrition. Leaders talked about low turnover but needing to hire more support for their teachers and being unable to do that in the current market.)

6.2 Educator feelings about the initiative were mixed, but more positive when they received direct coaching.

Overall, educators were less likely to attribute improvements to practice to the ECSO initiative. However, most CLI educators reported improvements to their practice. Nearly all (95%) of Cohort 1 educators and 89% of Cohort 2 educators in CLI reported that they improved their use of effective teaching and care practices as a result of ECSO participation. Further, most CLI educators (79% in Cohort 1; 89% in Cohort 2) felt more supported by their leader or program directors as a result of ECSO participation. In Flamingo and UMB, 46-65% of educators reported feeling more supported by their leader or program directors as a result of ECSO participation. Educators from UMB and Flamingo were also slightly less likely to indicate that they would continue the practices learned in their participation in ECSO compared to educators in CLI. Qualitatively, direct teacher coaching (CLI) was often mentioned by educators in infant and toddler classrooms across ECSOs felt that the initiative was not as applicable to them as it was for teachers in pre-k classrooms.

7. Next Steps

Each of the ECSOs, in partnership with New Profit, EEC, the Harvard Center on the Developing Child, and Abt, is engaged in a process of reflection on Year 2 findings and adjusting their program models as they prepare to enroll a third cohort of EEPs for the 2022-23 school year.

In the coming year, Abt will launch a quasiexperimental design study to examine program impact on outcomes, in addition continuing the implementation study. A key consideration that will inform aspects of that investigation is the value of organizational climate, and positive climate shifts, to educator outcomes like job satisfaction and feelings of professionalism, as well as classroom quality improvements and positive shifts that can impact child outcomes.

Limitations of Descriptive Findings

The descriptive findings in this report must be interpreted cautiously. Although we report improvement over time on key leader, educator, and program outcomes, without a comparison group we cannot attribute these findings with certainty to the initiative.

Using the findings from the evaluation, EEC is assessing the feasibility of scaling the ECSO initiative across the state. A key consideration is whether the initiative not only has a positive impact on leader and educator practice but also has a positive effect on the early education workforce pathways and educator retention in Massachusetts. The impact study will help to answer this question and inform decision making about next steps for the ECSO initiative.

Appendix A: Data Collection Details

ECSO Supports Data Dashboard

ECSOs recorded the hours of support they provided to instructional leaders/leadership teams going back to July 2021 in monthly worksheets supplied to Abt. Each support 'session' was recorded in the worksheet and categorized by *format* and *topic*, among other details. Format and topic lists are provided in Exhibit A-1.

Exhibit A-1. ECSO Support Data Format and Topic Choices

Format of Supports	Topic of Supports
Training/Professional Development/Workshops	Collection, Reflection, & Use of Data
Coaching/Technical Assistance	Curriculum Selection & Implementation
Community of Practice/Professional Learning Community	Educator Knowledge
Online Courses	Leader Identity
Other (describe in 'Notes')	Program Climate
	Program Management Structures (JEPL Building Blocks)
	Providing JEPL
	Other (describe in 'Notes')

Instructional Leader Survey

In October/November 2021 and again in May/June 2022, Abt administered an online survey to EEP leaders. The sample and response rates are described in Exhibits A-2 and A-3. Note that 67 leaders responded to both the fall *and* the spring survey.

Exhibit A-2. ECSO EEP Leader Survey Sample: Fall

ECSO	Number of Programs	Number of Programs Responding	Program Level Response Rate	Number of Leaders	Number of Leaders Responding	Leader Level Response Rate
CLI						
Cohort 1	7	7	100%	13	9	69%
Cohort 2	10	9	90%	21	15	71%
Total	17	16	94%	34	24	71%
Flamingo						
Cohort 1	10	9	90%	28	17	61%
Cohort 2	10	9	90%	27	14	52%
Total	20	18	90%	55	31	56%
UMB						
Cohort 1	11	10	91%	16	11	69%
Cohort 2	7	7	100%	15	10	67%
Total	18	17	94%	31	21	68%
TOTAL						
Cohort 1	28	26	93%	57	37	65%
Cohort 2	27	25	93%	63	39	62%
Total	55	51	93%	120	76	63%

ECSO	Number of Programs	Number of Programs Responding	Program Level Response Rate	Number of Leaders	Number of Leaders Responding	Leader Level Response Rate
CLI						
Cohort 1	7	4	57%	14	7	50%
Cohort 2	9	8	89%	18	14	78%
Total	16	12	75%	32	21	71%
Flamingo						
Cohort 1	9	7	78%	20	10	50%
Cohort 2	9	7	78%	23	10	43%
Total	18	14	78%	43	20	47%
UMB						
Cohort 1	11	7	64%	15	10	67%
Cohort 2	6	5	88%	13	8	62%
Total	17	12	71%	28	18	64%
TOTAL						
Cohort 1	27	18	67%	49	27	55%
Cohort 2	24	20	88%	54	32	59%
Total	51	38	75%	103	59	57%

Exhibit A-3. ECSO EEP Leader Survey Sample: Spring

Educator Survey

In November/December 2021 and again in May/June 2022, Abt administered an online survey to fulltime lead/co-educators at ECSO-supported EEPs. Each educator received a \$25 electronic gift card for completing the survey. The sample and response rates are described in Exhibits A-4 and A-5. Note that 102 educators responded to both the fall *and* the spring survey.

ECSO	Number of Programs	Number of Programs Responding	Program Level Response Rate	Number of Educators	Number of Educators Responding	Educator Level Response Rate
CLI						
Cohort 1	7	6	86%	54	26	48%
Cohort 2	10	8	80%	50	23	46%
Total	17	14	82%	104	49	47%
Flamingo						
Cohort 1	10	8	80%	55	23	42%
Cohort 2	10	7	70%	56	24	43%
Total	20	15	75%	111	47	42%
UMB						
Cohort 1	11	9	82%	83	59	71%
Cohort 2	7	6	86%	45	23	51%
Total	18	15	83%	128	82	64%
TOTAL						
Cohort 1	28	23	82%	192	108	56%
Cohort 2	27	21	78%	151	70	46%
Total	55	44	80%	343	178	52%

Exhibit A-4. ECSO EEP Educator Survey Sample: Fall

Exhibit A-5. ECSO EEP Educator Survey Sample: Spring

ECSO	Number of Programs	Number of Programs Responding	Program Level Response Rate	Number of Educators	Number of Educators Responding	Educator Level Response Rate
CLI						
Cohort 1	7	7	100%	70	27	39%
Cohort 2	9	7	78%	54	26	48%
Total	16	14	88%	124	53	43%
Flamingo						
Cohort 1	8	5	63%	65	13	20%
Cohort 2	8	7	88%	63	24	38%
Total	16	12	75%	128	37	29%
UMB						
Cohort 1	10	10	100%	106	43	41%
Cohort 2	5	5	100%	51	19	37%
Total	15	15	100%	157	62	39%
TOTAL						
Cohort 1	25	22	88%	241	83	34%
Cohort 2	22	19	86%	168	69	41%
Total	47	41	87%	409	152	37%

CLASS Data

Each ECSO conducted CLASS observations in EEPs at a time close to the start of the EEP's involvement in the ECSO initiative and at a follow-up period. Cohort 1 baseline observations were conducted either in the Spring or Fall of 2021, and Cohort 2 baseline observations were conducted in the Fall of 2021. All follow-up observations were conducted in the Spring of 2022. Numbers of observed classrooms and observed EEPs are provided in Exhibits A-6 and A-7.

ECSO	Number of Programs with Observations	Number of Infant Classrooms Observed	Number of Toddler Classrooms Observed	Number of Pre-K Classrooms Observed	Total Number of Classrooms Observed
CLI					
Cohort 1	7	13	19	21	53
Cohort 2	9	7	11	25	43
Total	16	20	30	46	96
Flamingo					
Cohort 1	10	9	16	25	50
Cohort 2	10	5	10	31	46
Total	20	14	26	56	96
UMB					
Cohort 1	11	8	14	26	48
Cohort 2	6	8	22	22	52
Total	17	16	36	48	100
TOTAL					
Cohort 1	28	30	49	72	151
Cohort 2	25	20	43	78	141
Total	53	50	92	150	292

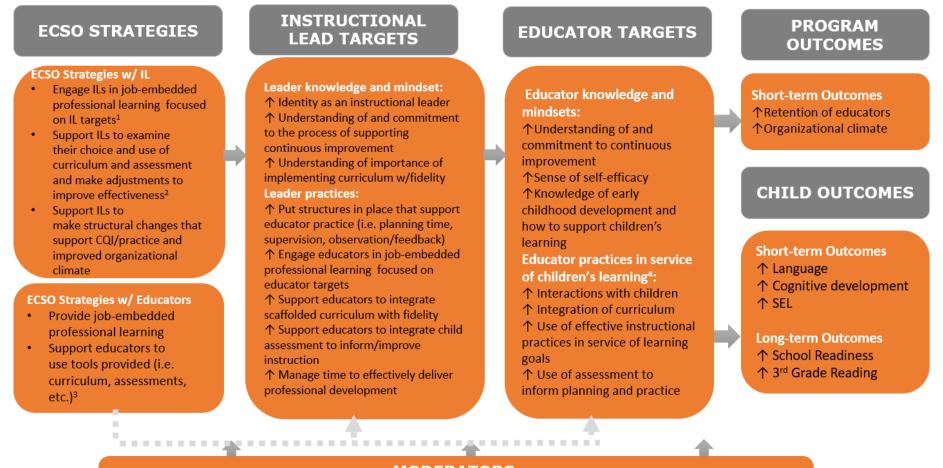
Exhibit A-6. CLASS Observation Data: Baseline (Spring or Fall 2021)

Exhibit A-7. CLASS Observation Data: Followup (Spring 2022)

ECSO	Number of Programs with Observations	Number of Infant Classrooms Observed	Number of Toddler Classrooms Observed	Number of Pre-K Classrooms Observed	Total Number of Classrooms Observed	
CLI						
Cohort 1	7	13	18	17	48	
Cohort 2	9	6	10	22	38	
Total	16	19	28	39	86	
Flamingo						
Cohort 1	9	4	14	11	29 29	
Cohort 2	9	5	6	18		
Total	18	9	20	29	58	
UMB						
Cohort 1	11	6	12	16	34	
Cohort 2	6	7	18	14	39	
Total	17	13	30	30	73	
TOTAL						
Cohort 1	27	23	44	44	111	
Cohort 2	24	18	34	54	106	
Total 51		41	78	98	217	

Appendix B: Initiative-Wide Theory of Change and Implementation Fidelity Matrix

Exhibit B-1. MA ECSO Initiative-Wide Theory of Change



MODERATORS Factors that could affect who benefits most and/or least ECSO / Instructional Lead / Educator / Child / Contextual

Source: Harvard Center on the Developing Child, version date 10/5/21.

ECSO/Key Component	Total # of Measurable Indicators	Unit of Implemen- tation	Number of Units in Which Component was Implemented	Number of Units in Which Fidelity of Component was Measured	Unit-Level Threshold for Fidelity of Implementation	Next Level and/or Sample-Level Threshold for Fidelity of Implementation	COHORT 1 Achieved Fidelity Score and Whether Program Met Sample-Level Threshold	COHORT 2 Achieved Fidelity Score and Whether Program Met Sample-Level Threshold
CLI								
1. Teacher Professional Development	2 (Teacher coaching, Teacher training)	Classroom s	57 Classrooms (Cohort 1) 47 Classrooms (Cohort 2)	57 Classrooms (Cohort 1) 42 Classrooms (Cohort 2)*	Classroom-level threshold score= 1-3 points	Program-level threshold score= 0-2 possible points Sample-level threshold score = <90% of the 16 FULLY implementing programs meet program-level threshold for both indicators	1 of the 7 Cohort 1 programs (14%) met program-level fidelity threshold Program fidelity = NO	1 of the 9 Cohort 2 programs (11%) met program-level fidelity threshold Program fidelity = NO
2. Leadership Training and Development	4 (Leader training, Leader coaching, Leader PLC meetings, Critical Friends site visits)	Programs	7 Programs (Cohort 1) 10 Programs (Cohort 2)	7 Programs (Cohort 1) 9 Programs (Cohort 2)*	Program-level threshold score= 0-9 possible points	Sample-level threshold score = 100% of the 16 FULLY implementing programs meet program-level threshold for all 4 indicators	4 of the 7 Cohort 1 programs (57%) met program-level fidelity threshold Program fidelity = NO	3 of the 9 Cohort 2 programs (44%) met program-level fidelity threshold Program fidelity = NO
3. Financial Incentives/ Materials	3 (Training stipends, Literacy materials,	Classroom s /Initiative	57 Classrooms (Cohort 1) 47 Classrooms (Cohort 2)	57 Classrooms (Cohort 1) 42 Classrooms (Cohort 2)*	Classroom-level threshold score= 0-2 possible points, Initiative-	Program level threshold score=0- 3 possible points Sample-level	7 of the 7 Cohort 1 programs (100%) met program-level fidelity threshold	9 of the 9 Cohort 2 programs (100%) met program-level fidelity threshold

Exhibit B-2. Implementation Fidelity Scores, by ECSO and Cohort

ECSO/Key Component	Total # of Measurable Indicators	Unit of Implemen- tation	Number of Units in Which Component was Implemented	Number of Units in Which Fidelity of Component was Measured	Unit-Level Threshold for Fidelity of Implementation	Next Level and/or Sample-Level Threshold for Fidelity of Implementation	COHORT 1 Achieved Fidelity Score and Whether Program Met Sample-Level Threshold	COHORT 2 Achieved Fidelity Score and Whether Program Met Sample-Level Threshold
	Curriculum materials)				level threshold score=0-1 points	threshold score = <100% of the 16 FULLY implementing programs meet program-level threshold for all 3 indicators	Program fidelity = YES	Program fidelity = YES
FLAMINGO								
1. Community of Practice Sessions	3 (Leader-led CoP sessions with educators, CoP sessions with leaders, CoP session frequency)	Programs and Implementa tion Specialists	10 Programs (Cohort 1) 10 Programs (Cohort 2), 3 Specialists	9 Programs (Cohort 1)** 9 Programs (Cohort 2)**, 3 Specialists	Program-level threshold score=0- 2 points, Specialist threshold score=0- 1 point	Sample-level threshold score=89% of the 18 FULLY implementing programs and 89% of the Specialists meet program-level threshold	8 of the 9 Cohort 1 programs (89%) met program-level fidelity threshold Program fidelity = YES	8 of the 9 Cohort 2 programs (89%) met program-level fidelity threshold Program fidelity = YES
2. One-to-one Leader coaching	2* (Individualized coaching sessions, Coaching conversations fidelity (will be scored at a later date))	Programs and Implementa tion Specialists	10 Programs (Cohort 1) 10 Programs (Cohort 2)	9 Programs (Cohort 1)** 9 Programs (Cohort 2)**	Program-level threshold score=0- 1 point	Sample-level threshold score=90% of the 18 FULLY implementing programs meet program-level threshold	9 of the 9 Cohort 1 programs (100%) met program-level fidelity threshold Program fidelity = YES	9 of the 9 Cohort 2 programs (100%) met program-level fidelity threshold Program fidelity = YES
3. Leadership development course	2 (Access/ enrollment in	Programs	10 Programs (Cohort 1)	9 Programs (Cohort 1)**	Program-level threshold score=0- 2 points	Sample-level threshold score=100% of	9 of the 9 Cohort 1 programs (100%)	9 of the 9 Cohort 2 programs (100%)

	ECSO/Key Component	Total # of Measurable Indicators	Unit of Implemen- tation	Number of Units in Which Component was Implemented	Number of Units in Which Fidelity of Component was Measured	Unit-Level Threshold for Fidelity of Implementation	Next Level and/or Sample-Level Threshold for Fidelity of Implementation	COHORT 1 Achieved Fidelity Score and Whether Program Met Sample-Level Threshold	COHORT 2 Achieved Fidelity Score and Whether Program Met Sample-Level Threshold
		courses, mastery of courses)		10 Programs (Cohort 2)	9 Programs (Cohort 2)**		the 18 FULLY implementing programs are given course access and 90% of the 18 FULLY implementing programs meet program-level threshold for mastery	met program-level fidelity threshold Program fidelity = YES	met program-level fidelity threshold Program fidelity = YES
4.	System of data collection and analysis	2 (Classroom observation data report shared with program, Classroom observation data conversations with leaders)	Programs	10 Programs (Cohort 1) 10 Programs (Cohort 2)	9 Programs (Cohort 1)** 9 Programs (Cohort 2)**	Program-level threshold score=0- 2 points	Sample-level threshold score=60% of the 18 FULLY implementing programs got CLASS reports and 100% of that 60% meet program-level threshold for conversations	8 of the 9 Cohort 1 programs (89%) met program-level fidelity threshold Program fidelity = YES	9 of the 9 Cohort 2 programs (100%) met program-level fidelity threshold Program fidelity = YES
5.	Facilitation of Leader Coaching Certification	2 (Access/ enrollment in coursework, participation in coaching certification program (will	Programs	10 Programs (Cohort 1) 10 Programs (Cohort 2)	9 Programs (Cohort 1)** 9 Programs (Cohort 2)**	Program-level threshold score=0- 2 points	Sample-level threshold score=100% of the 18 FULLY implementing programs meet program-level	9 of the 9 Cohort 1 programs (100%) met program-level fidelity threshold Program fidelity = YES	9 of the 9 Cohort 2 programs (100%) met program-level fidelity threshold Program fidelity = YES

	ECSO/Key Component	Total # of Measurable Indicators	Unit of Implemen- tation	Number of Units in Which Component was Implemented	Number of Units in Which Fidelity of Component was Measured	Unit-Level Threshold for Fidelity of Implementation	Next Level and/or Sample-Level Threshold for Fidelity of Implementation	COHORT 1 Achieved Fidelity Score and Whether Program Met Sample-Level Threshold	COHORT 2 Achieved Fidelity Score and Whether Program Met Sample-Level Threshold
		be scored at a later date)					threshold for access		
6.	ECSO connection between programs and BPS-provided teacher training	3 (Specialists attend BPS PD, Specialists meet with BPS coaches, Specialists discuss BPS coaching during leader coaching sessions)	Implementa tion Specialists	2 Specialists	2 Specialists	Specialist-level threshold score=0- 3 points	Sample-level threshold score=100% of Specialists meet program-level threshold for completion	3 out of the 3 Cohort 1 specialists (100%) met program-level fidelity threshold Program fidelity = YES	3 out of the 3 Cohort 1 specialists (100%) met program-level fidelity threshold Program fidelity = YES
7.	Educator coursework	1 (Educator course information shared with program)	Programs	10 Programs (Cohort 1) 10 Programs (Cohort 2)	9 Programs (Cohort 1)** 9 Programs (Cohort 2)**	Program-level threshold score=0- 1 point	Sample-level threshold score=90% of the 18 FULLY implementing programs meet program-level threshold	9 of the 9 Cohort 1 programs (100%) met program-level fidelity threshold Program fidelity = YES	9 of the 9 Cohort 2 programs (100%) met program-level fidelity threshold Program fidelity = YES
U	MB								
Sı	Essentials 0-5 urvey Use aining	2 (Survey administration and report trainings, Work session	Programs	11 Programs (Cohort 1) 7 Programs (Cohort 2)	11 Programs (Cohort 1) 6 Programs (Cohort 2)***	Program-level threshold score= 0-2 possible points	Sample-level threshold score = <75% of the 17 FULLY implementing programs meet	5 of the 11 Cohort 1 programs (45%) met program-level fidelity threshold Program fidelity = NO	5 of the 6 Cohort 2 programs (83%) met program-level fidelity threshold Program fidelity = YES

ECSO/Key Component	Total # of Measurable Indicators	Unit of Implemen- tation	Number of Units in Which Component was Implemented	Number of Units in Which Fidelity of Component was Measured	Unit-Level Threshold for Fidelity of Implementation	Next Level and/or Sample-Level Threshold for Fidelity of Implementation	COHORT 1 Achieved Fidelity Score and Whether Program Met Sample-Level Threshold	COHORT 2 Achieved Fidelity Score and Whether Program Met Sample-Level Threshold
	delivery to leaders)					program-level threshold		
2. Survey Administration	2 (Educator participation, parent participation)	Programs	11 Programs (Cohort 1) 7 Programs (Cohort 2)	11 Programs (Cohort 1) 6 Programs (Cohort 2)***	Program-level threshold score= 0-2 possible points	Sample-level threshold score = <75% of the 17 FULLY implementing programs meet program-level threshold	11of the 11 Cohort 1 programs (100%) met program-level fidelity threshold Program fidelity = YES	6 of the 6 Cohort 2 programs (100%) met program-level fidelity threshold Program fidelity = YES
3. Coaching (TA)	1 (Coaching sessions for leaders)	Programs	11 Programs (Cohort 1) 7 Programs (Cohort 2)	11 Programs (Cohort 1) 6 Programs (Cohort 2)***	Program-level threshold score= 0-1 possible points	Sample-level threshold score = <75% of the 17 FULLY implementing programs meet program-level threshold	11of the 11 Cohort 1 programs (100%) met program-level fidelity threshold Program fidelity = YES	5 of the 6 Cohort 2 programs (83%) met program-level fidelity threshold Program fidelity = YES
4. Peer Learning Communities	1 (PLCs for leaders and coaches)	Programs	11 Programs (Cohort 1) 7 Programs (Cohort 2)	11 Programs (Cohort 1) 6 Programs (Cohort 2)***	Program-level threshold score= 0-1 possible points	Sample-level threshold score = <75% of the 17 FULLY implementing programs meet program-level threshold	8 of the 11 Cohort 1 programs (73%) met program-level fidelity threshold Program fidelity = YES	5 of the 6 Cohort 2 programs (83%) met program-level fidelity threshold Program fidelity = YES

*1 CLI program withdrew from the initiative in this cohort **1 Flamingo program withdrew from the initiative in this cohort ***1 UMB program withdrew from the initiative in this cohort

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