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Early Education Workforce Supports at Scale

How state-level data and research could
improve innovations and investments
in Massachusetts

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Big challenges call for bold solutions. But knowing how to tailor an initiative or channel an investment to achieve desired change is nearly impossible without a full understanding of the problem at hand. Such is the state of affairs for Massachusetts policymakers as they seek to build and support a vibrant and sustainable early care and education (ECE) workforce in the Commonwealth.

Recognizing the critical role and economic necessity of high-quality ECE, Massachusetts has made substantial investments in the development and retention of the ECE workforce in recent years. And while the state is working to monitor these efforts through additional data collection, we continue to lack foundational insights and a comprehensive understanding of the ECE workforce in Massachusetts. The persistence of these blind spots will undoubtedly constrain continued innovation and impact.

This white paper seeks to outline the opportunity and imperative of building data and research capacity at the state level specific to improving our understanding of the ECE workforce. This includes, for example, being able to describe the diverse backgrounds, needs, and experiences of early educators; who is (or is not) being served by current strategies and how well they are working; what barriers there are to successful implementation; and what additional investments are needed. Throughout this white paper we:

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1. **Take stock** of what is known nationally and in Massachusetts specifically pertaining to the ECE workforce,
2. **Detail activities** underway that hold promise for improved infrastructure or new insights, and
3. **Highlight what could be** with cross-agency collaboration and investment in data and research efforts.

A Stock-take

What we know about the importance of supporting the ECE workforce

National data sets and early efforts by a handful of states have helped shape our broad understanding of the context, drivers, and motivations within the ECE workforce. Significant effort has been made here in Massachusetts to bring forth similar insights, either through strategic surveys or just-in-time data collection, but the lack of systemic attention and sustained progress has limited the breadth and quality of these insights.

Massachusetts in a National Context

High-quality ECE is essential for the well-being of families and children, yet early educators are among the lowest-paid workers in the United States.³ As a result, early educators often face concerns about their well-being and economic security. In most states, including Massachusetts, the median hourly wage for an early educator does not meet the standard for a living wage.⁴

The bleak economic prospects for early educators contribute to high rates of turnover and workforce instability. For example, in a 2019 national survey of ECE providers, 33% of centers reported high turnover with more than 20% of their teachers leaving in the past year.⁵ The number of home-based educators declined by 25% between 2012 and 2019.⁶ Individual-level estimates show a similarly troubling picture. Estimates from the 2010 Current Population Survey show that 24% of individuals who were working in ECE in 2009 had left the industry entirely.⁷ In Massachusetts, 30% of center educator and 15% of family child care (FCC) educator respondents to a statewide survey in 2019 indicated they were “very or somewhat likely” to leave their job in the next 12 months.⁸

The COVID-19 pandemic exacerbated challenges in the ECE sector. National estimates indicate that at its lowest point during the pandemic in April 2020, the ECE workforce had shrunk by about a third compared to February 2020.^{9,10} Massachusetts was among the states with the sharpest declines, with estimates indicating the ECE workforce had shrunk by about half compared to February 2020.¹¹ Many ECE establishments had to adjust recruiting and hiring practices to fill vacancies.¹² To aid in filling staff vacancies, beginning in December 2021, the Massachusetts Department of Early Education and Care (EEC) implemented minimum hiring requirements in lieu of the previous certification process for educators to allow for flexibility in hiring staff.

From the outside in

National efforts to understand the ECE workforce

- **Early Childhood Workforce Index**—A periodic report produced by the Center for the Study of Child Care Employment that tracks progress and provides recommendations on state policies in support of the ECE workforce.
- **National Survey of Early Care and Education**—A nationally representative recurring survey of ECE providers, educators, and households with children under age 13.

More recent estimates indicate that the size of the workforce has rebounded since the pandemic. As of June 2024, the ECE workforce in Massachusetts had recovered to surpass its pre-pandemic level.¹³ It is unclear whether and to what extent that rebound consists of returning members of the workforce or new entrants.¹⁴ In Massachusetts, we have limited information about the post-pandemic composition of the workforce but have some data on providers. As of May 2024, about 30% of currently licensed providers opened after the onset of the COVID-19 pandemic. Most of the new providers are FCC providers: 75% of providers that opened after February 2020 are FCC providers; 35% of all current FCC providers opened after February 2020.¹⁵

Although the size of the workforce has recovered to at least match pre-pandemic levels, turnover continues to be high, and staff shortages persist. Wage growth in the ECE sector has been slower since 2020 compared to other occupations that attract similar types of workers.¹⁶ Even new providers who are drawn to ECE because of the potential to make a difference in the lives of families and children acknowledge the stress that comes from low compensation and other financial challenges.¹⁷ As of Spring 2023, Massachusetts center-based programs reported a turnover rate of 27%, with almost half of centers reporting at least one open position.¹⁸ As of Fall 2023, 30% of Massachusetts center-based programs reported they were unable to serve their full licensed capacity, and unfilled staff openings were one of the most frequently cited reasons.¹⁹

A model of what's possible **Massachusetts' investments** **in PK-12 workforce data and** **research**

Comprehensive investments in data infrastructure and research capacity at the Massachusetts Department of Elementary and Secondary Education over the last two decades enabled the state to mobilize quickly to document the shifts and impact of the pandemic on the PK-12 workforce, as well as rigorously evaluate the policy changes enacted to mitigate staffing shortages and vacancies.²⁰

For more information, see:

- [COVID-19 and the Composition of the Massachusetts Teacher Workforce](#)
- [Teacher Licensure and Workforce Quality: Insights from Emergency Licenses in Massachusetts](#)

“The absence of good data allows anecdote—and sometimes bias—to drive policy decisions. Without quality comprehensive data, it’s impossible to answer key policy questions, much less develop estimates of the level of public funding needed to recruit and retain a qualified ECE workforce.”

CENTER FOR THE STUDY OF CHILD CARE EMPLOYMENT, 2019²



How is Massachusetts supporting the ECE workforce?

Massachusetts has invested in a multi-pronged approach to improve early educators' experiences. The strategies are in different stages of implementation but reflect an effort to attend to different areas of need—developing a strong pipeline, providing opportunities to build important competencies and facilitate career progression, improving economic well-being, and enabling a supportive work environment.

- **Registered apprenticeships:** Models to recruit and support new educators to the field by providing compensated on-the-job training and mentorship towards earning a credential.
- **FCC pre-licensing support:** Supported workforce pathways for new FCCs that focus on the skills and capacity needed to be a high-quality educator and successful business owner.
- **ECE scholarships:** Funding to support educators in their pursuit and completion of associate's, bachelor's, and master's degrees in ECE and other related degrees.
- **Career pathways program:** Funding to 15 community colleges and the Urban College of Boston to provide access to higher education coursework and wraparound supports.
- **Professional development centers:** Regional centers that provide training, technical assistance, and coaching opportunities designed to build educator knowledge and skills.
- **StrongStart Learning Management System:** Online system that allows educators to access self-paced and instructor-led trainings that EEC develops and funds; provided in multiple languages and with interactive features.
- **Certification and credentialing system development:** Future system will support professionalization of the field through state-endorsed competencies, a clear career ladder for educators, and aligned salary scale.
- **Commonwealth Cares for Children (C3) grants:** Grants provided to ECE programs to facilitate ongoing and new investments in the workforce including increased compensation, benefits, and professional development.
- **Early Education and Care Staff Pilot Program:** Immediate access to child care financial assistance for income eligible staff working in licensed and funded ECE programs.
- **Early Childhood Support Organization:** Intensive support (including coaching and training) to program leaders and educators to strengthen their organizational climate, support the use of curriculum and child assessments in their program, and engage in continuous quality improvement.

As policies and strategies are implemented, it is crucial to build data and research capacity to examine their impacts and ensure that they are sufficient and equitable.

Who is in the workforce, and how are they doing? An incomplete picture

There are limitations in the data currently available to robustly document and understand fundamental facets of the ECE workforce in Massachusetts. One-time surveys of the workforce have highlighted important characteristics and experiences that could drive how workforce strategies are implemented.²¹ However, policy changes and new and ongoing investments affecting the ECE sector necessitate real-time and comprehensive data and rigorous evaluation as the composition of the workforce continues to evolve.

Massachusetts, like many other states, has some established data systems for collecting workforce data, but substantial gaps remain in the extent to which the data available capture the full spectrum of ECE settings and the level of information about characteristics, experiences and workforce dynamics.²² For example, EEC maintains a workforce registry, but it currently does not include all educators. Even among educators in the system, many records are incomplete (information is missing or not up-to-date). There are also limitations in the extent to which educator-level data can be linked to information about the programs where educators currently work or have previously worked. The registry also does not fully capture the range of workforce supports currently available or include important indicators about compensation, benefits, and educator well-being.²³

Policy changes and new and ongoing investments affecting the ECE sector necessitate real-time and comprehensive data and rigorous evaluation as the composition of the workforce continues to evolve.

For snapshots of the ECE workforce in Massachusetts, see:

- **The Massachusetts Early Education and Care Workforce Survey 2019** (Douglass et al., 2020). This report describes the state of the workforce (including educational backgrounds, experience, needs and professional aspirations) prior to the COVID-19 pandemic.
- **Strengthening the Foundation: A Profile of Early Childhood Educators in Boston and Beyond** (Patil et al., 2024). This report presents findings from an exploratory survey conducted in 2022. It focuses primarily on Boston-based providers.
- **Understanding ‘Post-Pandemic’ Family Child Care Providers: Survey of New Entrants and Those Who Left the Field** (Lucas et al., 2024). This study examines the experiences of family child care providers after the COVID-19 pandemic, including why they chose to enter and/or leave the field and what supports would be helpful.
- **An Economic Analysis of the Child Care and Early Education Market in Massachusetts** (Liebman, 2024). This paper describes the size of the early educator workforce and their wages. It also describes the types of jobs educators typically hold before and after entering the field and compares wages in the ECE sector with those other occupations.



EEC has also been able to collect data on educator turnover and wages through surveys of Commonwealth Cares for Children (C3) grantees, but these are reliant on administrator reports and do not allow us to distinguish between when educators leave their employer to work for another program and when educators leave the ECE sector entirely. Understanding this distinction has important policy implications.

Existing data from state agencies external to EEC could also provide insights about early educators. For example, a recent study used unemployment insurance wage data from Illinois to examine employment and wage history of early educators, as well as explore transitions between employers within the child care industry and into and out of the child care industry.²⁴ However, accessing these data for research purposes requires data-sharing agreements, coordination between agencies, and time and resources from agency staff. In Massachusetts, state law restricts the ability of the Department of Unemployment Assistance to share data with other state agencies.²⁵

A model of what's possible

Examining wages and employment trajectories of the ECE workforce using Unemployment Insurance data

Using quarterly wage data reported by employers to support the Unemployment Insurance (UI) program in Illinois, researchers were able to examine: (1) how much ECE workers were getting paid and how wages changed between 2006 to 2021; (2) what industries ECE workers come from and what industries they transfer to when leave the ECE industry; and (3) how long ECE workers stay in their jobs. Using the UI data offered several advantages: First, by capitalizing on an existing data source, it limited data collection burden for both ECE providers and state agencies. Second, individual-level data provided a greater level of detail about how much wages and turnover varies compared to averages.

For more information, see:

[**What Were the Wages and Employment Trajectories of Child Care Workers in Illinois Over the Last Two Decades?**](#)²⁶

How enhanced data and research capacity can strengthen workforce supports

Moving from the data we have to the data we need

Policy changes and new and ongoing investments affecting the ECE sector necessitate current and comprehensive data as the composition and needs of the workforce continue to evolve. Although Massachusetts is making headway in building data and research capacity, there is more work to do to move from the data we have to the data we need to be able to answer questions such as:

- What are the current competencies and skills of the workforce?
- Who is accessing the different workforce supports that are available?
- Are early educators getting the support they need?
- How are various workforce support and development strategies affecting the recruitment, retention, and career progression of early educators?
- Is there a robust pipeline to ensure the supply of educators aligns with demand?
- What policies and practices promote successful recruitment and retention of educators with different qualifications and backgrounds?
- How can new entrants to the workforce be supported to ensure their development and advancement?
- How do staffing levels and turnover patterns differ by program characteristics such as geographic region, capacity and enrollment, and funding received?

Massachusetts has taken several steps toward strengthening data and research capacity:

- The [Massachusetts Education-to-Career \(E2C\) Research and Data Hub](#) was established to bring together data from multiple state agencies and provide various audiences with tools to examine how children progress from ECE, through K-12 education, and into higher education and the workforce.
- The governor established an [Inter-Agency Early Education & Child Care Task Force](#), which includes “identifying strategies to recruit, train, upskill, and retain members of the early education and child care workforce” and “assessing how better coordination among state agencies could support families in accessing early education and child care” among its goals.
- EEC has established a new division that provides strategic data analytics, research, and policy development across the agency. This division has led efforts to develop the agency’s first [research agenda](#) and [key performance indicators](#).
- The FY25 state budget establishes a [Data Advisory Commission](#) to “make recommendations to improve the use of state, provider and program-level data related to the cost, quality, and utilization of early education and care services.”
- EEC is also in the process of developing a new, more integrated educator registry.



Building capacity to answer these questions means investing in resources not just for the collection of data, but also for ongoing data management and analysis. One way that states have bolstered their efforts in this regard is by fostering partnerships not just with other state agencies but also with universities, research institutions, foundations, and other state and local organizations.²⁷

Finally, it is important to ensure that data collected are useful and relevant, and that they can be used and shared in a timely way to inform decisions. This means engaging providers and educators themselves to understand challenges that they face in accessing data systems and keeping their records updated, and to discuss and gather their insights about how data and research efforts can better promote their success and improve their experiences.

A model of what's possible

The Study of Early Education through Partnerships

Faced with fragmented ECE systems and limited insights to guide intervention and investments, executive leadership within Louisiana (2012) and Virginia (2018) turned to a research-practice partnership model to address some of the data and research gaps they were navigating. Through long-standing relationships with Dr. Daphna Bassok at the University of Virginia, both states have developed a robust understanding of their ECE sector and have established a strong foundation for rigorous evaluation and experimentation, particularly in testing and assessing innovations impacting the ECE workforce.

For more about these partnerships, see: [Study of Early Education through Partnerships](#)

ENDNOTES

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