Promoting Workforce Development to Improve Early Childhood Care and Education

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This brief provides an overview of evidence-based practices and policies that state leaders can use to support meaningful workforce development practices, which ultimately improve early childhood program quality and promote positive child outcomes. Additionally, the brief discusses potential implications of the COVID-19 pandemic on state leaders’ options for influencing workforce development at the state and program levels.

The State of the Early Childhood Workforce

Ideally the early childhood care and education (ECCE) workforce would reflect the races and ethnicities of the children, families, and communities they serve. While the ECCE workforce is racially and ethnically diverse, there are racial disparities in educational attainment and wages across ECCE settings. The ECCE workforce currently comprises about 2 million racially diverse adults who work in centers and homes and care for approximately 10 million children ages birth through 5 years (National Survey of Early Care and Education [NSECE], 2021a, 2021b). As of 2012, 14.5% of ECCE professionals identified as Hispanic; 15.5% identified as non-Hispanic Black; 63.5% identified as non-Hispanic White; and 5.5% identified as non-Hispanic Asian, American Indian or Alaskan Native, Native Hawaiian or other Pacific Islander, Other, or Multi-Race1 (Paschall et al., 2020).

Although strides have been made to increase the educational attainment, wages, and benefits of the ECCE workforce, significant gaps remain. Federal and state policymakers have increased professional requirements (e.g., minimum education levels for some programs and annual training) and provided educational supports (e.g., scholarships), yet only 52.6% of center-based professionals and 34% of listed home-based professionals have earned an associate’s degree or higher (NSECE, 2021a, 2021b). In addition, low wages are a leading concern for recruitment and retention. As of May 2021, the national median hourly wage for ECCE professionals was $13.22, and the median annual wage was $27,490 (U.S. Bureau of Labor Statistics, 2022b). ECCE professionals also face inadequate employee benefits. In 2018, only 15% of ECCE professionals received health insurance through their employers, compared to an average of nearly 50% across all other occupations (Gould, 2015), and only about 10% had a workplace retirement plan (Whitebook, Hankey et al., 2018).

1 These racial and ethnic categories were combined due to small sample size and to avoid disclosure in the public use dataset.
While these issues impact the entire ECCE workforce, they disproportionately affect staff of color. Black ECCE professionals are less likely than educators of other races and ethnicities to work in centers that offer nonwage benefits (Caven et al., 2021). After controlling for educational attainment, setting type, and age of children served, one study found Black ECCE professionals earned an average of $0.84 for every dollar that White ECCE professionals earned (Ullrich et al., 2016). Moreover, Black professionals working with infants and toddlers earned $0.77 less per hour than infant-toddler professionals of other races and ethnicities, and this wage deficit increased to $1.77 per hour for Black professionals working with preschool age children (Austin et al., 2019).

The COVID-19 pandemic exacerbated many of these existing challenges and created new difficulties for state leaders seeking to implement evidence-based strategies to promote workforce development and ultimately improve child outcomes. As of May 2022, the ECCE workforce was only 88% as large as it had been in February 2020, before the start of the pandemic (U.S. Bureau of Labor Statistics, 2022a). Several pandemic-related factors may account for the smaller ECCE workforce. An early report during the pandemic indicated the March 2020 shutdown increased ECCE professionals’ emotional and financial stress and negatively impacted their overall health (Swigonski et al., 2021). Nationally, 42% of ECCE professionals took on debt by using personal credit cards to purchase supplies, and 39% tried to meet families’ needs by dipping into their own personal savings accounts (National Association for the Education of Young Children [NAEYC], 2020). Additionally, 49% of family child care professionals reported they were not able to pay themselves during the pandemic because of reduced enrollment, and 20% of the ECCE professionals surveyed reported missing a rent or mortgage payment (McLean et al., 2021).

Other ongoing challenges included staffing shortages due to high turnover rates and difficulty retaining and recruiting qualified educators (NAEYC, 2020; NAEYC, 2021). Eighty one percent (81%) of ECCE professionals reported it was as difficult or more difficult to recruit and retain qualified staff in summer 2020 than it was before the pandemic (NAEYC, 2021). Considering these challenges, it is not surprising that 70% of respondents to the 2021 National Association for the Education of Young Children survey of early childhood educators with less than 1 year of experience reported they were likely to leave the field, demonstrating the crisis in the early childhood educator pipeline (NAEYC, 2021). While this figure fell to 45% in a follow-up survey in 2022, one third of all respondents, regardless of years of experience, reported they were considering leaving their program or closing their family child care homes (NAEYC 2022).

**The Impact of the Workforce on Program Quality and Child Outcomes**

Substantial research has demonstrated that high-quality ECCE has a significant, positive impact on child development and outcomes (Institute of Medicine & National Research Council, 2015; McCoy et al., 2017; Power to the Profession, 2020; Smillie & McCann, 2020). Overall, children who participate in high-quality ECCE programs demonstrate improved social, physical, and cognitive outcomes in the short and long term.
Benefits to participating in a high-quality ECCE program

<table>
<thead>
<tr>
<th>Children are more likely to:</th>
<th>Children are less likely to:</th>
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<tbody>
<tr>
<td>Be ready for school</td>
<td>Need special or remedial education</td>
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<tr>
<td>Be healthier</td>
<td>Be retained in school</td>
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<tr>
<td>Graduate from high school</td>
<td>Commit crimes as youth or adults</td>
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<tr>
<td>Become productive contributors to the economy</td>
<td>Be unemployed as an adult</td>
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<td></td>
<td>Require public assistance as an adult</td>
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Source. Institute of Medicine & National Research Council (2015); McCoy et al. (2017); Power to the Profession (2020); Smillie & McCann (2020).

Workforce policies aimed at preparing, supporting, and retaining early childhood educators can significantly improve the quality of ECCE programs. Thus, the ECCE workforce is one of the key pathways to improving the quality of ECCE and ultimately, improving child outcomes (Institute of Medicine & National Research Council, 2015; Whitebook, Mclean, Austin, & Edwards, 2018).

Evidence-Based Strategies for Promoting Workforce Development

National and state policymakers are supporting the development and implementation of an array of programs and initiatives to increase the knowledge and skills of the workforce so that ECCE systems provide a solid foundation for the well-being and success of all children. Generally, research points to four evidence-based strategies for promoting workforce development:

- **Increasing levels of formal education or training specific to ECCE:** Research supports higher minimum educational qualifications for teaching staff, including specialized training or educator preparation in early childhood development or education. Although findings related to this requirement are mixed, research has shown that ECCE professionals with at least a bachelor’s degree provide higher quality learning environments (Institute of Medicine & National Research Council, 2015; Manning et al., 2017) and contribute to improved child outcomes (Early, Barbarin, et al., 2005; Whitebook, Mclean, Austin, & Edwards, 2018). Additionally, research suggests that programs without well-qualified early childhood professionals fail to produce large or persistent gains in academic achievement (Friedman-Krauss et al., 2020). Providing certain educational supports to address the challenges that preservice professionals face can increase their rates of successfully obtaining a degree. These supports include learning communities (e.g., cohort programs), skill-based guidance (e.g., tutoring), flexible hours or locations, academic counseling and advising, and financial assistance (Wechsler et al., 2016; Whitebook, Mclean, Austin, & Edwards, 2018).

- **Providing workplace supports and ongoing professional development:** High-quality work environments allow ECCE professionals to apply their knowledge and skills and improve their instructional practices. Specifically, high-quality work environments incorporate ongoing professional development; build in time for professional activities that allow for meaningful
collaboration, preparation, and planning; and provide sufficient compensation and benefits (Institute of Medicine & National Research Council, 2015; Whitebook, Mclean, Austin, & Edwards, 2018). Coaching is one example of a sustained professional learning experience that builds staff capacity to support ECCE professionals in implementing effective instructional practices (NAEYC & National Association of Child Care Resource and Referral Agencies, 2011; National Center on Quality Teaching and Learning [NCQTL], 2014). Practice-based coaching, a research-based cyclical process, focuses on using effective, everyday teaching practices that are important for children's school readiness. Practice-based coaching can be part of a larger training program with preservice professionals as well as teachers and directors throughout their careers (National Center on Early Childhood Development, Teaching and Learning, n.d.; NCQTL, 2014).

- **Increasing compensation and the availability of benefits**: Compensation packages, including salary and benefits, have been found to impact recruiting and retention of well-qualified professionals, which in turn impacts child outcomes (Friedman-Krauss et al., 2020; Institute of Medicine & National Research Council, 2015; Smillie & McCann, 2020). Higher compensation matched to qualification standards has been associated with increases in observed professional and program quality (Institute of Medicine & National Research Council, 2015; Whitebook, Mclean, Austin, & Edwards, 2018).

- **Increasing the availability of high-quality workforce data**: There is a growing research base supporting the association between the continuous collection and use of high-quality data (e.g., a feedback loop) and increases in program effectiveness and quality (Karoly & Auger, 2016; Minervino, 2014). State representatives who use high-quality workforce data to examine the impact of workforce policies are more likely to engage in informed planning around professional development, educator preparation and recruitment, and compensation (Whitebook, Mclean, & Austin, 2018). An ideal ECCE workforce data system would have up-to-date data on the size and characteristics of the workforce, be comparable across levels (e.g., states, regions, and localities), and have the potential to be linked to program, child, and family data. With such a comprehensive and integrated system, policymakers could use aggregate data to inform decisions and report meaningful findings to stakeholders.

**National Policy Levers for Promoting Workforce Development**

In *Transforming the Workforce for Children Birth Through Age 8: A Unifying Foundation* (2015), the Institute of Medicine and National Research Council reviewed the science of development and early learning for the ECCE workforce. This seminal report synthesizes the research and guides future policy development with 12 recommendations in six areas (Table 1). The scope of these recommendations shows the complexity of the issues states must address and the range of stakeholders they must engage to further support and improve the workforce.
### Table 1. Recommendations for Transforming the Early Childhood Workforce

<table>
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<th>Area</th>
<th>Recommendations</th>
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| **Qualification requirements for professional practice** | 1. Strengthen competency-based qualification requirements for all care and education professionals working with children from birth through age 8.  
2. Develop and implement comprehensive pathways and multiyear timelines at the individual, institutional, and policy levels for transitioning to a minimum bachelor’s degree qualification requirement, with specialized knowledge and competencies, for all lead educators working with children from birth through age 8.  
3. Strengthen practice-based qualification requirements, including a supervised induction period, for all lead educators working with children from birth through age 8. |
| **Higher education and ongoing professional learning** | 4. Build an interdisciplinary foundation in higher education for child development.  
5. Develop and enhance programs in higher education for care and education professionals.  
6. Support the consistent quality and coherence of professional learning supports during ongoing practice for professionals working with children from birth through age 8. |
| **Evaluation and assessment of professional practice** | 7. Develop a new paradigm for evaluation and assessment of professional practice for those who work with children from birth through age 8. |
| **The critical role of leadership** | 8. Ensure that policies and standards that shape the professional learning of care and education leaders encompass the foundational knowledge and competencies needed to support high-quality practices for child development and early learning in their organizations. |
| **Interprofessional practice** | 9. Improve consistency and continuity for children from birth through age 8 by strengthening collaboration and communication among professionals and systems within the care and education sector and with closely related sectors, especially health and social services. |
| **Support for implementation** | 10. Support workforce development with coherent funding, oversight, and policies.  
11. Collaboratively develop and periodically update coherent guidance that is foundational across roles and settings for care and education professionals working with children from birth through age 8.  
12. Support comprehensive state- and local-level efforts to transform the professional workforce for children from birth through age 8. |

**Source.** Institute of Medicine and National Research Council (2015, pp. 6–13).

ECCE leaders at the state and national levels have leveraged the Institute of Medicine and National Research Council (2015) recommendations to further inform systems planning. Most notable is the **Unifying Framework for the Early Childhood Education Profession** (2020) developed through the Power to the Profession’s consensus-building process, which includes stakeholders at all levels across the country. The goal of this framework is to establish unity and clarify career ladders, knowledge and competencies, qualifications, standards, accountability, supports, and compensation to define the profession across all states and settings (Power to the Profession, 2020).
One key outcome of the Power to the Profession (2020) process was consensus on three unique designations or roles, with specific educational qualifications, settings, and responsibilities to help bridge the roles and labels used in different sectors of ECCE (Table 2). These designations are intended to be used as the foundation for state boards to grant professional licensure. Because most states do not have state licensure boards for ECCE professionals, and most professionals are not tracked as part of the larger teacher certification systems, implementation of individual licensure at these levels would require significant investments in state systems, revisions to or creation of workforce policies, and additional academic and ongoing professional supports.

Table 2. Three Early Childhood Designations and Associated Qualifications, Settings, and Responsibilities

<table>
<thead>
<tr>
<th>Designation</th>
<th>Educational attainment</th>
<th>Setting</th>
<th>Responsibilities</th>
<th>Example parallel roles in early childhood settings</th>
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<tbody>
<tr>
<td>Early Childhood Educator I (ECE I)</td>
<td>Completion of professional preparation program (120 clock hours)</td>
<td>Birth through grade 3</td>
<td>Develop and sustain high-quality learning environments as a member of the teaching team</td>
<td>Assistant teacher in community-based setting or district-funded preschool</td>
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<tr>
<td>Early Childhood Educator II (ECE II)</td>
<td>Completion of an early childhood associate's degree</td>
<td>Birth through age 5</td>
<td>Develop and sustain high-quality learning environments and guide practice of ECE I as a member of the teaching team</td>
<td>Family child care provider, lead teacher, or on-site supervisors in community-based setting, assistant teacher in district-funded preschool</td>
</tr>
<tr>
<td>Early Childhood Educator III (ECE III)</td>
<td>Completion of an early childhood bachelor's degree or higher</td>
<td>Birth through grade 3</td>
<td>Independently develop and sustain high-quality learning environments and guide practice of ECEs I and II as a member of the teaching team</td>
<td>Family child care provider, lead teacher, or on-site supervisors in community-based setting or district-funded preschool</td>
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Note. Adapted from Power to the Profession (2020).

Barriers to State Implementation of Comprehensive Workforce Development Improvements

Although resources such as *Transforming the Workforce for Children Birth Through Age 8* and *Unifying Framework for the Early Childhood Education Profession* have identified key recommendations and strategies states can use to promote ECCE workforce development, no one strategy will fully address the larger ECCE workforce issues identified in the opening section. Many researchers caution against
expecting professional qualifications alone to have a large impact on child outcomes (Early, Maxwell, et al., 2007; Mashburn et al., 2008). Rather, research suggests professional preparation and qualifications significantly improve child outcomes when they are considered alongside other factors that impact program quality, such as work environment, compensation, and ongoing training (Friedman-Krauss et al., 2020; Institute of Medicine & National Research Council, 2015; Whitebook, Mclean, Austin, & Edwards, 2018). Therefore, state leaders should implement a multipronged, comprehensive approach to ECCE workforce development and program improvement that accounts for the COVID-19 pandemic repercussions, first working to address the difficulty in retaining staff and stabilizing the workforce.

The barriers for states seeking to implement workforce improvements are not insignificant, particularly as the impacts of the COVID-19 pandemic are ongoing and have compounded preexisting barriers. The following sections describe the challenges to implementing the evidence-based strategies to improve the ECCE workforce, program quality, and ultimately child outcomes. States must address these challenges to develop a diverse, well-qualified, and representative teacher preparation pipeline.

**Lack of Alignment of Educational Expectations and Career Ladders**

Professionals’ knowledge and training are among the strongest indicators of early childhood program quality, and there is increasing research evidence that compels states to require minimum educational qualifications for both lead and assistant teachers (Power to the Profession, 2020). However, ECCE programs are struggling to retain and recruit qualified staff under those requirements. In fact, the COVID-19 pandemic's effect on recruitment and retention in the ECCE workforce caused some state-run preschool programs to relax teacher qualification requirements around degrees, specialized training, and background checks (Friedman-Krauss et al., 2020).

Nationwide, policymakers are working to clarify ECCE career ladders (i.e., ECE I, II, and III; see Table 2) and to potentially institute state-level professional licensure. However, state ECCE systems remain largely organized by state-specific career ladders that incorporate the full range of workforce education and training with setting-specific requirements and supports (e.g., Head Start, Child Care, and district-supported program requirements). This variability in state career ladders and accepted credentials reduces the portability of credentials when professionals move from one state or setting to another. Assisting states in transitioning from these state career ladders to professional licensure as outlined in Table 2 is complicated. A large proportion of the current ECCE workforce does not currently meet the requirements for the ECE I, II, and III, nor do most states have the authority or infrastructure in place to implement individual licensure.

Additionally, research suggests that increasing degree requirements while only traditional educational pathways are available could lead to a less stable and less diverse workforce (Workman, 2019). Common challenges for full-time early childhood educators simultaneously pursuing higher education include the following:

- Financial burden due to the low wages in the field.
• Inflexible schedules and unsupportive work environments.

• Competing family, work, and school responsibilities.

• General math requirements that are unrelated to their day-to-day early childhood work (Whitebook et al., 2013).

• Limited opportunities to transfer credits from nondegree certificates or credentials (e.g., child development associate or state-specific certificates) or 2-year degree programs (Lloyd et al., 2021).

These barriers, and others, can cause a full-time ECCE professional to take 10–12 years to complete an associate’s degree at a community college (Lieberman et al., 2020; Sandstrom & Schilder, 2021). Other common barriers, particularly among underrepresented groups (e.g., people of color, multilingual learners) include the high cost of higher education; challenges associated with being a “nontraditional student” with inadequate mentorship and supports to increase academic success; and lack of support at higher education institutions for multilingual learners, who make up a sizable percentage of the ECCE workforce (Sandstrom & Schilder, 2021; Wechsler et al., 2016; Whitebook, Mclean, Austin, & Edwards, 2018).

**Insufficient Teaching Supports**

Compared to K–12 educators, early childhood educators often receive insufficient teaching supports (e.g., lack of paid time to complete professional responsibilities, inadequate training and professional development, unreliable and undertrained substitues and support staff), which leads to higher rates of teacher turnover, lower levels of program improvement, and difficulties in recruiting well-qualified educators (Schlieber et al., 2019; Whitebook, Mclean, Austin, & Edwards, 2018). Additionally, a lack of professional supports (e.g., working computer and printer, training for working with multilingual learners) makes it more challenging for professionals to individualize their instructional practices to meet the needs of all children (Whitebook et al., 2016).

The COVID-19 pandemic further impacted early childhood educators’ working environments, professional development needs, and general well-being (Weiland et al., 2021). Schedules had to change to accommodate cleaning tasks, staff absences, and reopening efforts, which cut into time for learning-related tasks. The early shutdown period, uneven reopening effort, and limited stabilization plans left many programs on shaky footing (Weiland et al., 2021). As a result, many ECCE professionals experienced spikes in depressive symptoms and reported feeling overwhelmed and stressed, particularly about health risks to themselves and their families. These concerns were further exacerbated by many programs’ inability to provide health benefits for all staff (Doocy et al., 2020; Weiland et al., 2021).
Lackluster Compensation Packages

Although research indicates that compensation packages, including salary and benefits, impact program and educator quality, compensation packages are insufficient to stabilize and support the workforce. The Center for Study of Child Care Employment reports that, between 2014 and 2016, over half of ECCE professionals received public support (e.g., earned income tax credit, Temporary Assistance for Needy Families, Supplemental Nutrition Assistance Program) and health care programs (e.g., Medicaid, Children’s Health Insurance Program), which are indicators of economic insecurity (Whitebook, Mclean, Austin, & Edwards, 2018).

Poor compensation packages have been shown to negatively impact program quality and professional well-being (Institute of Medicine & National Research Council, 2015; Whitebook, Mclean, Austin, & Edwards, 2018). For example, 54% of ECCE professionals pointed to lack of benefits as a key reason for turnover, and 78% of ECCE professionals cited wages as a main recruitment challenge, explaining that pay is so low that potential applicants are either relying on pandemic unemployment assistance or recognizing they can make more money working in other fields (NAEYC, 2021). Offering bonuses, hazard pay, or slight wage increases from state funding was not enough to combat the staffing crisis (Bassok et al., 2021). Additional costs from the pandemic (e.g., cleaning supplies, personal protective equipment) and shrinking revenue from decreased enrollment further contribute to the inability of center-based and home-based programs to offer competitive wages (NAEYC, 2020).

Missing Comprehensive Workforce Data

States use a variety of data systems to collect data about the ECCE workforce, with most compiling workforce registries. These registries are often designed to track data about the size and characteristics of the workforce, including assigning professionals’ levels on the state career pathway. Each state determines which data elements to collect and sets the standards for collection based on the structure and needs of the state’s professional development system. While the National Workforce Registry Alliance establishes standards of practice for state workforce data collection and recognizes those states who meet or exceed these expectations, workforce data still vary from state to state. Additionally, only a few states mandate participation in registries, which results in incomplete data about the workforce. Workforce registries can link professionals to their employment (e.g., early childhood program); however, they are not typically designed to collect data in such a way that professionals can be linked to classrooms or groups, children, and families.

Although collection of comprehensive workforce data (i.e., education, training, and employment data with the potential to be linked to child and family data) and robust workforce data (e.g., full participation across settings) may not yet be possible in many states, research supports a policy of investing resources to implement a system of ongoing collection and use of quality workforce data. State representatives who use high-quality workforce data to examine the impact of workforce policies are more likely to engage in informed planning around professional development, professional preparation and recruitment, and compensation, which have all been found to impact program quality and child
outcomes (Friedman-Krauss et al., 2020; Institute of Medicine & National Research Council, 2015; Whitebook, Mclean, Austin, & Edwards, 2018).

**Resources**

State leaders will need a variety of resources and supports to:

- Further stabilize ECCE programs as the impact of the pandemic on programs and the workforce becomes clearer.

- Continue to support ECCE workforce improvements (e.g., increased levels of education and training, supportive work environments).

The Administration for Children and Families recently launched a webpage, *Strategy Resources to Address the Early Care and Education Workforce Shortage* (https://www.acf.hhs.gov/ecd/strategy-resources-address-early-care-and-education-ece-workforce-shortage) that includes curated technical assistance resources to support state and local efforts to address ECCE workforce issues. State leaders working to address systems-level workforce issues can access resources on the following topics: Wages, Benefits, and Incentives; Professional Development, Higher Education, and Apprenticeships; Expanded Services; Staff Wellness Initiatives; Leadership; and Equitable Financing.

**Conclusion**

Collaboration and cooperation among federal, state, local, and non-governmental entities is essential to addressing the barriers state leaders encounter when implementing comprehensive workforce development improvements. For these improvements to be successful, state and federal policy leaders and diverse and representative members of the workforce will need to come together and share information about progress and suggest future directions. The federal government has established technical assistance supports to promote improvements. State and local leaders may request technical assistance from the [Child Care Technical Assistance Network](https://www.acf.hhs.gov/ecd/strategy-resources-address-early-care-and-education-ece-workforce-shortage) centers involved in supporting workforce development, including the PDG B-5 Technical Assistance Center and the National Early Care and Education Workforce Center.
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