

RESEARCH REPORT

Strengthening the Diversity and Quality of the Early Care and Education Workforce

Summary of the 2018 and 2019 Convenings

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Executive Summary

In the years immediately preceding the COVID-19 pandemic, policymakers, researchers, and philanthropists recognized the pressing need to strengthen the quality of the early care and education (ECE) workforce. Research shows that the quality of ECE sets the foundation for children's long-term development and academic achievement. Moreover, research shows that quality ECE requires early childhood educators who demonstrate competency in meeting young children's developmental needs. Evidence documenting the relationship between early childhood educator professional preparation and children's outcomes spurred a growing movement to professionalize the ECE workforce, to ensure early educators have the skills and knowledge needed to best support children's early learning.

In recent decades, the population of children attending ECE programs has become increasingly racially and ethnically diverse. Likewise, a great strength of the ECE workforce is its racial and ethnic diversity. If efforts to professionalize the field, including requirements for increasing degree qualifications, are not also coupled with efforts to increase access to higher education, inequities in wages and opportunities could be exacerbated. Removing systemic barriers to higher education and funding for professional compensation are a necessary part of efforts to strengthen early educator competencies to lead to stronger child outcomes. This issue and surrounding context prompted a series of expert convenings on this topic to provide an opportunity for discussion, learning, and idea generation. This report summarizes key themes from two of the convenings occurring in March 2018 and April 2019. A companion report (Schilder and Sandstrom 2021) summarizes the January 2021 convening with a focus on ECE workforce well-being and the devastating effects of the COVID-19 pandemic.

About the Convenings

With support from the Foundation for Child Development, in 2018 and 2019, the Urban Institute and Child Trends organized and facilitated convenings on the topic of strengthening the ECE workforce to best meet all young children's needs. These convenings were designed to highlight what was known and what gaps and tensions existed regarding two related questions:

- How can policy maintain the diversity of the ECE workforce while increasing professionalism?
- How can policy support the preparation of the ECE workforce to meet the diverse needs of young children?

Scholars, experts, and practitioners read key research on these topics before the meeting, listened to several keynote speakers and panel presentations, and engaged in group discussions about key issues and implications for policy, research, philanthropy, and practice.

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Key Themes from the 2018 and 2019 Convenings

ECE for an Increasingly Diverse Population of Children

Convening participants discussed the issue of how the ECE workforce can best support the increasingly diverse population of young children. Key themes included the following:

- Existing research shows that the population of young children is increasingly diverse in terms of
 race, ethnicity, culture and languages, and it is important to consider intersectionality to best
 support the developmental needs of the diverse population of young children.
- It is crucial to elevate discussions of diversity when considering how to support the ECE workforce in best meeting the needs of young children and their families.
- Numerous challenges and opportunities exist for policy, practice, and research regarding how the ECE workforce can best support the needs of young children and their families in light of this growing diversity.
- In the US, the current racial climate has created stress that affects children as well as the workforce.
- As a field, it is important to define and unpack the term "diversity" to properly support the range of young children's needs.
- Diversity of the ECE workforce is important and necessary to maintain, but other factors are also necessary to support young children's growth and development.

The ECE System Is Fragmented, and the Workforce Is Diverse

To meet the needs of the increasingly diverse population of young children and families, it is important to recognize the fragmentation of the ECE system and the challenges this poses to strengthening the quality and diversity of the workforce. Key issues identified included the following:

- Unlike K-12 education, numerous ECE programs exist and each has unique requirements for the workforce. These requirements differ based on several factors including type of care and location.
- The ECE workforce consists of people with different roles and responsibilities. This variation leads to differences in compensation and professional development opportunities.
- Racial and ethnic differences among members of the ECE workforce reveal disparities in opportunity and compensation, linked in part to the roles of early childhood educators as well as program characteristics such as size and auspice.

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 This fragmentation creates challenges for policymakers, researchers, and practitioners seeking to strengthen the quality and diversity of the workforce.

Challenges and Opportunities Related to Workforce Fragmentation

Convening participants discussed the following key themes related to the fragmentation and diversity of the workforce that have implications for policy, practice, and future research.

- Low pay is a key barrier to reducing inequities and professionalizing the ECE workforce. Median annual wages for child care workers are less than half those of kindergarten teachers, who are generally required to have a bachelor's degree (\$24,230 versus \$56,850 in 2019).
- Early educators are more racially, ethnically, and linguistically diverse than K-12 educators and more similar in composition to the children they care for and educate. In 2018, nearly 40 percent of early educators were people of color, whereas 20 percent of K-12 teachers were of color (Whitebook, McLean et al. 2018). A significant share of early childhood educators consists of first-generation families, a sizable percentage speak a home language other than English, and nearly all are female (McLean et al. 2021).
- Gaps exist in policy, practice, and research related to the diversity of the ECE workforce. Meeting
 participants noted the importance of attending to and addressing these disparities.

Raising Minimum Educational Requirements: Motivation and Barriers

To provide quality ECE that supports young children's growth and development, early childhood educators must have knowledge, skills, and abilities to meet the diverse needs of young children and their families. Convening participants discussed the following motivations and barriers to raising minimum educational requirements:

- A major source of the focus on improving the quality and diversity of ECE is the set of recommendations in the 2015 Institute of Medicine's Transforming the Workforce for Children Birth through Age 8 report that presented evidence showing a correlation between early educators' levels of education and ECE quality.
- Given the growing diversity of young children in the US, early childhood educators need specialized training in asset and strengths-based approaches that celebrate families' racial and ethnic diversity.

However, these specific motivations come with significant challenges:

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- Obtaining a degree can take years and be expensive and burdensome for established early educators required to return to school to keep their positions. These educators need targeted support and coaching as well as financial assistance and incentives to be successful. Building career pathways for workers entering the field and leveraging innovative funding streams to support higher education attainment are necessary to develop a strong pipeline of qualified early educators.
- Degrees are important, but competencies are equally important. Convening participants discussed the importance of equipping early childhood educators with the skills and knowledge to be successful in their roles, not solely focusing on degrees. Competencies should also address early educators' personal biases and recognize racist ideas and language around them.
- State and county efforts to design and implement quality rating and improvement systems (QRIS)
 should consider how to best support the existing workforce in an equitable way to meet the diverse needs of children and families.
- Evidence on the benefits of early educator training and qualifications provided through the Child Development Associate (CDA) credential, associate degrees, and bachelor's degrees need to be considered. Tensions in the early childhood field remain regarding whether it is feasible to require lead child care teachers to have a bachelor's degree even if higher education is linked to positive child outcomes. Given the state of the current workforce, low pay, and more attractive positions in the public school system, such requirements could unravel an already unstable system.

Recommendations for Policy and Practice

Convening participants recommended changes in policy and practice to address the challenges of the increasingly diverse population of young children and the ECE workforce. Recommendations are as follows:

- Make significant public investments in ECE that support increased compensation and improved working conditions as inherent to high-quality ECE.
- Focus investments on professional development of early childhood educators already in the workforce.
- Support enhancements to the professional development infrastructure.
- Create focused opportunities for professional development and degree attainment to ensure members of racial/ethnic and linguistic groups that have traditionally been marginalized have access to education and advancement.
- Recruit and invest in a diverse leadership, because it helps build a pipeline for preparing diverse new leadership at the master's and doctoral degree levels.

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Strengthening the Diversity and Quality of the Early Care and Education Workforce

High-quality ECE sets the foundation for children's long-term development and academic achievement (Belfield et al. 2006; García et al. 2021; McCoy et al. 2017; Yoshikawa et al. 2013). For ECE to be high quality and produce positive child outcomes, early childhood educators must demonstrate certain competencies—professional skills and knowledge (Reid et al. 2015). In the years immediately preceding the COVID-19 pandemic, policymakers, researchers, and philanthropists recognized the pressing need to strengthen the quality of the ECE workforce given strong evidence documenting the relationship between the professional preparation of ECE educators and children's outcomes. This evidence spurred a growing movement to professionalize the ECE workforce—to establish a core set of expectations or standards regarding minimum qualifications and competencies for early educators (IOM/NRC 2015). Actions to professionalize ECE, such as increasing degree qualifications or higher education course completion requirements could have unintended negative consequences if inadequately coupled with efforts to increase access to higher education. Specifically, inequities in wages and opportunities could be exacerbated. Carefully addressing systemic barriers to professional opportunities by increasing access to higher education and funding for professional compensation are a necessary part of efforts to strengthen early educator competencies to lead to stronger child outcomes (Whitebook, Hankey et al. 2018).

About the Convenings

With support from the Foundation for Child Development, in 2018 and 2019, the Urban Institute and its partners at Child Trends organized and facilitated convenings on the topic of strengthening the ECE workforce to best meet all young children's needs. These convenings were designed to highlight what was known and what gaps and tensions existed regarding two workforce questions:

- How can policy maintain the diversity of the ECE workforce while increasing professionalism?
- How can policy support the preparation of the ECE workforce to meet the diverse needs of young children?

The convenings were exploratory in nature, offered as a professional development opportunity for select early-career researchers in the Foundation's Young Scholars Program (YSP). YSP supports scholarship for early-career researchers and funds implementation research relevant to policy and practice.

Recent YSP cohorts have examined the preparation, competency, compensation, well-being, and professional learning of the ECE workforce. The convenings were designed to provide the Young Scholars with opportunities to network among themselves and with national experts on research and policies designed to strengthen the diversity and quality of the ECE workforce.

Although the pandemic has led to major disruptions in the ECE workforce, the movement to professionalize the workforce discussed during these convenings has remained an important topic of interest. Moreover, the pandemic has highlighted the critical issues of workforce diversity and quality and the importance of ECE for children and families. The momentum to professionalize the workforce continues to focus on improving outcomes for children by ensuring the ECE workforce is skilled, stable, and appropriately compensated. Thus, the issues discussed remain relevant to informing policies still under debate in 2021.

Convening Structure and Participants

Each convening was a day and a half, with the first day dedicated to panel presentations and roundtable discussions and the second day devoted to a hands-on workshop for the Young Scholars on implementation science research and its application to the topics discussed on the previous day. The convenings were designed to provide the Young Scholars with opportunities to network among themselves and with national experts on research and policies designed to strengthen the diversity and quality of the ECE workforce. Invited national and state research and policy experts and practitioners who were engaged in the 2018 convening were as follows:

SESSION 1: INTRODUCING THE ISSUES: PROFESSIONALISM AND DIVERSITY IN THE ECE FIELD

- Lisa Guernsey, deputy director of the Education Policy program and director of the Learning
 Technologies project at New America
- Michael López, principal associate at Abt Associates at the time of the convening, is now vice president at NORC at the University of Chicago
- Valora Washington, CEO of the Council for Professional Recognition, the nation's largest credentialing organization for early educators
- Moderator: Heather Sandstrom, principal research associate, Urban Institute

SESSION 2: MAPPING THE BARRIERS TO PROFESSIONALIZING A DIVERSE WORKFORCE

- Joanne Hurt, director of early learning, Wonders Early Learning + Extended Day
- Florence Kreisman, director, education department, Mary's Center

- Sonia Pruneda-Hernandez, early childhood program coordinator for Montgomery College (MC)
 Rockville and Takoma Park Campuses
- Moderator: Maurice Sykes, senior associate at the Early Childhood Leadership Institute

KEYNOTE SPEAKERS ON NATIONAL INITIATIVES

- Welcoming remarks: Jacqueline Jones, President, Foundation for Child Development
- Cemeré James, vice president of policy at the National Black Child Development Institute (NBCDI)
- Lucy Recio, senior analyst, National Association for the Education of Young Children (NAEYC)
- Moderator: Sara Vecchiotti, Vice President, Foundation for Child Development

SESSION 3: FEDERAL POLICY OPPORTUNITIES AND CHALLENGES

- Lori Connors-Tadros, senior project director for the Center on Enhancing Early Learning Outcomes
 (CEELO) at the National Institute for Early Education Research
- Yvette Sanchez Fuentes, deputy chief for public policy and research at Child Care Aware of America
- Shayne Spaulding, principal research associate at the Urban Institute
- Elizabeth Groginsky, assistant superintendent of early learning at the Office of the State
 Superintendent of Education in the District of Columbia
- Moderator: Gina Adams, senior fellow, Urban Institute

SESSION 4: STATE AND LOCAL STRATEGIES TO SUPPORT THE ECE WORKFORCE

- Ivory Clarke, associate program officer at the National Academy of Sciences
- Tonja Rucker, program director, early childhood success, National League of Cities
- Winona Hao, director of the National Association of State Boards of Education (NASBE)'s ECE work
- Kathy Glazer, President, Virginia Early Childhood Foundation
- Moderator: Shirley Adelstein, research associate, Urban Institute

National and state research and policy experts and practitioners who were engaged in the 2019 convening were as follows:

SESSION 1: HOW SHOULD WE THINK ABOUT DIVERSITY AMONG YOUNG CHILDREN TODAY?

 Aisha Ray, Professor Emerita of Child Development at Erikson Institute, and a Distinguished Fellow at the BUILD Initiative Lea J. E. Austin, codirector of the Center for the Study of Child Care Employment at UC Berkeley

SESSION 2: WHAT COMPETENCIES ARE NEEDED TO MEET THE DIVERSE NEEDS OF YOUNG CHILDREN?

- Abena Ocran-Jackson, Director of Council Programs at the Council for Professional Recognition.
- Sarah LeMoine, Senior Director for ZERO TO THREE's Professional Development and Workforce Innovations department
- Christy Tirrell-Corbin, PhD, Director of the Early Childhood/Early Childhood Special Education
 Teacher Preparation Program, University of Maryland College Park

SESSION 3: WHAT IS THE ROLE OF PUBLIC POLICY IN PREPARING THE WORKFORCE TO MEET THE DIVERSE NEEDS OF YOUNG CHILDREN?

- Shannon Christian, Director, Office of Child Care, Administration for Children and Families
- Paula Bendl Smith, Child Care Specialist for the Office of Child Care's Technical Assistance Division
- Sarah Merrill, Infant Toddler Program Specialist in the Office of Early Child Development with a focus on Head Start
- Winona Hao directot of NASBE's Early Childhood Education (ECE) work
- Tonja Rucker, Director for Early Childhood Success in the Institute for Youth Education and Families at the National League of Cities
- Danielle Gonzales, Managing Director for the Education & Society Program at the Aspen Institute

REFLECTIONS: WHERE DO WE GO FROM HERE?

- Ivelisse Martinez-Beck, Senior Social Science Research Analyst and the Child Care Research Team Leader in the Office of Planning, Research, and Evaluation (OPRE), Administration for Children and Families (ACF), US Department of Health and Human Services (HHS)
- Martha Zaslow, Child Trends and the Society for Research in Child Development

Additional invited experts that contributed to roundtable discussions included: Rolf Grafwallner, Program Director for Early Childhood Initiatives at the Council of Chief State School Officers (CCSSO); Jerlean Daniel, former Executive Director of the National Association for the Education of Young Children; and Maurice Sykes, senior associate at the early childhood leadership.

Facilitators and meeting planners were Heather Sandstrom and Gina Adams from Urban Institute,
Tamara Halle and Martha Zaslow (Urban's partners) from Child Trends, Chrishana Lloyd from Child Trends,

and Sarah Vecchiotti from the Foundation for Child Development. (See appendix A for convening agendas and appendix B for brief biographies on each presenter.)

Before both convenings, participants were given prereading materials that included seminal documents and research reports and briefs on the key topics. During the meetings, experts presented findings related to the themes and participants engaged in conversations about the implications for policy, practice, and research. In addition to providing comments, presenters sparked discussion and participants asked questions and engaged in facilitated discourse. The meetings gave participants opportunities to engage in rich conversations about increasing the quality and diversity of the ECE workforce. On the second day of convening in both 2018 and 2019, Young Scholars participated in a workshop to explore how implementation science is important in research on diversity and quality in ECE, particularly if this research is to inform systemic transformation.² Appendix C more fully describes the workshop contents.

Key Themes

The convenings underscored the importance of understanding the policy context. The diversity of the ECE workforce is positioned to meet the needs of young children and their families across a range of settings, but multiple challenges exist in supporting the workforce to best meet these needs. Unlike the K–12 education workforce, the ECE workforce in the United States is fragmented in terms of qualifications and program types. Convening participants discussed the issues created through the ECE workforce's fragmentation and its implications for those working to strengthen the ECE workforce.

In this section, we discuss key themes across the two convenings, including the growing diversity of young children in the US; the fragmented nature of the ECE workforce; and motivations, barriers, and cautions related to supporting early childhood educators in achieving higher credentials.

ECE for an Increasingly Diverse Population of Children

In recent years, the challenge of how the ECE workforce can best support the increasingly diverse population of young children has gained attention (Lopez et al. 2017). Participants discussed key related issues at the convenings:

Existing research shows the population of young children is increasingly diverse in terms of race, ethnicity, culture, and languages, and it is important to consider intersectionality (i.e., the interconnected nature of these social elements) to best support the developmental needs of the diverse population of young children (Reid, Kagan, and Little 2019).

- Elevating discussions of diversity is essential to exploring how to support the ECE workforce in ways that could best meet the needs of young children and their families.
- Numerous challenges and opportunities exist for policy, practice, and research regarding how the ECE workforce can best support the needs of young children and their families considering this growing diversity.

EXISTING RESEARCH ABOUT DIVERSITY OF YOUNG CHILDREN

Convening participants discussed the existing research showing the population of young children is increasingly diverse, with specific racial and ethnic groups facing structural barriers to accessing high-quality ECE that meets their needs for growth and development (Reid et al. 2015). Specific issues were discussed:

- The term "diversity" needs to be more thoughtfully unpacked, recognizing the full range of social characteristics of diverse populations and the intersectional nature of these characteristics. Participants discussed the importance of acknowledging the needs of populations that have faced structural barriers to opportunities, including families who are Black or Hispanic or with limited English proficiency. They also discussed the socioeconomic diversity among families with young children as well as the unique challenges of families with children with special needs. Participants noted that these groups often overlap. Nonetheless, in discussing "diversity," invited experts and Young Scholars noted it is important to be precise in considering the unique circumstances faced by families with different demographic characteristics and family structures.
- Children living in families with low incomes and Hispanic children are less likely than their counterparts to be enrolled in center-based early childhood programs (Reid et al. 2015).
- Children living in families with low incomes are more likely to attend low-quality preschool
 programs than their counterparts with higher incomes, and most children in public preschool
 programs attend economically segregated programs that are often also segregated by race or
 ethnicity (Reid et al. 2015).
- In light of the demographic shift among young children, ECE providers and convening participants discussed concerns about educators who are not prepared to meet the needs of children in families with low incomes or children who are Black, Hispanic, dual language learners, or immigrants (Ray, Bowman, and Robbins 2010).
- Participants raised the concern that teacher preparation standards lack specificity and clarity and require only a few hours of coursework and little practice devoted to training early childhood

educators in how to teach children who are not white, middle class, able bodied, English speakers (Ray, Bowman, and Robbins 2010). Current trends highlight the significance of this concern:

- In the US, about one-third of all young children ages 8 and under are growing up in households where at least one parent speaks a language other than English (Park, Zong, and Batalova 2018).
- » Although the term "dual language learners" is often used to denote a single group of children learning two languages, research reveals substantial diversity among dual language learners. Children live in families with adults who speak many different languages and have varied countries of origin, different racial and ethnic characteristics, and differing levels of education, employment opportunities, and incomes (Byers-Heinlein and Lew-Williams 2013).
- » About one-quarter of young children are children of immigrants.³ These young children have been facing an increasingly hostile policy environment in recent years (Wood 2018), which can create additional challenges for them, their families, and the workforce serving them.

HOW WE THINK AND TALK ABOUT EDUCATING YOUNG CHILDREN

The goal of effectively educating the diverse population of children and ensuring all are prepared to succeed in school signals the need for highly qualified teachers with specialized education and training. Convening participants discussed challenges related to how we think and talk about educating young children:

- State-based teacher preparation standards and teacher education programs do not adequately address the developmental and educational needs of diverse groups of children, their families, and communities. Policies and practices must untie the "thorny knot" of ECE professional development systems that are not sufficiently rigorous, flexible, and creative to address the diverse needs of young children.⁴
- A lack of specificity and clarity in teacher preparation standards exists around teaching children who are not white, middle class, able bodied, and English speakers (Partelow et al. 2017; Ray Bowman and Robins 2006; Samson and Collins 2012).
- A prevailing assumption holds that increasing credentials and degrees will reap improvements for all children's educational achievement, including the most diverse children and those facing structural barriers. However, this assumption does not adequately consider the fact that Black and Hispanic educators, who may be best positioned to meet the needs of Black and Hispanic children, receive the lowest compensation and face barriers to educational opportunities.

HOW THE ECE WORKFORCE CAN BEST MEET THE DIVERSE NEEDS OF YOUNG CHILDREN

Policymakers, practitioners, and researchers must expand beyond focusing narrowly on professional development supports. Convening participants addressed key challenges related to workforce development in the context of increased diversity among children attending ECE programs:

- In the US, the current racial climate has created stress that affects children, their families, and ECE workforce. A range of factors create either enabling or disabling environments for all young children. ECE interventions should address the current climate.
- The ECE field should define and operationalize the term "diversity" to effectively support the dynamic range of young children's needs. Enormous diversity exists among children, and these differences are related to how children develop and express themselves. To date, inadequate attention has been given to understanding the term "diversity" and its contextual implications for young children and their families. Although we know that the context in which children are raised can influence their development, we need to know more about the role of social stratification, race, gender, and language diversity. For example, participants discussed how many early childhood educators tend to think narrowly about bilingual children without considering children who speak more than two languages and different dialects.
- ECE workforce diversity is essential, but it alone is not sufficient to support young children's growth and development. Evidence suggests a racial and cultural match between child and teacher can benefit children's learning and bring greater attention to children's individual needs (Downer et al. 2016). Bilingual teachers can help children learn English while encouraging maintenance of the home language and communicating effectively with the child's family. However, expert panelists noted that these benefits are achieved when teachers are equipped with the training and tools needed be effective in the classroom. Even when a teacher speaks a child's non-English home language fluently, that language is mostly used for conversation and not instruction. Meeting participants noted that high-quality instructional practices must scaffold the child's home language use and build on their strengths. Participants believed the ECE workforce must be prepared for the diversity among the young children they teach. Additional supports are needed as the workforce faces similar stresses associated with racism and sexism, which affect teachers and the young children and families attending ECE programs (Wood 2018). A report summarizing a discussion from the 2021 convening includes a summary of research on workforce wellness (Schilder and Sandstrom 2021).
- Additional research is needed to inform how to adequately support workforce efforts to provide tailored and effective support for children's diverse needs. Currently, research is stymied by a lack of assessment instruments and methods that can accurately measure the development of children

with different home languages. Moreover, the existing workforce has not yet been given opportunities to learn the linguistic and cultural skills to work effectively with the range of languages and backgrounds of young children today. Greater attention is also needed for multiracial children, who make up approximately 7 percent of the US population, more than doubling from 3 percent over the past decade (Parker et al. 2015). Convening participants discussed the issue of placing multiracial children into categories for research purposes. Little is known about how being a multiracial child in a racialized society affects development. As early perceptions of social categories of race and class arise in children, it is important to reduce racial bias and to give children the chance to interact with peers and adults from different backgrounds. It is also important to foster positive self-image and support children in developing nurturing relationships within their own cultural and linguistic communities. To advance policy and research, attendees suggested considering the following questions:

- » Do ECE environments enable or hinder the development of children who experience racism, and how can the ECE workforce be supported to create these enabling environments?
- » What constitutes the context of raising young children in the US and other racialized societies, and how can the ECE workforce be supported within this context?
- » How can policymakers support the ECE workforce to create enabling environments that support children affected by socioeconomic inequity, racism, and an anti-immigrant climate?

The ECE System Is Fragmented and the Workforce Is Diverse

The groundbreaking National Academies of Sciences report *Transforming the Workforce for Children Birth through Age 8* highlighted the importance of recognizing the fragmentation of ECE in the US and how this creates challenges in strengthening the quality and diversity of the workforce (IOM/NRC 2015). Below are key issues identified in the report and discussed at the 2018 and 2019 convenings:

- Unlike K-12 education, numerous ECE programs exist, and each has different requirements for the workforce. These requirements differ based on numerous factors, including type of care, sources of funding, and location (NCES 2019; Office of Child Care 2021; Office of Head Start n.d.).
- The ECE workforce consists of people with different roles and responsibilities, and requirements can differ based on roles, compensation, and professional development opportunities.
- In the ECE workforce, racial and ethnic disparities exist in opportunity and compensation, linked in part to variations in the roles of early childhood educators, as well as their program characteristics such as size, location, and auspice.

 Overall, the fragmentation in the ECE system creates challenges for policymakers, researchers, and practitioners seeking to strengthen the quality and diversity of the workforce (IOM/NAS 2015).

DIFFERENCES BASED ON TYPE OF ECE PROGRAM AND EARLY CHILDHOOD EDUCATORS' ROLES

Convening participants discussed the importance of considering differences in roles and responsibilities based on program type. The largest ECE program categories are Head Start and Early Head Start, child care, and preschool. These programs offer services to young children but have different purposes, are funded and administered differently from one another, and have specific regulations related to the ECE workforce. Participants reviewed differences in ECE requirements across the largest ECE programs and how requirements for the workforce differ based on role:

- Head Start and Early Head Start. The federally funded Head Start and Early Head Start programs are designed to provide comprehensive child development services to children and their families. The programs serve predominantly children living in families with low incomes as well as eligible children with disabilities, dual language learners, and children of migrant and seasonal workers. Head Start services are offered primarily in centers, and Early Head Start services are offered in centers and home-based settings. Head Start employs directors, family service coordinators, teachers, and teaching assistants. The education and credentialing requirements⁶ are specified by federal requirements. For example, Head Start and Early Head Start teachers must have at least a CDA credential.⁷ However, professional development requirements for Head Start teachers differ from those for Early Head Start who are early childhood providers responsible for the growth and development of infants, toddlers, and pregnant women.
- Child care. Child care programs are funded through a combination of federal, state, local, and private funds. Child care services are offered in homes (called family child care in many states) and centers. Licensed child care providers are required to meet minimal thresholds of health and safety, but specific education and credentialing requirements vary by location and type of care. In most states, education and credentialing requirements for home-based child care providers are less than for center-based providers. Home-based providers are typically owners who are responsible for both providing care and managing all aspects of the child care business. In some states and locations, home-based providers are considered directors or teachers, and some home-based providers employ additional staff such as assistants (IOM/NRC 2015; Kashen, Potter, and Stettner 2016). Although most states require providers to have at least a high school diploma, a few states require child care providers to attain specific credentials. The National Survey of Early Care and Education reports that education levels vary by age, with people who have lower levels of education caring for infants and toddlers and those caring for preschool-age children more likely to have higher levels of education (Paschall, Madill, and Halle 2020).

Preschool. Preschool programs are primarily funded by states and school districts in the form of public preschool or prekindergarten, but some federal funds also support preschool. Preschool services are offered mostly in public schools, but depending on the state or district, child care centers and home-based child care providers are eligible to offer preschool services. Like center-based care, public and private preschool programs often employ assistant teachers, teachers, and directors, but the educational and credentialing requirements of those working in preschool tend to be more rigorous than for those working in Head Start or child care programs (Rhodes and Huston 2012; Schilder 2016).

RACIAL AND ETHNIC DIVERSITY OF THE ECE WORKFORCE: WAGE AND OPPORTUNITY GAPS

The wage and opportunity gaps inherent in the existing ECE system are associated with issues of racial and ethnic diversity of the workforce. Meeting participants discussed the issues of racial and ethnic diversity and associated wage and opportunity gaps.

Participants reviewed materials developed by Austin and colleagues at the Center for the Study the Child Care Employment (Austin et al. 2019), who report that diversity in family child care homes and child care centers is stratified by education level. Groups with higher educational attainment are less ethnically and linguistically diverse. In child care centers, diversity also correlates with job role, which is partly a reflection of educational attainment.

Early childhood educators working in public schools are the highest earners, followed by those working in community-based centers, Head Start educators, and infant-toddler educators. Austin noted that after controlling for other factors, Hispanic and Black teachers earn less on average than white teachers. Additionally, assistant teachers—who earn less on average than lead teachers—are more likely than lead teachers to be Hispanic or Black. Thus, evidence exists that current policies are not leveling the playing field in addressing racial inequities (Austin et al. 2019; Whitebook et al. 2018).

The Center for the Study of Child Care Employment also reports that racial and ethnic disparities in wages exist based on the ages of children attending ECE. Early childhood providers working with infants and toddlers are more likely to be Black or Hispanic and have lower compensation and wages compared with those teaching preschool-age children. This is true for Early Head Start teachers compared with Head Start teachers and child care providers (Austin et al. 2019; Whitebook et al. 2018). 9

CHALLENGES AND OPPORTUNITIES RELATED TO FRAGMENTATION

Participants at the 2018 and 2019 convenings discussed the following key themes related to the fragmentation and diversity of the workforce that have implications for policy, practice, and research:

- Low pay is a key barrier to reducing inequities and professionalizing the ECE workforce. Median annual wages for child care workers are less than half those of kindergarten teachers, who are generally required to have a bachelor's degree (\$24,230 versus \$56,850 in 2019). 10 Preschool teachers earn \$30,520 per year, which is significantly below the median annual wage of \$39,810 for all workers in the US. Black early educators make 84 cents to every dollar a white early educator makes. Beyond race, gender is a huge part of the pay disparity. According to one expert at the 2018 meeting, "We built an industry on the backs of women." She then stated, "If we look beneath the surface of our issues in ECE, we would find racism and sexism lurking."
- Early educators are more racially, ethnically, and linguistically diverse than K-12 educators and more similar in composition to the children they care for and educate. The current workforce has been characterized as predominantly women of color with low incomes. Such diversity could be celebrated, but one panelist cautioned against celebrating the overrepresentation of minorities in a low-paid, low-valued field. We know that the ECE workforce is more linguistically diverse than the country and that Black and Hispanic women are more likely to hold the lowest-paid, lowest-status jobs. In 2018, nearly 40 percent of early educators were people of color whereas 20 percent of K-12 teachers were of color (Whitebook et al. 2018). A significant share of early childhood educators is first-generation, a sizable percentage speak a home language other than English, and nearly all are female (McLean et al. 2021).
- Gaps exist in policy, practice, and research related to the diversity of the ECE workforce. Meeting participants noted the importance of acknowledging and addressing racial and ethnic disparities. At the convenings, key questions emerged for policymakers, practitioners, and researchers:
 - » What are the implications for children who see that members of the ECE workforce who are Black or Hispanic women lack power and authority?
 - » What are the long-term implications for an equitable society if during their early years of development children see caregivers of color being treated with lower levels of respect?What does that mean on a daily basis for all of the children attending ECE programs?
 - » How can policies best support the existing diverse ECE workforce in attaining the education and credentials that research shows are associated with improved child outcomes? What alternative pathways can support the ECE workforce in meeting the education, credential, and professional development requirements that best meet the needs of the racially and ethnically diverse workforce?

Raising Minimum Educational Requirements: Motivation, Barriers, and Cautions

To provide quality ECE that supports young children's growth and development, early childhood educators must have knowledge, skills, and abilities to meet the diverse needs of young children and their families. Convening attendees discussed the range of education and training requirements that exist, the motivation for increasing minimum levels of education of early childhood educators, and existing barriers and cautions.

MOTIVATIONS

Concurrent motivations for increasing the minimum levels of education of early childhood educators are rooted in the interest of professionalizing the workforce:

- A major source of the focus on improving the *quality and diversity* of ECE is the set of recommendations in the *Transforming the Workforce* report (IOM/NRC 2015). This report presents evidence showing a correlation between levels of education and ECE quality and includes recommendations for increasing early childhood educators' minimum levels of education. The report offers a blueprint for action to improve the quality of professional practice, building on shared competencies for early childhood professionals and principles for effective professional learning.
- To improve outcomes for the increasingly diverse population of young children and their families, it is important for early childhood educators to be prepared to meet their needs by tailoring education to each child and family's culture and language. Using an asset and strengths-based approaches can help celebrate racial and ethnic diversity of children and families participating in early childhood programs.

However, these specific motivations come with significant challenges:

- Degrees are important, but a focus on competencies is equally important. Convening participants discussed the importance of considering competencies—including skills, content knowledge, and the ability to recognize racist ideas or language. Participants reflected on the importance of being able to engage in difficult conversations with teachers about issues of language, race, and cultural competence. A central recommendation that generated extensive discussion among convening attendees was whether a minimum bachelor's degree requirement with specialized knowledge and competencies for all lead early educators could benefit all children or would exacerbate existing inequities. Panel presentations and discussions raised the following key points related to this recommendation:
 - State and county efforts to design and implement quality rating and improvement systems (QRIS) should consider how to best support the existing workforce to meet the diverse needs of children and families. Many QRIS include enhanced expectations of the ECE workforce. Many

- QRIS also require early childhood educators to have knowledge of child development and early learning; use practices to help children learn and develop based on science; have knowledge and skills for working with diverse populations of children; form and use partnerships with families; and be able to self-reflect and improve their practice. To effectively meet these expectations, early educators need preservice training and ongoing professional development and support.
- Evidence on the benefits of early educator training and qualifications provided through the CDA credential, associate degrees, and four-year degrees need to be considered (CDA Council 2014; Washington 2015). While the CDA credential was initially developed outside of higher education and granted to early childhood educators who demonstrate competencies in standards and functional areas, training for the CDA is increasingly included in community college curricula. Most community colleges offer one of three types of credentials for early childhood educators: (1) a CDA credential; (2) a terminal associate degree in ECE; or (3) an associate degree that allows students to transfer into a four-year degree program (Kaplan 2018). To earn a CDA, educators need to complete a course on child growth and development; coursework on the specific standards and functional areas; and a portfolio. An assessment involves successful completion of coursework, portfolio review, and on-site observation of competencies. In addition to community colleges offering pathways from the CDA to an associate degree, some community colleges have agreements with four-year institutions to transfer coursework seamlessly.
- » CDA completion is a potential pathway to maintaining the workforce's diversity, and it will be important to determine whether completing the credential in a higher education context fosters diversity. Convening participants engaged in discussions about the CDA's value in fostering workforce diversity and the need to consider how CDA certification could be better integrated in higher education. The *Transforming the Workforce* report and numerous studies cited in this report show a correlation between ECE educator degree attainment and positive child outcomes (IOM/RNC 2015). However, numerous barriers exist for ECE educators to obtain credentials and degrees.

BARRIERS AND CAUTIONS

Attendees discussed barriers to providing the ECE workforce with the professional development, education, and compensation that research shows are associated with effective teaching that leads to desired outcomes for young children and families. The barriers discussed include the following:

Public investment in the ECE system is inadequate. Consistent with the fragmented nature of ECE,
 the US currently has a mixed financing system, with a combination of public and private, market-

based funding. The current costs of child care exceed the costs of college in many states, and private ECE tuition is not high enough to pay for early childhood educators to obtain additional degrees and credentials or to raise early childhood educator wages. Among 37 developed nations, the United States ranks the third lowest in spending in the early years of care and education (Whitebook, McLean et al. 2018). The lack of public investment in ECE and the clear misalignment in the diversity makeup of ECE versus higher levels of education make it difficult for students who are members of the ECE workforce to have consistent, fulfilling education experiences. One meeting attendee noted, "When educators are on public assistance themselves and work full time, they can't provide high-quality experiences for children." Another stated, "As long as we have a market-based system, it's going to be challenging to get more money for early childhood educators. We know families cannot pay."

- Consensus on the certification requirements for early childhood educators working with children ages 4 and younger is lacking. Early educators are rarely individually licensed or certified except in public preschool programs (Whitebook 2014). Convening attendees discussed the recommendations in the *Transforming the Workforce* report and in many states' QRIS that require certification and a pathway to an early childhood degree. Yet currently no consistent set of requirements exists, as all US states set their own qualifications for ECE teachers, assistant teachers, and directors of ECE programs (IOM/NRC 2015; Whitebook 2014). Exacerbating this issue is that many states lack a pathway for early childhood educators to seamlessly move up from a CDA to an associate degree to a bachelor's degree. As noted in the IOM report (2015), "The ability to transfer credits from a community college to a 4-year institution can be hampered or facilitated" by agreements between the two institutions regarding credit transfer. Thus, existing implementation strategies tailored to the ECE workforce's needs are inadequate to support degree and credential attainment.
- ECE educators face challenges accessing higher education. In addition to the structural issues in how ECE credentials and degrees are offered, many ECE educators face additional barriers to credential and degree completion. Most early childhood educators work during the times that higher education coursework is offered, are older than the typical college student, and have more hands-on experience than the average student attending higher education (IOM/NRC 2015). As noted previously, early childhood educators are more likely than K−12 educators to speak languages other than English. Thus, to meet early childhood educators' needs, it is important that education and professional development include active learning tailored to the background knowledge and skills of early childhood educators, include in-person coaching, and be offered at times and use methods that are available to full-time workers.

Meeting participants discussed how at most community colleges, it can take 10 to 12 years for a full-time child care worker to complete an associate degree. Many take a single class per semester, and sometimes skip a semester if the coursework they need is not available. Finally, some specific requirements, such as math or English courses, can create barriers for early childhood educators who are not able to access remedial coursework and struggle with the content. Consequently, a single course may hold them back from attaining a degree.

- Low compensation and variable access to employment create problems for the well-being of the ECE workforce. Compensation for working in ECE is low but varies across programs. Early childhood educators working in publicly funded preschool programs make substantially higher wages than those working in Head Start. Yet Head Start educators make more than those working in child care. And early childhood educators teaching preschoolers make more than those supporting the development of infants and toddlers (IOM/NRC 2015; NSECE Project Team 2013; Whitebook 2014). In turn, early childhood educators who make more money and have access to employer-sponsored health insurance are healthier and less stressed than those with lower compensation and fewer employee benefits (IOM/NRC 2015). Participants at the meeting discussed how the ECE workforce is at risk financially, emotionally, and physically. Further, increasing expectations related to credentials and degrees places additional stress on the workforce.
- Systemic racism and sexism create challenges for Black and Hispanic early childhood educators and the children they serve. Women of color have historically lacked access to employment and education opportunities that offer higher compensation, benefits packages, and workforce protections. The 1938 Fair Labor Standards Act intentionally excluded domestic workers, which prevented many Black women from receiving key protections, such as minimum wage and overtime eligibility (Schilder and Curenton 2021). Moreover, Black early educators are more likely to work with infants and toddlers—positions that pay lower wages than those who teach preschool-age children.
- A large share of the ECE workforce works full time and does not have the time, resources, or motivation to return to school. As noted, early childhood educators are disproportionately people of color and immigrants. Many are older and have not participated in formal education in a while, and a share of early childhood educators have credentials or degrees that are not easily transferrable to other education programs. Additionally, many of these women want to go back to school but face the barrier of limited financial resources because of the history of structural racism.¹¹

- A national movement to professionalize the ECE workforce and raise minimum qualifications could pose risks to staff diversity if extant systemic barriers are also not addressed. Only 35 percent of early childhood educators have a bachelor's degree or higher compared with 96.5 percent of K-12 educators. Evidence shows that more qualified early childhood educators with bachelor's degrees in ECE or a related field are better able to deliver educational instruction and produce desirable student outcomes (Manning et al. 2017). Convening participants expressed concerns that systemic barriers will make it more challenging for certain groups of early educators to pursue higher education if minimum qualifications are raised. Policies and practices need to be changed to address these structural barriers so that raising minimum qualifications yields higher-quality ECE while not reducing the workforce's diversity.
- Being mindful of unintended consequences is essential. Some ECE programs have purged staff without college degrees to get to the next QRIS level. Lead teachers without degrees are stepping down into assistant roles. Convening participants discussed the challenge states face in increasing higher education qualifications. They noted that it is important for state policymakers to consider the amount of time necessary to complete a degree or there could be unintended consequences. 12

Policies and Practices to Strengthen the ECE Workforce

Convening participants discussed recommended federal, state, and local policies and practices that could strengthen the ECE workforce's capacity to meet the diverse needs of young children and their families while maintaining or increasing the workforce's diversity. The following recommendations cut across federal, state, and local governments as well as higher education institutions:

- Make significant public investments in ECE that support increased compensation and improved working conditions as inherent to high-quality ECE. Meeting participants discussed funding sources that could be increased as well regulatory and programmatic changes that could be enhanced.
- Focus investments on professional development of early childhood educators already in the workforce. These investments continue to be necessary given the low level of teacher qualifications permitted in many programs and teachers' low levels of education in some settings. Investing in professional development for those already in the workforce can also help sustain diversity. One solution is establishing apprenticeships that combine on-the-job training and classroom instruction and scholarships for coursework leading to credentials and degrees. ¹³ Such opportunities are especially important to maintain the workforce's diversity while supporting quality improvements.

- Support enhancements to the professional development infrastructure. Developing professional pathways for early childhood educators working in the full range of ECE settings, from home-based settings through school-based prekindergarten, could contribute to improving education and professional development opportunities and creating effective pedagogical leaders throughout the ECE profession.
- Create focused opportunities for professional development and degree attainment to ensure members of racial/ethnic and linguistic groups that have traditionally been marginalized have access to education and advancement. Such opportunities are critical to ensuring the workforce matches the demographic characteristics of young children and families. Without such actions, it is likely that existing stratification by race/ethnicity and compensation will increase, exacerbating inequities among ECE educators and the children they serve.
- Recruit and invest in a diverse leadership, because it helps build a pipeline for preparing diverse new leadership at the master's and doctoral degree levels (Whitebook, Kipnis, and Bellm 2008). Convening participants discussed the issue that although the majority of the existing ECE workforce has lower levels of education than K-12 teachers, the field should nonetheless support a professional pathway that goes through the doctoral level. Specifically, participants discussed the importance of supporting diverse leaders in attaining graduate degrees. They noted that federal, state, and local leaders can focus existing funds and policy actions to strengthen educational opportunities and compensation among early childhood leaders.
- Initiate public education campaigns and engage policymakers in strategic discussions focused on upgrading ECE workforce pay and qualifications. Across federal, state, and community settings, participants noted the need to spread awareness about the importance of the ECE workforce and the existing inequities among its members. In addition, participants discussed the importance of engaging policymakers to develop action plans to address issues of inequitable compensation and increased workforce requirements for ECE.

NATIONAL RECOMMENDATIONS

At the national level, some existing programs provide opportunities to strengthen the diversity and quality of the ECE workforce. ECE participants discussed recommendations to increase federal funding and expand provisions of the following federal programs that can support the ECE workforce.

Seek opportunities to use Every Student Succeeds Act (ESSA)¹⁴ funds to support the ECE workforce. ESSA provides federal funds for elementary and secondary schools and authorizes the Preschool Development Grant program. ¹⁵ The 2015 reauthorization of this program provided increased flexibility to states and districts that created opportunities and challenges for supporting

- professionalism and diversity among ECE educators. Although these provisions do not directly mandate workforce diversity, states can focus their efforts in ways that specifically address barriers to diversity, such as funding for professional development and improvements to teacher preparation programs. Although states and districts can now allocate funding to ECE educators, financially strapped states and districts could shift funds from early childhood to K–12 education.
- Use the Head Start Act¹⁶ and regulations to support Early Head Start and Head Start teachers in meeting increased requirements. The Head Start Act, which authorizes Head Start and Early Head Start, includes provisions for early childhood educators working in these settings (Derrick-Mills et al. 2015). These programs account for a large share of early childhood educators that are more diverse than preschool teachers. Thus, this law and associated regulations potentially have a large impact on the ECE workforce. The law and regulations authorize substantial funding that can be devoted to training and technical assistance as well as other workforce supports. Associated regulations point to the importance of professional development supports for workplace environments to ensure teaching methods are effective in meeting the needs of early childhood educators and the children they teach. Many Head Start teachers exceed educational requirements, a pattern that poses the risk of reducing the workforce's racial diversity in the future if educational opportunities are not equitable for other ECE workers. Convening participants raised concerns and suggested that Head Start provide equitable educational opportunities to the existing workforce to maintain diversity and increase educational attainment.
- Use Child Care and Development Fund ¹⁷ Quality Set-Aside Funds to promote a diverse, professionalized workforce. The CCDF reauthorization included several provisions that could be used to support workforce diversity and professional development. The provisions require states to improve conditions for recruiting, retaining, and advancing a diverse ECE workforce. The reauthorization sets aside some funds for quality improvement that can be used to support training and professional development. As noted, home-based providers are more racially and ethnically diverse than other members of the ECE workforce. Convening participants discussed devoting a share of CCDF funding to home-based providers with greater need of additional training, professional development, and connections to resources via staffed networks or shared services business alliance (Coffey and Isaacs 2019).
- Consider how to leverage The Higher Education Act ¹⁸ to support early childhood educators seeking degrees. The Higher Education Act authorizes federal aid programs administered by the US Department of Education to support people pursuing postsecondary education and institutions of higher education. Federal higher education aid could be used to strengthen the ECE workforce. Specifically, states can use the funding for grants to support teacher preparation and for student aid, loan forgiveness, and student support services.

• Use the Workforce Innovation and Opportunity Act (WIOA) ¹⁹ to provide early childhood job seekers access to employment, education, and training and support services to succeed in the labor market. WIOA requires states and localities to implement career pathway models, which could both prompt states to support career pathways for the ECE workforce and be used by states to offer child care to those taking coursework to advance their careers (Spaulding 2015).

FURTHER STEPS THAT COULD BE TAKEN AT THE STATE LEVEL

State policymakers can take action to support the ECE workforce in many ways. Convening participants discussed the following recommendations for states:

- Create and maintain education policies that make significant public investment in ECE (Whitebook 2014). Convening participants discussed the importance of considering and incorporating compensation and working conditions in how we define quality early education and care (Kashen, Potter, and Stettner 2016).
- Revise existing QRIS to tailor supports to the ECE workforce that also account for the diversity of young children. Convening participants discussed the possibility of states incorporating new measures of quality in their QRIS that include compensation for the workforce and pathways for the existing ECE workforce to obtain skills and competencies. Participants discussed how QRIS could be changed to incorporate indicators of quality that reflect the importance of educators' preparation to work with children and families of diverse cultures and abilities. The CCDF quality set-aside funds could be used by states to make these changes.
- Devote adequate resources to higher education programs and certification systems that are aligned with more rigorous skill and competency standards. Convening participants discussed the need to devote sufficient resources to higher education programs and certification systems to support the preparation of the ECE workforce. Participants noted the challenges in changing higher education programs without strong state leadership.
- Increase availability of ECE coursework and training to create more equitable professional development opportunities. States can invest in ECE college coursework and training opportunities outside of higher education for the ECE workforce. In addition, state leaders can work to coordinate existing coursework and training across child care, Head Start, and pre-K, and for members of the ECE workforce with different titles to create more aligned pathways and opportunities across the system.
- Align state requirements for the ECE workforce to create professional pathways for early childhood educators. Convening participants discussed the importance of states' role in creating alignment among state-issued credentials so that early childhood educators could more easily move

from one position to another that has higher compensation. Convening participants discussed this recommendation as one way states can create policies that support the recruitment, development, and retention of a workforce that includes professionals who reflect the diversity of the children and families served and are prepared to work with children and families of diverse cultures and abilities (Kaplan 2018).

Create policies to address salary parity that account for racial differences. Current data suggest large racial disparities among early childhood educators based on position and race. However, data on the workforce are currently rarely disaggregated by role, program setting, credential, demographic characteristics, experience in the field, population, age of children served, and compensation. Convening participants discussed the importance of collecting and using data on race and salary to craft policies to address existing inequities.

PROGRAM AND INSTITUTIONAL RECOMMENDATIONS

Meeting participants discussed recommendations below that were also noted in Kaplan's 2015 recommendations:

- Support higher education field placements in settings serving racially and ethnically diverse students as well as students living in families with low incomes. To ensure early childhood educators have experience working with diverse children and families, higher education institutions need to partner with schools and early childhood programs that serve diverse populations of children. Ensuring early childhood educators have these experiences requires that higher education institutions partner with child care, Head Start, and pre-K programs to offer such placement opportunities to early childhood educators. Without this focused effort, existing inequities could be reinforced.
- Take steps to ensure curriculum frameworks address diversity, equity, and inclusion. Convening participants discussed the importance of ensuring curriculum frameworks focus on diversity of the workforce and of the children and families participating in ECE programs. Participants noted the importance of offering resources and supports the ECE workforce needs to promote more inclusive practices for children with special needs and provide instruction on culturally competent pedagogical practices. In addition, participants noted that given the racial inequities in opportunity and compensation, it is important that curriculum frameworks employed by institutions of higher education consider existing disparities in opportunities for workforce members (IOM/NAS 2015; Kaplan 2018).
- Utilize grants, scholarships, and tuition and loan forgiveness programs to make formal
 coursework in higher education more accessible. Higher education institutions have a role to play

in ensuring eligible students have access to grants and scholarships. Moreover, community colleges and four-year institutions can take steps to make coursework more accessible by offering courses at night or on weekends and by supporting hybrid and remote learning opportunities (Kaplan 2015).

- Assess the preparation and practices needed for ECE professionals to work effectively with children with diverse needs. Highly qualified and well-compensated ECE professionals, who are trained to work effectively with children with diverse needs, are essential to ensuring that ECE programs across various settings can help all children succeed in school and life. As the field continues to professionalize, it is critical to understand what preparation educators need to meet the diverse needs of all young children. This includes implementing practices that support racial, ethnic, cultural, and linguistic diversity.
- Adopt practices that support early childhood educators in completing their credentials and degrees. Programs can support early childhood educators by paying for substitute teachers and offering increased compensation for educators who have completed degrees. Higher education institutions can support early childhood educators in completing degrees by offering online supports and tailoring supports to meet the existing workforce's needs. For example, higher education institutions could invest in programs for students who are dual language learners and who need remedial supports to succeed with their degrees and credentials.

Appendix A. Convening Agendas

Foundation for Child Development Young Scholars Program 2018 Convening

Strengthening ECE Workforce Diversity while Improving Workforce Quality

Challenges, Opportunities, and Policy Solutions

Agenda for Thursday, March 15 Continental breakfast	8:30-9:00 a.m.
Welcome and introductions	9:00-9:45 a.m.
Sara Vecchiotti, Foundation for Child Development	
Heather Sandstrom, Urban Institute	
Session 1: introducing the issues: professionalism and diversity in the ECE field	9:45-11:00 a.m.
Lisa Guernsey, New America Michael López, Abt Associates and National Research Center on Hispanic Children and	
Families	
Valora Washington, Council for Professional Recognition	
Moderator: Heather Sandstrom, Urban Institute	
Resources:* (1) Quality Jobs, Quality Child Care: The Case for a Well-Paid, Diverse Early Education	
Workforce (Kashen, Potter, and Stettner 2016)	
(2) Building the Workforce our Youngest Children Deserve (Rhodes and Huston 2012)	
 (3) "Diversity and Stratification in California's ECE Workforce" (Whitebook, Kipnis, and Bellm 2008) 	
	11:00-11:15
Break	a.m.
 Session 2: mapping the barriers to professionalizing a diverse workforce Joanne Hurt, Wonders Early Learning Florence Kreisman, Mary's Center Sonia Pruneda-Hernandez, Montgomery College Moderator: Maurice Sykes, Early Childhood Leadership Institute and NAEYC Black Caucus 	11:15 a.m 12:30 p.m.
Resources: (4) Building a Skilled Teacher Workforce: Shared and Divergent Challenges in Early Care and Education in Grades K–12 (Whitebook 2014)	
 (5) It Takes a Community: Leveraging Community College Capacity to Transform the Early Childhood Workforce (Kaplan 2018) 	
Transforming the Workforce for Children Birth through Age 8: A Unifying Foundation (IOM/NRC 2015)	
 (6) Chapter 9: "Higher Education and Ongoing Professional Learning" (7) Chapter 11: "Status and Well-being of the Workforce" 	
Break and get lunch	12:30-1:00 p.m.
Lunch speakers: national initiatives Welcome: Jacqueline Jones, Foundation for Child Development Cemeré James, National Black Child Development Institute Lucy Recio, National Association for the Education of Young Children	1:00-1:45 p.m.
Moderator: Sara Vecchiotti, Foundation for Child Development Session 3: federal policy opportunities and challenges Lori Connors-Tadros, National Institute for Early Education Research Yvette Sanchez Fuentes, Child Care Aware	1:45-3:00 p.m.

Elizabeth Groginsky, DC Office of the State Superintendent of Education

Shayne Spaulding, Urban Institute

Moderator: Gina Adams, Urban Institute

Resources:*

- (8) "Strengthening ECE Workforce Diversity while Improving Workforce Quality: Key Federal Policies"a
- (9) Roots of Decline: How Government Policy Has De-Educated Teachers of Young Children (Bellm and Whitebook 2006)

3:00-3:15 p.m. **Break** 3:15-4:30 p.m.

Session 4: state and local strategies

- Ivory Clarke, National Academy of Sciences
- Tonja Rucker, National League of Cities
- Winona Hao, National Association of State Boards of Education
- Kathy Glazer, Virginia Early Childhood Foundation
- Moderator: Shirley Adelstein, Urban Institute

Resources:*

- (10) Early Childhood Teacher Education Policies: Research Review and State Trends (Schilder 2016)
- (11) Workforce Designs: A Policy Blueprint for State Early Childhood Professional Development Systems (NAEYC) (LeMoine 2008)

Idea generation activity and closing

4:30-5:15 p.m.

Sources: See References section of this report for complete source citations.

Foundation for Child Development Young Scholars Program 2018 Convening Strengthening ECE Workforce Diversity while Improving Workforce Quality

Half-Day Implementation Science Workshop

Agenda for Friday, March 16	
Continental breakfast	7:30-8:30 a.m.
Welcome and introductions Tamara Halle, Martha Zaslow, and Chrishana Lloyd—Child Trends	8:30-9:00 a.m.
 Overview of implementation science and application to efforts to strengthen workforce diversity while improving workforce quality This presentation will provide a brief overview of implementation science frameworks (e.g., implementation stages, data and feedback loops, etc.), as well as a stage-based approach to program evaluation, and illustrate some challenges to implementing early childhood initiatives focused on strengthening diversity of the workforce while improving quality using the Abbot District initiative as an example. Resources: (1) OPRE Brief 2015-48 on "An Integrated Stage-Based Framework for Implementation of Early Childhood Programs and Systems" (Metz et al. 2015, especially pgs. 3–15). (2) The PII Approach: Building Implementation and Evaluation Capacity in Child Welfare (PII 2013, especially pgs. 3–4). (3) "Reaching for Quality: Lessons from New Jersey on Raising Preschool Teacher Qualifications while Maintaining Workforce Diversity" (Coffman and Green 2010) 	9:00-9:45 a.m.
Small group work, part I YSP Scholars work in small groups (e.g., three or four each) to plan the next phase of evaluation research needed for one of three promising approaches presented in the resource readings for supporting workforce diversity while increasing workforce quality: supporting bachelor degree attainment, apprenticeships, and scholarships to increase professional qualifications of a diverse workforce. Resources: (4) "Yes They Can: Supporting Bachelor Degree Attainment for Early Childhood Practitioners" (Sakai et al. 2014) (5) Rethinking Credential Requirements in Early Education: Equity-Based Strategies for Professionalizing a Vulnerable Workforce (McCarthy 2017, especially pgs. 16–21) (6) "Professional Development Scholarships Increase Qualifications of Diverse Providers" (Lipscomb, Schmitt, and Pratt 2015)	9:45-10:30 a.m.
Break	10:30-10:45 a.m.
Report out Small groups will report back to the full group on their research design work for the next phase of what we need to know about different approaches for increasing the diversity of the workforce while improving quality.	10:45-11:15 a.m.
Small group work, part II YSP Scholars work in small groups (e.g., three or four each) to <u>plan to collect</u> implementation data focused on one of three approaches to increasing the diversity of the workforce while improving quality: supporting bachelor degree attainment, apprenticeships, and scholarships to increase professional qualifications of a diverse workforce. Scholars will consider what data collection on implementation would be required for understanding how to transfer the approach to a new context, assuming evidence of effectiveness in a previous context. Resources: YSP Scholars can use all resources noted above (1–6)	11:15-11:45 a.m.
Report out	11:45 a.m.– 12:15 p.m.

Small groups will report back on the data elements they believe will capture	
implementation supports and outcomes in their research design for transferring an	
effective practice in support of a diverse and quality ECE workforce to a new context.	
Wrap-up and evaluation	12:15-12:30
Final reflections on the full-day convening and half-day implementation workshop. YSP	p.m.
Scholars will fill out an evaluation for the convening.	

Sources: See References section of this report for complete source citations.

Preparing the ECE Workforce to Meet the Diverse Needs of Children

Challenges, Opportunities, and Policy Solutions

Agenda fo	or Tuesday,	April 30.	2019

Welcome and introductions	10:30-11:15 a.m.
Session 1: How should we think about diversity among young children today?	11:15 a.m12:30
 Aisha Ray, Erikson Institute and BUILD Initiative 	p.m.
Lea Austin, Center for the Study of Child Care Employment	•
Resources:	
Preparing Early Childhood Teachers to Successfully Educate All Young Children (Ray,	
Bowman, and Robbins 2010)	
"ECE's Quintessential Equity Challenge" 20	
A Better Start: Why Classroom Diversity Matters in Early Care and Education (Reid et al.	
2015)	
Growing Superdiversity among Young U.S. Dual Language Learners and Its Implications (Park,	
Zong, and Batalova 2018)	
Lunch break and networking opportunity	12:30-1:00 p.m.
Session 2: What competencies are needed to meet the diverse needs of young children?	1:00-2:15 p.m.
Abena Ocran-Jackson, Council for Professional Recognition	
Sarah LeMoine, Zero to Three	
Christy Tirrell-Corbin, University of Maryland College of Education	
Resources:	
"Diversity and Inclusion in Early Care and Education" (CDA Council 2014)	
"Understanding Many Languages: Preparing Early Educators to Teach Dual Language	
Learners" (Petig, Austin, and Dean 2018) Transforming the Workforce Birth through Age 8: A Unifying Foundation (IOM/NRC 2015)	
 Transforming the Workforce Birth through Age 8. A Onlying Foundation (IOM/NRC 2013) Knowledge and competencies (Chapter 7) 	
Higher education and ongoing professional learning (Chapter 8)	
Break	2.15 2.20
	2:15-2:30 p.m.
Session 3: What is the role of public policy in preparing the workforce to meet the	2:30-3:45 p.m.
diverse needs of young children?	
Shannon Christian, Office of Child Care, Administration for Children and Families	
Sarah Merrill, Office of Head Start, Administration for Children and Families Winona Hao, National Association of State Boards of Education	
Tonja Rucker, National League of Cities	
Danielle Gonzales, Aspen Institute	
Resources:	
"Building an Early Childhood Professional Development System" (Demma 2010)	
"Degrees in Context: Asking the Right Questions about Preparing Skilled and Effective	
Teachers of Young Children" (Whitebook and Ryan 2011)	
	2.45 4.20
Facilitated group discussion	3:45-4:30 p.m.
Reflections: Where do we go from here?	4:30-4:45 p.m.
 Ivelisse Martinez-Beck, Office of Planning, Research and Evaluation, Administration 	
for Children and Families	
Martha Zaslow, Child Trends and Society for Research in Child Development	
Closing remarks from Foundation	4:45-4:50 p.m.

Sources: See References section of this report for complete source citations.

Foundation for Child Development Young Scholars Program 2019 Convening

Preparing the ECE Workforce to Meet the Diverse Needs of Children

Challenges, Opportunities, and Policy Solutions

Agenda for	Wednesda	v. Mav 1. 20)19

	Agenda for Wednesday, May 1, 2019		
Breakfast and informal networking opportunity		8:30-9:00 a.m.	
Scholar	presentations	9:00-10:00 a.m.	
Implementation workshop: Overview of implementation science and application to preparing the ECE workforce to meet the diverse needs of children		10:00- 10:45 a.m.	
	Tamara Halle, Child Trends		
	Martha Zaslow, Child Trends and Society for Research in Child Development		
Recomn	nended readings:		
•	"Advancing Equity in Early Childhood Education: NAEYC Draft Position Statement" ²¹		
	"Preparing Early Childhood Teachers to Successfully Educate All Children" 22		
	Preparing Early Childhood Teachers to Successfully Educate All Children: The		
	Contribution of Four-Year Undergraduate Teacher Preparation Programs (Ray,		
	Bowman, and Robbins 2006)		
Additio	nal resources:		
•	"An Integrated Stage-Based Framework for Implementation of Early Childhood Programs and Systems" (Metz et al. 2015)		
	"Measuring Culturally Responsive Early Care and Education" (Shivers, Sanders, and Westbrook 2011)		
	"Measuring Quality of ECE Programs for Children with Disabilities" (Spiker et al. 2011)		
Break		10:45-11:00 a.m	
Small g develo	roup work: Designing and evaluating culturally responsive ECE professional pment at the state, city, school, and/or classroom levels with implementation in mind	11:00 a.m12:45 p.m.	
Recomn	nended readings:		
•	"New Understandings of Cultural Diversity and the Implications for Early		
	Childhood Policy, Pedagogy, and Practice" (Reid et al. 2017)		
•	"Linguistically Responsive Professional Development: An Apprenticeship Model" (Heineke et al. 2018)		
•	"Building Anti-Bias Early Childhood Programs: The Role of the Leader" (Derman-		

Sources: See References section of this report for complete source citations.

Sparks et al. 2015)

Wrap-up

12:45-1:00 p.m.

Appendix B. Presenter Biographies

Gina Adams is a senior fellow in the Center on Labor, Human Services, and Population at the Urban Institute and a national expert on factors that shape the affordability, quality, and supply of child care/early education services as well as the ability of families with low incomes to benefit from them. She led seminal research on how families, providers, and agency staff experience the subsidy system that supported state and federal efforts to create subsidy systems that are family-friendly and fair to providers.

Ivory Clarke is an associate program officer at the National Academy of Medicine. She directs the Transforming the Workforce for Children Birth through Age 8: Pathways to Implementation program. In this role, she works directly with state teams to develop actionable implementation plans, grounded in the science and recommendations from the 2015 Institute of Medicine report *Transforming the Workforce for Children Birth Through Age 8: A Unifying Foundation*.

Lori Connors-Tadros is the senior project director for the Center on Enhancing Early Learning Outcomes (CEELO) at the National Institute for Early Education Research at Rutgers University. Tadros leads the work of CEELO to build capacity of state early education administrators to implement comprehensive early learning systems for children birth through third grade.

Elizabeth Groginsky is the assistant superintendent of early learning at the Office of the State Superintendent of Education in the District of Columbia. In this capacity, Groginsky administers and coordinates programs related to the District's efforts to expand and improve high-quality child care and development services in the public and private sectors and ensures strong consumer education and outreach.

Lisa Guernsey is deputy director of the Education Policy program and director of the Learning Technologies project at New America. She leads teams of writers and analysts to tell stories, translate research, examine policies, and generate ideas for new approaches to help disadvantaged students succeed.

Tamara Halle is a developmental psychologist and senior scholar in the early childhood research area at Child Trends. She has more than 20 years of experience conducting research and evaluation studies on factors associated with children's early development. Dr. Halle also serves on the Implementation Research Advisory Committee for the Foundation for Child Development and as a senior advisor within the National Center on Parent, Family, and Community Engagement.

Winona Hao directs NASBE's Early Childhood Education (ECE) work. She provides state policymakers with ECE policy trends, analyses, and technical assistance. Hao oversees NASBE's ECE State Network where she supports state teams and works with national partners to advance the workforce for children from birth through age 8.

Joanne Hurt is the executive director of Wonders Early Learning + Extended Day, a nonprofit organization that provides NAEYC-accredited early childhood education and before- and after-school programs in Montgomery County and the District of Columbia. Joanne has been in educational leadership for the past 24 years and has worked at Wonders for 29 years.

Cemeré James is the vice president of policy at the National Black Child Development Institute (NBCDI). Before joining NBCDI, James was a senior policy analyst at the Center for Law and Social Policy (CLASP). James was also lead operations specialist at Illinois Department of Human Services and, from 2009 to 2011, an inaugural fellow in the Illinois Early Childhood Fellows Program.

Jacqueline Jones is the Foundation for Child Development's president and CEO, where she is responsible for developing and implementing its strategic vision and goals. Before her tenure at the Foundation for Child Development, Dr. Jones served as a senior advisor on early learning to Secretary of Education Arne Duncan and as the country's first deputy assistant secretary for policy and early learning in the US Department of Education.

Florence Kreisman is the director of the Quality Improvement Network (QIN) Hub at Mary's Center in Washington, DC, where she helps lead this citywide initiative to enhance the quality of infant and toddler care and education within the family child care context. Before her current role, Kreisman served as the dual language manager with DC Public Schools's Early Childhood division, where she supported the rollout and implementation of the Head Start School-Wide Model and led a team of specialists coaching in pre-K and kindergarten classrooms.

Chrishana M. Lloyd, is a nationally recognized expert on the study and implementation of interventions to support early childhood professionals in environments such as home-based child care, community-based, and Head Start settings. Dr. Lloyd has more than 20 years of experience in the social science and education fields and considerable experience with applied place-based research and technical assistance.

Michael López, a principal associate at Abt Associates, brings more than 25 years of experience conducting policy-relevant early childhood research, with an emphasis on populations with low incomes or culturally and linguistically diverse populations. He is co-principal investigator for both the National

Research Center on Hispanic Children and Families and the National Migrant and Seasonal Head Start Study.

Sonia Pruneda-Hernandez is the early childhood program coordinator for Montgomery College (MC) Rockville and Takoma Park Campuses. She is the coadvisor of the MC Early Childhood Education Club, which has received numerous awards, and is the MC coordinator for the Maryland State Department of Education Child Care Career and Professional Development Fund.

Lucy Recio is part of the public policy and advocacy team at the National Association for the Education of Young Children (NAEYC), where she is responsible for writing and developing tools and resources and providing technical assistance to build capacity for engagement and impact by NAEYC members and affiliates. Before joining NAEYC, Lucy served as the deputy director of education and youth services for Bronx Borough President Ruben Diaz Jr.

Tonja Rucker currently serves as the director for early childhood success in the Institute for Youth Education and Families at the National League of Cities. She is responsible for developing and overseeing implementation of the institute's work plans and long-term strategies for early education. She conceptualizes and leads efforts to identify and document best practices and promising initiatives, oversees the implementation of technical assistance, and contributes to the overall management of the institute, including strategic planning, coordination of cross-program initiatives, and identification and cultivation of prospective funders.

Yvette Sanchez Fuentes serves as the deputy chief for public policy and research at Child Care Aware of America. She previously served as assistant director for policy with Ascend at the Aspen Institute. She brings extensive experience in providing services to young children from families with low incomes at the local, regional, and national levels.

Heather Sandstrom is a principal research associate in the Center on Labor, Human Services, and Population at the Urban Institute. Her research focuses on early childhood development and public programs that support the well-being of low-income children and families, such as Head Start and Early Head Start, public prekindergarten, child care subsidies, and early childhood home visiting.

Shayne Spaulding is a principal research associate in the Income and Benefits Policy Center at the Urban Institute, where her work focuses on the evaluation of workforce development and postsecondary education programs. She has spent nearly 20 years in the workforce development field as an evaluator, technical assistance provider, and program manager.

Maurice Sykes serves as senior associate at the Early Childhood Leadership Institute, where he focuses on policy and practices related to developing new leaders to the field of early childhood education. Sykes was recently inducted into the Washington DC Hall of Fame for his numerous contributions to the field of education.

Sara Vecchiotti is the chief program officer at the Foundation for Child Development and is responsible for program and grant development and monitoring and communications. Before this position, Dr. Vecchiotti served as the chief operating officer for Lutheran Social Services of New York, where she oversaw all social service programs. Dr. Vecchiotti has also held several leadership positions at the New York City Administration for Children's Services within the Division of Early Care and Education.

Valora Washington is CEO of the Council for Professional Recognition, the nation's largest credentialing organization for early educators. Throughout her career, Dr. Washington has cocreated several institutions, such as Michigan's Children, the Early Childhood Funders Collaborative, and the CAYL Institute. She has chaired and served on numerous boards and commissions such as the Massachusetts Governor's School Readiness Commission; Voices for America's Children; NAEYC; and the National Head Start Association.

Martha Zaslow is director of the Office for Policy and Communications of the Society for Research in Child Development and a senior scholar at Child Trends. At Child Trends, Dr. Zaslow conducts research focusing on professional development of the early childhood workforce and approaches to improving the quality of early childhood programs.

Appendix C. Applying Implementation Science Workshop Summary

Child Trends research scholars led half-day workshops on the second days of the 2018 and 2019 convenings that provided Young Scholars opportunities to learn about implementation science and engage in activities to apply an implementation science lens to their research on the ECE workforce. Dr. Tamara Halle led these workshops. Dr. Chrishana Lloyd copresented with Dr. Halle at the 2018 workshop, and Dr. Martha Zaslow copresented at the 2018 workshop. The 2018 implementation science workshop focused on strengthening ECE workforce diversity while improving workforce quality. The 2019 workshop focused on preparing the ECE workforce to meet the diverse needs of children. At each workshop, after presentations, scholars gathered small groups to discuss how to apply this approach to their own policy research. Below we summarize the presentations by Drs. Halle, Lloyd, and Zaslow.

Implementation Science Overview

Presenters began each workshop with a brief overview of implementation science and a description of the stage-based approach to program evaluation. Presenters described some challenges to implementing early childhood initiatives focused on strengthening the workforce's diversity while improving quality and addressing the diverse needs of young children by presenting specific examples.

Implementation science is the systematic inquiry into the processes by which programs, policies, and individual practices are enacted in real-world settings, as well as the exploration of the contextual factors and organizational supports that are necessary to create a hospitable environment for enacted programs, policies, and practices to achieve their intended outcomes (Century and Cassata 2016; Damschroder et al. 2009; Granger, Pokorny, and Taft 2016; Martinez-Beck 2013; Peters et al. 2013; Peters, Tran, and Adam 2013). Implementation research explores questions such as the following (Century and Cassata 2016): (1) What are we doing? (2) Is it working as intended? (3) For whom and under what circumstances is it working as intended? (4) When, how, and why does it work the way it does? (5) What is being adapted from the original model for use in the current context, and why? (6) What structures are in place to support what we are doing now and into the future?

Key Components of Successful Implementation

Successful approaches to implementation science require an understanding of the stages, teams, data and feedback loops and cycles, and infrastructure. Stages are (1) **exploration** in which study teams assess needs, examine fit and feasibility, involve stakeholders, define the model and make decisions; (2) **installation** that focuses on new services not yet delivered, development of implementation supports, and making necessary structural and instrumental changes; (3) **initial implementation** in which service delivery is initiated, data are used to drive decisionmaking and continuous improvement, and teams engage in rapid-cycle problem-solving; and (4) **full implementation** that focuses on skillful implementation, system and organizational changes, and measuring child and family outcomes (Metz et al. 2015).

Implementation teams are charged with monitoring and supporting implementation. It is important that teams include key personnel at each level of the system, but the exact composition of the team varies depending on the intervention. People who are typically involved in education interventions include those working in the classroom or child care setting; individuals representing the school or program; county or community stakeholders; regional or cross site representatives; and state leaders. Communication should flow both ways among team members. In some instances, a single team is established, but in other instances multiple teams could focus on different aspects of a system.

Effective feedback loops are an essential component of implementation science research in which data are regularly collected, analyzed, and used. Data need to be reliable, valid, and trusted indicators of progress. Moreover, the data and indicators need to include measures of the development of an infrastructure for implementation (e.g., trainers, coaches, evaluation system). In addition, data should be used early and ongoing to inform improvements in early childhood initiatives and systems.

Implementation teams carry out improvement cycles as part of the overall approach. These cycles begin with planning, then focus on doing, then studying the intervention, and, finally, acting on the data to modify the intervention as appropriate.

Sufficient infrastructure is needed at each level of the system to support an implementation science approach. Individual competencies are needed that include training and ongoing supervision to develop or maintain skills and competencies to use performance assessment data. Organizational capacity and administrative facilitation include sufficient funds, human capital, and facilities as well as policies and procedures. Data systems include the capacity for monitoring of quality assurance and for ensuring data can be collected to evaluate the fidelity of implementation and assess outcomes. Finally, leadership must be willing to address both technical and adaptive challenges.

The types of research questions that can be addressed vary based on stage. During the exploration and installation stages, questions focus on the capacity and readiness of individuals, organization(s), and systems as well as the feasibility of implementation. During the initial and full implementation stages, questions focus on the quality of the implementation infrastructure, data and feedback loops, and leadership; fidelity of implementation; cost of implementation; spread of the program, policy, or practice; and scale up of the program, policy, or practice. During all stages, research questions should address the sustainability of the program, policy, or practice and contextualize the implementation.

Application to the Research of Young Scholars

Child Trends and Urban facilitators engaged small groups of scholars in conversations about implementation science to consider how to apply the framework to their own work. Scholars were given scenarios relevant increasing the quality and diversity of the early childhood workforce to meet the needs of an increasingly diverse population of young students. Small groups reported to the full group on possible research designs that could focus on different aspects implementing interventions. Scholars will consider what data collection on implementation would be required to understand how to transfer the approach to a new context, assuming evidence of effectiveness in a previous context.

Notes

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- The Foundation for Child Development sponsored the development of a book on implementation science and the ECE workforce: Getting it Right: Using Implementation Research to Improve Outcomes in Early Care and Education (2020). Workshop leader Tamara Halle was a book chapter author and shared her expertise on this topic.
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- ⁴ Aisha Ray, "ECE's Quintessential Equity Challenge," *New America*, 2019, https://www.newamerica.org/education-policy/reports/moving-beyond-false-choices-for-early-childhood-educatorsa-compendium/what-is-the-role-of-race-class-and-gender-in-resolving-eces-thorny-knot/.
- ⁵ "2010 Census Shows America's Diversity" (news release), United States Census Bureau, March 24, 2011, https://www.census.gov/newsroom/releases/archives/2010_census/cb11-cn125.html.
- ⁶ "1302.91 Staff Qualifications and Competency Requirements.," Head Start, accessed August 27, 2021, https://eclkc.ohs.acf.hhs.gov/policy/45-cfr-chap-xiii/1302-91-staff-qualifications-competency-requirements.
- ⁷ "1302.91 Staff Qualifications and Competency Requirements.," Head Start.
- 6 "Child Care Workforce Qualifications, Training, and Professional Development," Office of Child Care State Capacity Building Center, November 14, 2018, https://childcareta.acf.hhs.gov/sites/default/files/public/rg3e_childcareworkforce_111418_eng.pdf.
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- ¹¹ Schilder and Curenton, "Policymakers Can Redesign the Early Childhood and Education System to Root Out Structural Racism."
- ¹² Tracy Ehlert, "In-Home Childcare Providers Need to Step Up to the Importance of Formal Education," *New America* (blog), March 6, 2018. http://newamerica.org/education-policy/edcentral/-home-childcare-providers-need-step-importance-formal-education/.
- ¹³ Michelle Maier, "Investing in the Early Care and Education Workforce," MDRC, November 2020, https://www.mdrc.org/publication/investing-early-care-and-education-workforce.
- "Every Student Succeeds Act (ESSA)," US Department of Education, accessed August 27, 2021 https://www.ed.gov/essa?src=ft.
- ¹⁵ Erica Greenberg, "The Every (Preschool) Student Succeeds Act of 2015," *Urban Wire* (blog), December 15, 2015, https://www.urban.org/urban-wire/every-preschool-student-succeeds-act-2015.

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- ¹⁹ "Workforce Innovation and Opportunity Act," US Department of Labor, Employment and Training Administration, accessed August 27, 2021, https://www.dol.gov/agencies/eta/wioa.
- ²⁰ Aisha Ray, "ECE's Quintessential Equity Challenge."
- ²¹ Advancing Equity in Early Childhood Education Position Statement," NAEYC, April 2019, https://www.naeyc.org/resources/position-statements/equity.
- ²² Aisha Ray, Barbara Bowman, and Jean Robbins, "Preparing Early Childhood Teachers to Successfully Educate All Children," Foundation for Child Development, June 17, 2010, https://www.fcd-us.org/preparing-early-childhood-teachers-to-successfully-educate-all-children/.

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