



RESEARCH REPORT

Racial, Economic, and Social Justice for the Early Care and Education Workforce: Pre-, During, and Post- COVID-19

January 2021 Convening Summary

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Executive Summary

About the Foundation for Child Development Convening

The COVID-19 pandemic caused an unprecedented public health emergency that crippled the child care market in the United States. At its peak, the pandemic caused more than 3,000 deaths per day in the US, devastating families and the economy throughout the country (Adams, Ewen, and Luetmer 2021).¹ This crisis highlighted the essential role of the early care and education (ECE) workforce in the nation's economic stability and growth (Schilder and Sandstrom 2021). The pandemic's disproportionate effect on Black, Hispanic, and Native American communities further raised racial and social justice concerns.

In January 2021, Urban Institute, Child Trends, and the Foundation for Child Development sponsored a virtual convening as a professional development opportunity for the Foundation's Young Scholars Program (YSP).² YSP supports early-career researchers with grant funding to conduct projects relevant to ECE policy and practice. It also supports the scholarship and research of Promising Scholars, those YSP applicants who demonstrated exceptional potential to conduct rigorous high-quality implementation research focused on the ECE workforce. The 2021 convening brought together Young and Promising Scholars with national, state, and local experts, including academics, policymakers, and practitioners, to discuss key issues affecting the ECE workforce before, during, and after the COVID-19 pandemic.

Key Issues Discussed during the Convening

Convening participants discussed key readings and presentations from experts about advancing financial equity for the ECE workforce and promoting ECE workforce well-being. Participants noted challenges faced by the workforce and recommended specific actions to address these challenges.

Key issues regarding advancing financial equity were as follows:

- The ECE workforce suffers from structural wage and opportunity gaps. The ECE workforce consists primarily of women (95 percent), with women of color constituting about 40 percent of the ECE workforce (Austin 2021). In contrast, women of color represent 20 percent of the US population. Compared with other US occupations, the ECE workforce is poorly compensated, with women of color disproportionately experiencing structural opportunity and wage gaps.

- The COVID-19 pandemic worsened financial stability and equity among ECE providers and staff. The COVID-19 pandemic had a disproportionate impact on early childhood educators, especially those who continued working while other businesses shut down or shifted to virtual learning (Austin 2021).
- A need for equitable pay exists, especially in the context of requiring higher credentials. Recent policy efforts are designed to encourage early childhood educators to earn higher credentials and employers to offer equitable and commensurate pay. However, enacting these policies will require political will.

Key considerations in promoting ECE workforce well-being were as follows:

- The ECE workforce faces challenges to emotional well-being. Studies of the ECE workforce conducted before the COVID-19 pandemic provided a mixed picture of the well-being of the ECE workforce and showed that a portion of the workforce faces anxiety.
- ECE workforce well-being worsened during the COVID-19 pandemic. Early childhood educators faced economic stress that increased stress.
- Supports for the ECE workforce exist during the pandemic and should continue after the pandemic. Convening participants recommended several promising approaches to support the well-being of the ECE workforce during and after the COVID-19 pandemic.

Using implementation science can be a useful framework for evaluating promising practices to support the economic and psychological well-being of the ECE workforce. Convening speakers discussed how implementation science could provide a framework for evaluating promising practices. They noted that it is crucial to consider equity in research design, measures, and methodology. Moreover, implementation research can reveal factors that might reduce or increase inequity in ECE outcomes. Applying an implementation science lens to ECE workforce research can address equity issues.

Racial, Economic, and Social Justice for the Early Care and Education Workforce: Pre-, During, and Post-COVID-19

The COVID-19 pandemic caused an unprecedented public health emergency that crippled the child care market in the United States. At its peak, the pandemic caused more than 3,000 deaths per day in the US, devastating families and the economy throughout the country (Adams, Ewen, and Luetmer 2021).³ The crisis highlighted the essential role of the early childhood educators in the nation's economic stability and growth (Schilder and Sandstrom 2021).⁴ The pandemic's disproportionate effect on Black, Latinx, Asian and Pacific Islander, and Native American communities further raised racial and social justice concerns (Austin 2021; Yip 2021). It challenged policymakers, practitioners, and philanthropists to confront the evidence and identify strategies to dismantle structural barriers at the root of widening economic and health disparities (Schilder and Curenton 2021).

In the years preceding the COVID-19 pandemic, the state of the ECE workforce may not have been top of mind for the general public. However, efforts across government, philanthropy, advocacy, and research had begun to raise awareness about the importance of the ECE workforce in shaping children's early learning experiences and long-term developmental and academic success.

The ECE workforce includes classroom teachers and assistants in center-based programs and home-based child care providers—workers who provide direct care and education for young children. We refer to these workers as “early childhood educators” to recognize their teaching role, but they are also commonly referred to as “child care workers,” “child care providers,” and “caregivers.”

Concerns about the low pay, low credentials, and high turnover of early childhood educators had spurred a growing movement to transform the workforce. Recommended strategies included strengthening early childhood educators' skills and knowledge and providing equitable compensation and job benefits to improve workforce retention and well-being (IOM/NRC 2015). Before the pandemic, policymakers were focused on creating more robust career pathways to help recruit and retain staff. Recognizing the diversity of the workforce and the growing diversity of young children in the US were critical to these conversations (Sandstrom and Schilder 2021).

The COVID-19 pandemic highlighted fundamental structural problems, including inequities in access to career pathways and economic opportunities facing Black, Latinx, and Native American early childhood care providers (Schilder and Curenton 2021; Sharrock et al. 2021).⁵⁶ In turn, early childhood educators who are Black and Latinx report higher rates of stress and depression (Austin 2021). Moreover, Asians and Pacific Islanders as well as immigrant communities have been affected by violent incidents in recent years, and the ECE workforce serving these communities have also been affected (Barajas-Gonzalez 2021; Yip 2021).

It is therefore not surprising that recent reports reveal that one in eight early childhood educators who left the workforce during the pandemic do not plan to return (NWLC 2021). Federal stimulus funding and state and local policy innovations offer potential promise in addressing these structural issues. Yet to address deep racial, social, and economic structural inequities will require the design of innovative policies to support the ECE workforce and attention to equitable implementation.

With support from the Foundation for Child Development, the Urban Institute in partnership with Child Trends organized and facilitated a two-day convening in January 2021 titled *Racial, Economic, and Social Justice for the Early Care and Education Workforce: Pre-, During, and Post-COVID-19*. The convening highlighted what was known and the gaps and tensions regarding the following related questions:

- What do we know about advancing financial equity for the ECE workforce and routes forward to better compensation?
- What do we know about ECE workforce well-being and promising approaches to supporting the well-being of the ECE workforce?
- What needs to be considered to best support the implementation of policies to address structural inequities?

This report summarizes key themes discussed during the convening. It draws on background material shared, presentations from invited speakers, and rich group discussions. However, the report does not provide a full running record or represent a consensus on the topic.

We organized the report into the following sections:

- The first section, “About the 2021 Convening,” describes the convening structure and guests.
- The second section, “Advancing Financial Equity for the ECE Workforce: Session 1,” summarizes a mixture of presentations and discussions on critical steps to advancing financial equity and better compensation for the ECE workforce. The summary includes a review of

research related to the session topic, possible solutions participants discussed to address challenges in the field, and implications participants noted that are relevant to policy, practice, and research.

- The third section, “Key Considerations in Promoting ECE Workforce Well-Being: Session 2,” summarizes a mixture of presentations and discussions on key policy and practice considerations in promoting ECE workforce well-being. This summary includes a review of research related to the session topic, possible solutions participants discussed to address challenges in the field, and implications participants noted that are relevant for policy, practice, and research.
- The fourth section, “Using Equity and Implementation Science for Evaluating Promising Practices Can Support the Economic and Psychological Well-Being of the ECE Workforce,” includes summaries of two workshops on the implications of implementation science for the equity issues discussed on the first day. The first presentation, led by Milagros Nores, codirector for research at the National Institute for Early Education Research, discussed equity perspectives in implementation science. Tamara Halle, senior scholar at Child Trends, led the second presentation, which was a conversation about the importance of considering equity in research design, measures, and methodology.

About the 2021 Convening

Urban Institute, Child Trends, and the Foundation for Child Development sponsored a virtual convening in January 2021 as a professional development opportunity for the Foundation’s Promising Scholars. Since 2003, the Foundation’s Young Scholars Program has supported the scholarship of early-career researchers and funded projects relevant to policy and practice.⁷ The program supports scholars’ research that examines issues related to the preparation, competency, compensation, well-being, and ongoing professional learning of the ECE workforce. Promising Scholars are Young Scholars Program applicants who demonstrated exceptional potential to conduct rigorous high-quality implementation research focused on the ECE workforce.⁸ Promising Scholars receive resources and supports to refine their research skills and knowledge and provide opportunities for professional learning.

The first day of the convening had two main sessions with invited expert panels. The first session discussed advancing financial equity for the ECE workforce. The second session discussed vital policy and practice considerations in promoting ECE workforce well-being. Invited speakers included the following national and state research and policy experts and practitioners:

Session 1: Advancing Financial Equity for the ECE Workforce

- Lea J. E. Austin, Director, Center for the Study of Child Care Employment
- Lynette M. Fraga, Chief Executive Officer, Child Care Aware® of America
- Jovanna Archuleta, Assistant Secretary for Native American Early Childhood Education and Care, New Mexico Early Childhood Education and Care Department
- Jennifer Duran-Sallee, Deputy Secretary, New Mexico Early Childhood Education and Care Department

Session 2: Policy and Practice Considerations in Promoting ECE Workforce Well-Being

- Mark Nagasawa, Director, Straus Center for Young Children and Families at Bank Street
- Juliet Bromer, research scientist, Herr Research Center at the Erikson Institute
- Jamilah R. Jor'dan, Executive Director, Illinois Office of Early Childhood Development
- Fanny Roman, kindergarten teacher, PS 244Q, The Active Learning Elementary School

The second day of the convening followed a workshop format and focused on the implications of implementation science for the equity issues discussed on the first day. Milagros Nores, codirector for research at the National Institute for Early Education Research, presented a framework about implementation sciences to begin the discussion. Tamara Halle, senior scholar at Child Trends, gave an overview of the types of questions implementation science can address as they relate to equity for the early childhood education workforce.

Panelists reviewed research related to the session topics, considered possible solutions to address existing challenges in the field, and discussed implications for policy, practice, and research. The presenters' remarks sparked questions from the Promising Scholars and rich group discussions about the racial, economic, and social justice issues facing the ECE workforce.

Facilitators and meeting planners were Diane Schilder, Erica Greenberg, and Heather Sandstrom of the Urban Institute; Tamara Halle and Martha Zaslow of Child Trends; and Andrea Kent and Sara Vecchiotti of the Foundation for Child Development. Appendix A provides the meeting agenda and Appendix B includes the participant list.

Advancing Financial Equity for the ECE Workforce: Session 1

This section summarizes a mixture of presentations and discussions on critical steps to advancing financial equity and better compensation for the ECE workforce. The summary includes a review of research related to the session topic, possible solutions participants discussed to address challenges in the field, and implications participants noted that are relevant to policy, practice, and research.

The issue of low and inequitable compensation for the ECE workforce was a concern to policymakers before the COVID-19 pandemic, and the pandemic brought stark attention to the problem. Convening participants discussed how the ECE workforce is paid near-poverty wages. The devastation brought by the pandemic, including forced program closures and high worker turnover, increased the financial stress for ECE programs and staff, especially women of color. These events highlighted the importance of policy solutions that can address systemic issues and provide more equitable pay.

The ECE Workforce Suffers from Structural Wage and Opportunity Gaps

The ECE workforce consists primarily of women (95 percent), with women of color constituting about 40 percent of the ECE workforce (Austin 2021). In contrast, women of color represent 20 percent of the US population.⁹ Compared with other US occupations, the ECE workforce is poorly compensated, with women of color disproportionately experiencing structural opportunity and wage gaps. In 2019, the median ECE wage was \$12.12 per hour, compared with a median \$16.47 wage for all US workers (Gould and Blair 2020).¹⁰ In other words, before the pandemic, early childhood educators were earning about 26 percent less than the average American. Substantial variation exists across states, but compared with average workers, a high percentage of early childhood educators in the US live in poverty.¹¹

For example, the poverty rate for early childhood educators in Tennessee is 22.9 percent, more than twice the rate among all Tennessee workers (10.5 percent). Early childhood educators also experienced poverty at rates 4 to 14 times higher than K-12 teachers (Austin 2021). Wages paid to the ECE workforce are below minimum wage in several states and communities (Austin 2021; NSECE Project Team 2013). Many early childhood educators report they cannot afford child care for their own children (Fraga 2021).

Employment benefits are limited, too. Before the pandemic, nearly one-third of the ECE workforce lacked health insurance coverage, and only about 10 percent had a workplace retirement plan

(Whitebook et al. 2018). Convening participants noted that compared with other Organisation for Economic Co-operation and Development countries, the US spends a lower percentage of its gross domestic product on ECE: 0.5 percent compared with about 1 percent in France and most of the Nordic countries and more than 1.6 percent in Sweden and Iceland (OECD 2019).

Moreover, significant racial inequities exist. In 2019, Black early childhood educators' wages were 6 percent lower than their white peers. Within selected states and communities, the issue of low wages and their disproportionate impact on women of color are particularly notable. For example, according to Dr. Austin, before the pandemic in Marin County, California—one of the wealthiest communities in the country—nearly a quarter of Black early childhood educators lived in poverty, compared with 15 percent of white early childhood educators.

Before the pandemic, early childhood educators experienced extensive worry because of low wages, with 75 percent worried about paying monthly bills, 71 percent worried about paying for housing, and about 40 percent worried about having enough food for their families (Schlieber et al. 2019).

The COVID-19 Pandemic Worsened Financial Stability and Equity among ECE Providers and Staff

Across states, the COVID-19 pandemic had a disproportionate impact on early childhood educators, many of whom continued working while other businesses shut down or moved to remote work and schools operated through virtual learning (Austin 2021). As of late 2020, most states had authorized reopening early childhood programs. At the same time, Black and Latinx people and individuals with low incomes were hospitalized and dying from COVID-19 at disproportionate rates.¹² ECE programs struggled financially to keep their doors open as they dealt with low enrollment (meaning less income) and high staff turnover. Convening participants discussed how ECE programs have been affected in California:

- Eighty percent of ECE programs reported they remained open because they lacked the financial resources to survive a temporary closure.
- Forty-nine percent of family child care providers reported they were not able to pay themselves because of reduced enrollment.
- Twenty percent of the ECE workforce reported missing a rent or mortgage payment.

- Thirty-seven percent of programs reported they did not have sufficient funds to pay for the cleaning and sanitizing supplies needed to keep the workforce safe (McLean et al. 2021).

Similarly, in Oregon about half (49 percent) of early childhood educators reported worrying about themselves, their staff, and the children they cared for. In Louisiana over half (56 percent) reported they had not received a salary because of the pandemic (Bassok 2020; Oregon Early Learning Division 2020). As one early childhood educator reported to the Center for the Study of Child Care Employment, “The pressure from the community to open is extreme, and there seems to be very little concern on the part of the parents for the health of the staff and/or the older members of their own families.”¹³

A Need Exists for Equitable Pay, Especially in the Context of Requiring Higher Credentials

Recent policy efforts are designed to encourage early childhood educators to earn higher credentials and employers to offer equitable and commensurate pay. Before the pandemic, policymakers in the US had begun to focus attention on financing of the ECE workforce. A 2015 report, *Transforming the Workforce for Children Birth through Age 8*, highlighted the importance of a qualified ECE workforce and inequitable financing and compensation of the ECE workforce (IOM/NRC 2015). This report documented the challenges of the complex, long-term systems changes needed to implement recommendations to increase the compensation of the ECE workforce, noting that changes would require context-specific policies and political will. Specifically, the report noted the very high costs families with young children incur to pay for quality ECE, the low wages received by early childhood educators, and the fragmented systems and structures that need to be aligned and well-funded to bring about the changes (IOM/NRC 2015).

A 2018 follow-up report, *Transforming the Financing of Early Care and Education*, outlined a framework for a funding strategy to provide high-quality and accessible ECE for all children from birth to kindergarten, including a highly qualified and adequately compensated workforce (National Academies of Sciences, Engineering, and Medicine 2018). This report noted that despite the promise of ECE, available financing supports only a fraction of the families needing ECE and is inadequate to support the ECE workforce.

The report recommended providing financial assistance to the existing ECE workforce to attain desired credentials and degrees at no cost, noting their low compensation. Additionally, financial assistance for the entering workforce to pursue credentials and degrees would limit costs to attract new workers and promote workforce diversity. Of relevance to the convening participants, this report

recommended using existing resources in partnership with colleges and universities to support the existing ECE workforce and support research and evaluations of innovative approaches (National Academies of Sciences, Engineering, and Medicine 2018).

Policy Solutions Can Address Inequities in ECE Financing and Early Childhood Educator Compensation

By early 2021, several states had taken actions to begin to implement some of the recommendations from the 2015 *Transforming the Workforce* report. Additionally, the federal government supported several policies that had the potential to address inequities in ECE financing. Convening participants discussed the following policy strategies:

- **Fund the ECE system at a level that reflects the value of children and early childhood educators.** In 2015, adequately financing the ECE system for all children from birth to kindergarten entry would have cost at least \$140 billion per year, or about 0.75 percent of the US gross domestic product (IOM/NRC 2015). After the pandemic, stabilizing and rebuilding the ECE system would cost from \$335 to \$495 billion (Gould and Blair 2020). Yet this funding would generate more than \$43 billion in tax revenues and potentially restore \$30 to \$35 billion in household income from losses from parents who did not have adequate child care (Gould and Blair 2020).

According to Greenberg and colleagues (2018), child care subsidy generosity is related to ECE program quality. Said differently, funding matters when it comes to providing child care subsidy reimbursement high enough to cover the costs of a high-quality program. Considerable variation in subsidy program administration exists across states. By increasing child care subsidies and changing administration to contracts (which are more stable), policymakers can increase the stability and predictability of revenue and improve child care quality (Greenberg et al. 2018).

- **Provide sustained and equitable funding for the ECE system and fully fund needed services such as Medicaid.** To ensure public investments fill the gap between what families can afford to pay and what ECE educators need to make to provide high-quality care, policymakers should consider funding ECE like Social Security and Medicare. Convening participants discussed the issue that Social Security and Medicare are entitlements that provide a safety net, and people should view ECE as a similar essential service (Fraga 2021).

Instead, research shows that the ECE workforce is twice as likely as other workers to use public programs such as the Supplemental Nutrition Assistance Program and Medicaid because of low pay. By expanding Medicaid, early childhood educators would have greater access to needed medical services.¹⁴ Other options are to provide a combination of federal, state, and local funding to increase the wages of the ECE workforce. For example, New Mexico is currently considering a proposal to pay preschool teachers equal to K–12 salaries (Duran-Sallee and Archuleta 2021).

- **Take steps to rebuild the ECE system to address racial disparities and to dismantle structural inequities.** It is essential for individuals leading ECE systems to take a comprehensive view of how ECE programs are aligned or are not aligned. The combination of the Coronavirus Aid, Relief, and Economic Security Act,¹⁵ the Coronavirus Response and Relief Supplemental Appropriations Act of 2021,¹⁶ the American Rescue Plan Act, and flexibilities granted by federal agencies overseeing ECE programs have provided opportunities to rebuild the ECE system.¹⁷ To rebuild the system to address racial disparities and dismantle structural inequities requires specific attention to equity. Convening participants reported several existing challenges and opportunities related to rebuilding the system to address racial disparities:
 - » **Acknowledge the effect of structural racism on ECE.** It is vital to connect improvements in the ECE system to the movement for racial justice in the US (Fraga 2021). To address structural racism, states could expand wages and create alternative pathways for the workforce. They could prioritize funds to community-based child care providers and those who serve infants and toddlers, segments of the workforce in which women of color are disproportionately represented (Meek et al. 2020). In addition, policymakers and foundations could support research that employs a racial equity lens, similar to the Foundation for Child Development grants.¹⁸
 - » **Ensure directors and leaders have equitable access to comprehensive data systems and tools to support improved quality.** A complete picture of ECE is lacking. Although periodic national surveys gather data that look across different funding streams, data systems that collect data across preschool, child care, and Head Start are not ongoing, comprehensive, and aligned. Such data systems and tools are needed to paint a picture of the value of ECE and should provide data on the ECE workforce by race and ethnicity. For example, it is vital to give directors tools to obtain a complete picture of what is happening with resources devoted to infrastructure and wages and to show disparities within states and communities.

- » **Acknowledge the impact of the pandemic on early childhood businesses.** Providers experienced losses of wages and closures and difficulties obtaining the personal protective equipment needed to keep early childhood educators safe. It is essential to consider equitable distribution of resources, equipment, and supplies.
- **Create new governance systems to align programs and services for children from prenatal to age five.** For example, the New Mexico legislature passed legislation that created the Early Childhood Education and Care Department to implement a key recommendation in the *Transforming the Workforce* report (Duran-Sallee and Archuleta 2021). The new department is aligning funding from a range of early childhood programs to create coordinated services for children from birth through age five. The overarching strategic priorities are growing ECE investments and advancing a diverse, credentialed, and well-compensated workforce to increase quality, access, equity, and authentic collaboration. Critical steps to implementing the strategic priorities include multiple approaches related to governance. Meeting participants discussed the specific ways the new agency is addressing ECE workforce equity, which include
 - » supporting early childhood equity councils, focusing on workforce development, creating workshops to build capacity, and providing opportunities for institutions of higher education to collaborate;
 - » supporting the establishment of governance structures such as state departments devoted to ECE that can offer leadership, resources, and supports to support policies and services more equitably for the ECE system and ECE workforce; and
 - » across government agencies, identifying leaders who develop relationships with communities to build trust positions to address racial equity and tribal issues.
- **Support partnerships between state agencies, communities, and higher education to support the diversity of early childhood educators and the children they serve.** The New Mexico Early Childhood Education and Care Department supports developing a curriculum that represents the language and culture of communities across the state, including tribal communities; supports a network of coaches for early childhood educators; and offers extensive professional development. In addition, the state is creating articulation agreements among higher education institutions to more easily transfer credits to lead to obtaining credentials and degrees. Convening participants noted the following implications:
 - » As policymakers, researchers, and philanthropists consider ECE professional development, it is important to align compensation and consider how to support a culture that values and

respects educators regardless of title. Moreover, convening participants noted the importance of tying compensation to increases in professional development requirements.

- » Comprehensive professional development offered to all ECE providers is needed, so that specific groups of early childhood educators are not left out, leading to unintentional negative consequences.

- **Develop and regularly update research agendas to guide new research that addresses specific federal, state, and local priorities related to racial and economic issues affecting the ECE workforce.** For example, the Illinois’s Early Learning Council developed a research agenda in 2015 and updated it in 2019. The goal was to identify a few priority research questions to inform researchers and funders of research. This question guided the agenda: What information would—if we had it—cause us to behave differently in policy and practice, in ways that would likely lead to better outcomes for young children? The focus was accordingly on questions that, if answered, would help inform changes in policy and practice.¹⁹
- **Articulate and address fundamental research questions related to how the COVID-19 pandemic has impacted the financing of the ECE workforce at the national, state, and community levels.** Participants discussed how addressing some issues related to financing the ECE workforce could advance research and policy:
 1. How should states prioritize funding children and programs to address existing structural inequities?
 2. How has the early childhood workforce been impacted by the COVID-19 pandemic, and how have issues of structural inequity affected the ECE workforce?
 3. What actions can policymakers take to support the early childhood workforce in the aftermath of the COVID-19 pandemic?

Key Considerations in Promoting ECE Workforce Well-Being: Session 2

This section summarizes a mixture of presentations and discussions on key policy and practice considerations in promoting ECE workforce well-being, including a review of research related to the session topic, possible solutions participants discussed to address challenges in the field, and implications participants noted that are relevant for policy, practice, and research.

The COVID-19 pandemic created stress, worry, and anxiety for most Americans and disproportionately affected the ECE workforce, which was economically unstable before the pandemic (Weiland et al. 2021). Convening participants discussed how this economic stress affected early childhood educators of color at rates higher than their white counterparts because of lower wages and worse compensation packages (Austin 2021). As rates of COVID-19 were increasing in winter 2021, convening participants voiced concern about both the wellness and well-being of the ECE workforce.

Background Issues and Research: The ECE Workforce Faces Challenges to Emotional Well-Being

Studies of the ECE workforce conducted before the COVID-19 pandemic provided a mixed picture of the well-being of the ECE workforce and showed that a portion of the workforce already faced worries. Key issues that were discussed were as follows:

- Research suggests that many ECE teachers and caregivers experience distress, but comparisons between the ECE workforce and the general population provides mixed findings (Madill et al. 2018).
- ECE teachers with more adult-centered beliefs, lower wages, multiple jobs, no health insurance, more workplace demands, and fewer work-related resources reported more depressive symptoms (Roberts et al. 2019).
- High percentages of the ECE workforce in Marin County were worried about having enough money to pay their families' monthly bills, housing costs, and routine health care (Schlieber et al. 2019).

"Teacher Well-Being in Early Childhood Education," a 2019 special edition of the *Journal of Applied Developmental Psychology* (Hindman and Bustamante 2019b), presented findings from early childhood educator emotional well-being studies:

- Half the kindergarten teachers who answered the Schools and Staffing Survey who reported that they had inadequate resources said they planned to leave the teaching profession (Lambert et al. 2019).
- Preschool “lead and assistant teachers’ cumulative personal stress was significantly associated with teachers’ evaluations of children’s anger-aggression and cumulative job-related emotional exhaustion was significantly associated with teachers’ evaluations of children’s anxiety-withdrawal and social competence” (Jeon et al. 2019).
- One-third of Head Start teachers reported some depression either in fall or spring and that change in depression between fall and spring was commonplace (Hindman and Bustamante 2019a). Reduced depression over the year was uniquely predictive of children’s gains in prosocial skills and declines in problem behaviors, as rated by teachers (Hindman and Bustamante 2019a).
- ECE teachers’ participation in a socioemotional learning intervention found lower expulsion rates of preschoolers in the classrooms of teachers who participated in the intervention (Zinsser et al. 2019).
- ECE teachers had less psychological distress when they experienced teamwork, respect, and stability at work (Madill et al. 2018).
- Mindfulness-based social-emotional learning programs can give teachers tools to create a trauma-informed classroom, which helps alleviate stress associated with supporting trauma-impacted children (Kim et al. 2021).

ECE Workforce Well-Being Worsened during the COVID-19 Pandemic

The economic impact of the pandemic, trauma from disease and death, and stress from disruptions in daily life caused substantial challenges for the ECE workforce. Moreover, exposure to such stress fell disproportionately on communities of color. The federal government has devoted substantial resources to stabilizing the economy and supporting Americans’ physical and mental health.

Federal relief packages included targeted funds for child care, Head Start, and other federally funded early childhood programs and services. This relief had the potential to improve the well-being of the ECE workforce. Specifically, guidance from the Office of Head Start notes that stimulus funding can go toward supporting mental health services (Falgout 2021). Convening participants discussed key

issues affecting the well-being of the ECE workforce during the pandemic and implications for policy solutions, which we summarize below.

- **Personal grief and loss are pervasive among early childhood educators who are at the same time supporting children and families experiencing grief and loss.** Several participants provided preliminary results from ongoing studies of the ECE workforce; some summarized interview data, and others offered personal experiences about the trauma experienced since the onset of the pandemic. Several convening participants noted that efforts to support the workforce's well-being must account for those who are experiencing personal grief and loss. Efforts must also support early childhood educators working with children and families who have experienced grief and loss. One participant reported that the impact of this trauma is heavy. Another reported that in interviews with members of the ECE workforce, many said they feel they have been living through a war. Participants noted the importance of acknowledging that the pandemic has resulted in trauma experienced by early childhood educators, families, and the broader community.
- **The workforce was forced to be nimble in the face of changes in policies, funding, guidance, and requirements.** Convening participants noted that many ECE providers experiencing stress before the pandemic were asked to stay open or reopen quickly after brief government shutdowns, unlike public schools in many states. One participant who is an early childhood educator described how early childhood educators were required to be nimble in adapting to uncertainty and ongoing changes.

Many of these educators—especially those working in schools—were asked to teach remotely. Others were required to ensure toddlers wore masks and to keep young children physically separate. Educators were learning new techniques while implementing them. Moreover, many ECE educators were supporting families who were facing food and housing insecurity while at the same time educating their children—in some instances remotely.

Several participants reported that uncertainty and continued changes in information from the Centers for Disease Control, the federal government, and state agencies created challenges at the system level. The changes in policies, funding, guidance, and requirements required states to coordinate across agencies to reduce conflicting messages causing stress to the ECE workforce.

- **The early childhood workforce lacked safety and socioemotional support.** One participant noted health and safety standards must be in place, yet many members of the ECE workforce

are working in conditions that do not meet COVID-19 safety standards. Participants discussed being nimble in the absence of the personal protective equipment and supplies needed to operate safely. Some convening participants said challenges with the supply chain and problems distributing resources to those most in need exacerbated the stress that many early childhood educators were experiencing. Another noted that many members of the ECE workforce lack health insurance and access to medical care, so if they did fall ill or need mental health services, they may not receive the medical attention they need.

- **Continued monitoring and curriculum implementation were expected despite a lack of supports.** Several participants said in many settings, early childhood educators had to track their students' developmental progress and submit regular reports, implement curricula designed for in-person instruction, and address stress from social unrest about racial inequities. One participant noted that it is crucial to “keep true to what we know is important and meet the requirements that we are held accountable for and find a balance with the socioemotional components of learning.”
- **Racism and an anti-immigrant climate presented ongoing challenges.** Meeting participants reported that members of the ECE workforce are asked to implement antiracism curricula and address bullying resulting from an anti-immigrant climate. Several noted that as the COVID-19 pandemic disproportionately has led to disease and death for individuals of color, these same communities experienced the nation's increased awareness of structural racism and acts of violence against immigrants. Participants noted the importance of supporting ECE educators in the face of these additional challenging circumstances.

Supports for the ECE Workforce Exist during and after the Pandemic

Convening participants recommended several promising approaches to support the well-being of the ECE workforce during and after the COVID-19 pandemic. Participants based their recommendations on research, policy, practice, and personal experience.

Policymakers and administrators responsible for the ECE system can take specific actions to support the ECE workforce:

- **Provide ongoing, updated, coordinated, and proactive communication.** Several participants reported that conflicting messages, difficulties navigating multiple systems, and challenges with inequitable access to financial and other supports increased the stress on members of the ECE workforce. One participant said her state served as a hub to coordinate communication to

address this challenge among state agencies and the Centers for Disease Control to ensure consistent messages. She noted that they needed coordinated messages because the information and guidance from the Centers for Disease Control were evolving. As updated information based on science emerges about COVID-19 variants and information about vaccine distribution is released, updated messaging is necessary to keep the workforce informed.

- **Take steps to improve interagency collaboration.** Consistent with the need for ongoing communication, coordination among state agencies about communication and policy is needed to support the ECE workforce. Aligning regulations, monitoring, and supports can minimize the stress the ECE workforce experiences when navigating differences in policy and requirements. Different and conflicting regulations can add more stress for a workforce that has been economically affected by the pandemic. By aligning regulations and systems, states can eliminate one source of stress to the ECE workforce.
- **Define quality from diverse perspectives.** Several participants recommended that the ECE field reconsider all of our systems and how they privilege some members of the workforce and not others. One expert described how nearly every quality rating and improvement system requires child care providers to implement evidence-based curricula. Still, few acknowledge mixed ages and the unique context of home-based settings. She asked who is to say what is an “evidence-based curriculum” in a home setting? We need to consider who defines quality and a “good curriculum” and whether these definitions reflect the values of those responsible for implementing the curriculum. Definitions of quality that do not reflect the voices of early childhood educators can devalue the ECE workforce.
- **Provide technical assistance and resources to the ECE workforce to help them feel more supported and confident in teaching young children and engaging their families in new and different ways.** Participants reported the importance of leadership at the school building- or site-director level to support the ECE workforce in teaching remotely or in person while maintaining health and safety protocols. They noted that the role of leaders is often not considered by policymakers and practitioners. Focusing on principals’ and program directors’ roles in supporting curriculum implementation, family engagement, and workforce social supports can be necessary for the early childhood providers grappling with teaching in new and different ways. Moreover, offering teachers supports in using virtual technology appropriately with family members can help ECE teachers develop genuine connections with families. These relationships can alleviate the stress experienced by educators who have been struggling with

the lack of connections with families while leading to improvements in ECE workforce well-being.

- **Provide better pay, benefits, policies, and practices to support the workforce.** Changing workplace policies and practices by offering paid planning time, providing stable classroom assignments, and ensuring a supportive workplace climate can increase workforce well-being.
- **Distribute public funds equitably and account for structural racism in prioritizing public funds.** An equitable distribution of funds that focuses on communities that have historically been excluded can enhance the well-being of the workforce by mitigating stress caused by low wages and benefits (Meek et al. 2020).
- **Expand trauma-informed care.** Given the devastation of the pandemic and the associated trauma experienced by the ECE workforce and many of the families served by ECE, many participants suggested expanding trauma-informed care.
- **Support peer networking.** Consistent with the findings from research conducted before the pandemic, several convening participants reported that supporting peer networking that can expand social support systems for early childhood educators can effectively reduce stress. Several participants noted the benefits of formal peer learning communities and informal opportunities for early childhood educators to engage with one another and share their challenges and promising approaches to teaching young children and their families during a crisis.
- **Document best practices in virtual learning, professional development, and monitoring** to more effectively use technology in the future. Several participants reported that policymakers, researchers, and practitioners have become adept at using technology for learning, professional development, and program monitoring since the onset of the pandemic. In addition, some programs are conducting virtual monitoring visits, and some are using technology to better engage parents, with some groups of parents engaging at higher levels through technology. Several participants suggested a need for documenting lessons learned from the pandemic and research on best practices in using technology with the ECE workforce and with young children and their families.

Leaders and early childhood practitioners can take steps as well. These steps include the following:

- **Focus on play.** Convening participants noted that young children learn through play. As many ECE programs were closed during the pandemic, early childhood educators found it challenging

to implement play-based curricula for young children through video instruction. Nonetheless, they developed innovative approaches. Several participants reported that implementing best practices in play-based learning by working with parents and focusing on the joy of young children's growth and development can mitigate stress experienced by the workforce.

- **Support children's school readiness in age-appropriate ways.** One participant reported that many parents are concerned that their children are falling behind. She noted the importance of focusing on strengths and joy and supporting children's learning in ways that are age appropriate. She stated, "We know kids are resilient. Some children are getting supports at home, and others are struggling, but it is important that we not reinforce the negative assumptions or focus only on test scores. We are teaching during a pandemic, and we are learning during a pandemic. We need to normalize expectations to account for this."
- **Inform policymakers and researchers about the issues and advocate for change.** Several participants reported the importance of authentic engagement with early childhood providers. Policymakers, researchers, and practitioners said hearing the lived experience of early childhood educators is essential. Many also said it was crucial to engage the workforce in advocacy, forming research agendas and informing policymakers about the issues they face.

Support research and the development of innovative strategies to authentically engage the ECE workforce:

- **Use new methods and measures to assess the well-being of the diverse ECE workforce.** Participants noted the importance of using methodological techniques from other fields, such as criminal justice, anthropology, and research on disasters, to inform our approaches to assessing well-being. It is also essential that the measures are valid for an increasingly diverse ECE workforce.
- **Engage racially and ethnically diverse members of the workforce as partners in research.** One participant reported that she has been reading existing peer-reviewed research and sees that most samples are from white middle-class educators. She and others stated that we need to hear more from Black, Latinx, Asian and Pacific Islander, immigrant, and indigenous providers and populations. Community-engaged methods and authentically engaging members of the ECE workforce and the families engaged in ECE service are needed to effectively increase their participation and input. One participant noted, "When we put this [conversation] in the context of women of color, since birth, we have been taught and trained that we do not exist as human

beings. We exist to serve and specifically to serve children.” She noted that engaging the workforce as partners in research elevates their voices and validates their essential roles.

- **Focus research on different sectors and roles.** It is vital to focus research on family child care providers who are disproportionately affected by racism and impacted by the COVID-19 pandemic.²⁰ Research should engage directors, teachers, and assistant teachers and focus on the range of supports that could improve the well-being of the ECE workforce (Austin et al. 2019).
- **Look inside all ECE systems and see where there are opportunities to focus on equity.** Participants noted that each level and perspective in the ECE system could better emphasize equity. For example, one participant said academic researchers should base research on valid assumptions about the lived experience of early childhood workforce members. Engaging stakeholders in different roles and with different perspectives—leaders in government, researchers, and educators—and recognizing the value of an equity lens are critical for dismantling over 400 years’ worth of structures that have been built in these systems. We all must hold ourselves accountable for not reinforcing but dismantling inequities.
- **Document how the ECE workforce has supported diversity to transfer these lessons to K–12 settings.** One participant reported that we should celebrate the diversity of the ECE workforce. This participant noted that research on diversifying the K–12 workforce could learn from best practices in ECE.
- **Shift from a focus on the individual to community well-being.** Several participants reported that COVID-19 has been a collective trauma, and adequately supporting all community members requires a shift of focus from the individual to the community. One participant stated that the aftermath of the pandemic will change all of us. This person noted that she was not sure the country is prepared for the catch-up game we will be playing as we recover.
- **Support research and data for social justice.** Participants recommended that research employ a strengths-based approach and reframe questions to focus explicitly on equity. Such questions could include the following:
 - » How do we design supports that meet the needs of providers, children, and families by engaging them in the process?
 - » How do we engage children, families, and community members in defining ECE quality?
 - » How can we use a strengths-based approach to document the ECE workforce’s conditions to support their well-being?

Using Equity and Implementation Science for Evaluating Promising Practices Can Support the Economic and Psychological Well-Being of the ECE Workforce

Two workshops were held on the implications of implementation science for the equity issues discussed on the first day. The first presentation, led by Milagros Nores, codirector for research at the National Institute for Early Education Research, discussed equity perspectives in implementation science. The second presentation, a conversation about the importance of considering equity in research design, measures, and methodology, was led by Tamara Halle, senior scholar at Child Trends.

Equity Perspectives in Implementation Science Research

It is crucial to consider equity in research design, measures, and methodology (Foundation for Child Development 2020). Implementation research can reveal factors that might reduce or increase inequity in ECE outcomes (Foundation for Child Development 2020). This research must account for racism and discrimination as structural features that can lead to inequities. The quality of inputs and implementation infrastructure matters for the kinds of outcomes one gets from interventions (Foundation for Child Development 2020). Convening participants engaged in a conversation about how they could apply an equity perspective to their planned research.

Applying Implementation Science to ECE Workforce Research

In her workshop, Dr. Halle introduced an example of the importance of taking an implementation science approach in an evaluation of one specific ECE workforce training initiative. The initiative evaluated, the Teacher Education and Compensation Helps (T.E.A.C.H.®) program, links increased compensation with education and skill attainment.

Low wages and benefits persist for the ECE workforce; there is a historical pattern of women of color disproportionately comprising the ECE workforce; and compensation is linked with workforce psychological well-being and job and occupational turnover. Dr. Halle offered these sample research questions to help implementation science advance financial equity and better compensation for the ECE workforce (Century and Cassata 2016):

- **What** are we doing to address ECE workforce compensation and well-being? Are programs and policies to address compensation working as intended?

- **For whom and under what circumstances** are further programs and policies for the ECE workforce working as intended? Are outcomes equitable across the workforce?
- **When, how, and why** do programs and policies work the way they do?
- **What** is being adapted from the original program or policy model for use in the current context, and why?
- **What structures** are in place to support what we are doing now and into the future?

Several interventions designed to improve the economic well-being of the ECE workforce, including T.E.A.C.H.[®],²¹ Child Care WAGE\$,²² and R.E.E.T.A.I.N. (Shaw et al. 2019), demonstrate some positive outcomes (Cassidy et al. 1995; Child Care Services Association n.d.; Shaw et al. 2019). Yet, an evaluation of T.E.A.C.H.[®] in Pennsylvania (Miller and Bogatova 2009) indicated researchers and policymakers should pay attention to issues of teacher attrition and retention in the T.E.A.C.H.[®] program as well as the implementation of the intervention itself to understand the effectiveness of the program.

Furthermore, this study reported on the demographic characteristics of teachers who were accessing and completing the T.E.A.C.H.[®] program, as well as differences in levels of compensation (bonuses versus salary increases). Reporting on these disparities and following up with more in-depth data collection to determine why attrition happened and for whom the T.E.A.C.H.[®] program didn't work can lead to more equitable outcomes. Dr. Halle concluded this example by posting some implementation research questions for consideration:

- How do we address attrition in programs aimed at boosting workforce salaries and educational attainment? How does the COVID-19 pandemic affect these plans?
- For whom and under what circumstances are education-based salary supplement programs working? Are they equitable?
- What adaptations are needed to tier education-based salary supplement programs to achieve the intended outcomes of such programs (e.g., significant increases in workforce compensation)? Does the field need to try entirely new approaches?
- What structures are in place to support efforts to boost workforce compensation and well-being now and into the future?

After this brief overview, Dr. Halle invited participants to discuss how the Promising Scholars could employ an implementation science approach to their work. The discussion identified ways to reframe

research to focus more on implementation and increased the scholars' understanding of applying the implementation science framework to address questions of equity in their research.

Conclusion

The COVID-19 pandemic has brought devastation to many sectors in the US, with the ECE workforce hit particularly hard. Convening participants reported that the economic, racial, and social justice challenges faced by the ECE workforce are daunting. Yet discussions during the two-day convening yielded hope that promising approaches could be more thoroughly studied and brought to scale in the future. One participant noted that “challenges are a little different flavor” with the pandemic. Still, it exacerbated inequities and highlighted the importance of the ECE sector for the nation’s economy and workforce.

Convening participants discussed the importance of researching pressing issues to inform policy change. Several Promising Scholars noted their research focused on relatively small interventions, and they felt humbled when considering the daunting challenges faced by the ECE workforce. In response, meeting participants recommended that they consider building research bodies over time to inform policy changes to enhance the economic and social well-being of the workforce. One participant stated, “The idea is not for you to solve the world’s problems with you today. You have your entire career to do that. Think about your research as starting to make contributions to knowledge from a different perspective.”

In conclusion, participants noted the value of considering an equity-focused approach to the issues the ECE workforce faces to build evidence supporting their economic and social well-being, both apart from and with reference to the pandemic.

Appendix A. Convening Agenda

Foundation for Child Development Young Scholars Program 2021 Convening

Racial, Economic, and Social Justice for the Early Care and Education Workforce: Pre-, During, and Post-COVID-19

Challenges, Opportunities, and Policy Solutions

Agenda for Tuesday, January 12, 2021

Welcome and introductions	11:00–11:30 a.m.
<ul style="list-style-type: none"> ■ Jacqueline Jones, Foundation for Child Development ■ Diane Schilder, Urban Institute 	
Session 1: Advancing financial equity for the ECE workforce: routes forward for better compensation	11:30 a.m.–1:00 p.m.
<ul style="list-style-type: none"> ■ Lea Austin, Center for the Study of Child Care Employment ■ Lynette Fraga, Child Care Aware ■ Jovanna Archuleta, New Mexico Early Education and Care Department ■ Jennifer Duran-Sallee, New Mexico Early Childhood Education and Care Department ■ Moderator: Diane Schilder, Urban Institute 	
<i>Resources:</i>	
<ul style="list-style-type: none"> ■ “Transforming the Financing of Early Care and Education” (National Academies 2018) ■ <i>Number and Characteristics of Early Care and Education (ECE) Teachers and Caregivers: Initial Findings from the National Survey of Early Care and Education (NSECE)</i> (NSECE Project Team 2013) ■ “Want to Help Young Children? Expand Medicaid”²³ ■ <i>Are Higher Subsidy Payment Rates and Provider-Friendly Payment Policies Associated with Child Care Quality?</i> (Greenberg et al. 2018) ■ “Policies, Practices, and Resources for Child Care and Early Education Providers amid the Coronavirus Crisis”²⁴ 	
Facilitated small group discussion	1:00–1:20 p.m.
Break	1:20–1:45 p.m.
Session 2: Key policy and practice considerations in promoting ECE workforce well-being	1:45–3:15 p.m.
<ul style="list-style-type: none"> ■ Mark Nagasawa, Straus Center for Young Children and Families at Bank Street ■ Juliet Bromer, Herr Center at Erikson Institute ■ Jamilah R. Jor’dan, Illinois Office of Early Childhood Development ■ Fanny Roman, PS 244Q The Active Learning Elementary School ■ Moderator: Erica Greenberg, Urban Institute 	
<i>Resources:</i>	
<ul style="list-style-type: none"> ■ <i>Supporting the Psychological Well-Being of the Early Care and Education Workforce: Findings from the NSECE</i> (Madill et al. 2018) ■ “Personal and Workplace Contributions to Early Educator’s Depression Across Settings” (Roberts et al. 2019) ■ Special edition of the <i>Journal of Applied Developmental Psychology</i> on Teacher Well-Being in Early Childhood Education (Hindman and Bustamante 2019b) ■ “Teacher’s Voices: Work Environment Conditions That Impact Teacher Practice and Program Quality”²⁵ ■ “Office of Child Care COVID-19 Resources”²⁶ ■ “Promoting Sustainability of Child Care Programs during the COVID-19 Pandemic” (Burwick et al. 2020) 	
Facilitated small group discussions	3:15–3:35 p.m.
Break	3:35–3:45 p.m.

Reflections and closing remarks	3:45–4:15 p.m.
<ul style="list-style-type: none"> ■ Andrea Kent, Program Officer, Foundation for Child Development <ul style="list-style-type: none"> ○ What is the most single valuable thing you learned today? ○ What questions did the panels generate? 	
Scholar networking opportunity	4:45–6:00 p.m.

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

Agenda for Wednesday, January 13, 2021

Introduction of day 2	11:00–11:15 a.m.
<ul style="list-style-type: none"> ■ Tamara Halle, Child Trends ■ Diane Schilder, Urban Institute 	
Equity as a perspective for implementation research in early childhood education	11:15–11:45 a.m.
<ul style="list-style-type: none"> ■ Milagros Nores, National Institute for Early Education Research, author of chapter 12 in the Foundation’s <i>Getting it Right: Using Implementation Research to Improve Outcomes in Early Care and Education</i> 	
Resources:	
<ul style="list-style-type: none"> ■ Getting it Right: Using Implementation Research to Improve Outcomes in Early Care and Education (Foundation for Child Development 2020) 	
Understanding compensation, benefits, and workforce well-being, and why implementation issues matter: framing the exercise	11:45 a.m.–12:15 p.m.
<ul style="list-style-type: none"> ■ Tamara Halle, Child Trends 	
Resources:	
<ul style="list-style-type: none"> ■ “The Effect of Education on Child Care Teachers’ Beliefs and Classroom Quality: Year One Evaluation of the T.E.A.C.H. Early Childhood Associate Degree Scholarship Program” (Cassidy et al. 1995) ■ “Quality Improvements in the Early Care and Education Workforce: Outcomes and Impact of the T.E.A.C.H. Early Childhood Project” (Miller and Bogatova 2009) ■ “Evaluation of R.E.E.T.A.I.N., Minnesota’s Child Care Workforce Retention Program: Executive Summary” (Shaw et al. 2019) 	
Breakout group study design	12:15–1:45 p.m.
<ul style="list-style-type: none"> ■ Tamara Halle, Child Trends ■ Marty Zaslow, Child Trends; Office of Policy and Communications at the Society for Research in Child Development ■ Milagros Nores, National Institute for Early Education Research 	
Resources:	
<ul style="list-style-type: none"> ■ “Supporting Families and Child Care Providers during the Pandemic with a Focus on Equity” (Daily and Kazi 2020) ■ “How States Can Use Early Care and Education Provider Surveys to Develop COVID-19 Response Strategies” (Warner-Richter 2020) ■ “A List of COVID-19 Child Care Surveys and Data Analyses”²⁷ 	
Break	1:45–2:15 p.m.
Report back on breakout groups	2:15–3:00 p.m.
Closing remarks	3:00–3:30 p.m.
<ul style="list-style-type: none"> ■ Sara Vecchiotti, Foundation for Child Development ■ Diane Schilder, Urban Institute 	

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

Appendix B. Participant Biographies

Lea Austin is the director of the Center for the Study of Child Care Employment at the University of California, Berkeley. Dr. Austin leads the Center’s research and policy agenda aimed at improving the status of early educators. She has extensive experience in the areas of workforce development, racial equity, early childhood leadership competencies and curricula, and public policy and administration.

Jovanna Archuleta is the nation’s first assistant secretary for Native American Early Childhood Education and Care in New Mexico’s Early Childhood Education and Care Department (ECECD). She joined ECECD after nearly a decade working with the Eight Northern Indian Pueblos Council. Most recently, she served as Pueblo Outreach Coordinator for early childhood at the LANL Foundation. Archuleta earned an MBA from New Mexico Highlands University.

Juliet Bromer is a research scientist at the Herr Research Center at Erikson Institute. Dr. Bromer’s research focuses on workforce development and quality improvement in home-based child care and the family and community support roles of child care providers. She currently serves in a leadership role on several national studies, including the federally funded Home-Based Child Care Supply and Quality project as well as the Foundation for Child Development–funded Multi-State Study of Family Child Care Decline and Supply.

Jennifer Duran-Sallee currently serves as the department deputy secretary in New Mexico’s Early Childhood Education and Care Department (ECECD). Before joining ECECD, Dr. Duran-Sallee served as director for the Early Childhood Center of Excellence (ECCOE) at Santa Fe Community College. ECCOE is the college’s statewide initiative to transform New Mexico’s workforce through quality early childhood education.

Erica Greenberg is a senior research associate in the Center on Education Data and Policy at the Urban Institute. Her research spans early childhood and K–12 education, focusing on programs and policies like public prekindergarten, Head Start, child care subsidies, and home visiting. She also investigates the causes, consequences, and measurement of educational inequality.

Tamara Halle is a developmental psychologist and a senior scholar in the early childhood research area at Child Trends. She has over 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.

Mark Nagasawa is the director of the Straus Center for Young Children and Families at Bank Street College of Education. His research focuses on the nexus of high-quality ECE and elementary and secondary systems using professional development and evaluation as policy levers. The central assumptions of this work are that policymaking and enactment are cultural practices of power and that understanding the cultural logics that shape policy practice is a component of framing justice-centered educational and social policy reforms.

Milagros Nores is the codirector for research at the National Institute for Early Education Research. In her role she oversees research operations, while pursuing her own research as well. Her expertise and interests are in early childhood development, data-driven policy development, evaluation design, equity, and English language learners. Dr. Nores currently leads evaluations in Colombia (South America), West Virginia, and New Jersey, and recently concluded a study on parental-child educational practices for minority children in the US and an evaluation of Seattle's preschool programs, among others.

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. Prior to 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 served as Deputy Assistant Secretary for Policy and Early Learning in the US Department of Education.

Jamilah R. Jor'dan is the executive director at the Illinois Governor's Office of Early Childhood Development. In this role, she is responsible for leading the state's initiatives to create an integrated system of quality early learning and development programs to help give all Illinois children a strong educational foundation before they begin kindergarten. She convenes the state's Early Learning Council and oversees the state's Quality Rating and Improvement System; the Maternal, Infant, and Early Childhood Home Visiting Program; and the state's efforts to strengthen training and professional development supports for Illinois' early learning workforce.

Fanny Roman is a kindergarten teacher at PS 244Q The Active Learning Elementary School. She has extensive experience as an early childhood educator, having spent nine years teaching in the kindergarten classroom, and nine years prior to that teaching in the preschool classroom. She has a BA in Early Childhood Education and Sociology from Queens College and an MS in Children's Literature with a Bilingual Extension. Roman was one of the featured educators in the High Quality Early Learning Project created by the Research Foundation at the City University of New York and funded by the Foundation for Child Development.

Diane Schilder is a senior fellow at Urban Institute. She works with a team of researchers studying programs and policies that affect children and families. Applying knowledge gained as principal investigator of studies at a large nonprofit research organization, Harvard University, and the US Government Accountability Office, Schilder studies early care and education programs, elementary and secondary programs and policies, and higher education initiatives.

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. Prior to 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.

Martha Zaslow is senior advisor for the Society for Research in Child Development and a senior scholar at Child Trends. In these roles, Dr. Zaslow conducts research on professional development of the early childhood workforce and approaches to improving the quality of early childhood programs.

Appendix C. National Academy of Sciences Recommendations

Meeting participants discussed two reports: *Transforming the Workforce* (IOM/NRC 2015) and *Transforming the Financing of Early Care and Education* (National Academies 2018).

The 2015 report recommendations relevant to the conversations about financing the workforce are to ensure the following:

- Recommendation 1: Federal and state governments should establish consistent standards for high quality across all ECE programs. Receipt of funding should be linked to attaining and maintaining these quality standards. State and federal financing mechanisms should ensure that providers receive payments that are sufficient to cover the total cost of high-quality ECE.
- Recommendation 2: All children and families should have access to affordable, high-quality ECE. ECE access should not be contingent on the characteristics of children's parents, such as family income or work status.
 - a. ECE programs and financing mechanisms (with the exception of employer-based programs) should not set eligibility standards that require parental employment, job training, education, or other activities.
 - b. Federal and state governments should set uniform family payment standards that increase progressively across income groups and are applied if the ECE program requires a family contribution (payment).
 - c. The share of total ECE system costs that are not covered by family payments should be covered by a combination of institutional support to providers who meet quality standards and direct assistance to families that is based on uniform income eligibility standards.
- Recommendation 3: In states that have demonstrated a readiness to implement a financing structure that advances principles for a high-quality ECE system and includes adequate funding, state governments or other state-level entities should act as coordinators for the various federal and state financing mechanisms that support ECE, with the exception of federal and state tax preferences that flow directly to families.
- Recommendation 4: To provide adequate, equitable, and sustainable funding for a unified, high-quality system of ECE for all children from birth to kindergarten entry, federal and state

governments should increase funding levels and revise tax preferences to ensure adequate funding.

- Recommendation 5: Family payments for families at the lowest income level should be reduced to zero, and if a family contribution is required by a program, that contribution, as a share of family income, should progressively increase as income rises.
- Recommendation 6: A coalition of public and private funders should support the development and implementation of a first round of local-, state-, and national-level strategic business plans to guide transitions toward a reformed financing structure for high-quality ECE.
- Recommendation 7: Because compensation for the ECE workforce is not currently commensurate with desired qualifications, the ECE workforce should be provided with financial assistance to increase practitioners' knowledge and competencies and to achieve required qualifications through higher education programs, credentialing programs, and other forms of professional learning. The incumbent ECE workforce should bear no cost for increasing practitioners' knowledge base, competencies, and qualifications, and the entering workforce should be assisted to limit costs to a reasonable proportion of postgraduate earnings, with a goal of maintaining and further promoting diversity in the pipeline of ECE professionals.
 - d. Existing grant-based resources should be leveraged, and states and localities, along with colleges and universities, should work together to provide additional resources and supports to the incumbent workforce as practitioners further their qualifications as professionals in the ECE field.
 - e. States and the federal government should provide financial and other appropriate supports to limit to a reasonable proportion of expected postgraduate earnings any tuition and fee expenses that are incurred by prospective ECE professionals and are not covered by existing financial aid programs.
- Recommendation 8: States and the federal government should provide grants to institutions and systems of postsecondary education to develop faculty and ECE programs and to align ECE curricula with the science of child development and early learning and with principles of high-quality professional practice. Federal funding should be leveraged through grants that provide incentives to states, colleges, and universities to ensure higher education programs are of high quality and aligned with workforce needs, including evaluating and monitoring student outcomes, curricula, and processes.

- Recommendation 9: The federal and state governments, as well as other funders, should provide sustained funding for research and evaluation on early childhood education, particularly during the transition period, to ensure efforts to improve the ECE system result in positive outcomes for children and in the recruitment and retention of a highly qualified workforce.
- Recommendation 10: The federal government should align its data collection requirements across all federal ECE funding streams to collect comprehensive information about the entire ECE sector and sustain investments in regular, national data collection efforts from state and nationally representative samples that track changes in the ECE landscape over time to better understand the experiences of ECE programs, the ECE workforce, and the developmental outcomes of children who participate in ECE programs.

Notes

- ¹ “Risk for COVID-19 Infection, Hospitalization, and Death by Race/Ethnicity,” Centers for Disease Control, updated July 16, 2021, <https://www.cdc.gov/coronavirus/2019-ncov/covid-data/investigations-discovery/hospitalization-death-by-race-ethnicity.html>.
- ² A related paper, *Strengthening the Diversity and Quality of the Early Care and Education Workforce: Summary of the 2018 and 2019 Convenings*, summarizes the key themes from previous convenings held in 2018 and 2019. Those meetings focused more closely on the topics of maintaining workforce diversity while implementing efforts to increase staff education levels, as well as training the workforce to support the diverse needs of children.
- ³ “Risk for COVID-19 Infection, Hospitalization, and Death by Race/Ethnicity,” Centers for Disease Control
- ⁴ Penelope Whitney and Edward Lempinen, “COVID-19 Is Ravaging U.S. Early Childhood Education, New Report Finds,” *Berkeley News*, February 23, 2021, <https://news.berkeley.edu/2021/02/23/covid-19-is-ravaging-u-s-early-childhood-education-new-report-finds/>.
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