Workforce Data

An ongoing lack of comprehensive, quality data hinders states' efforts to develop policies to prepare, support, and reward the early childhood workforce. Understanding the reach and effectiveness of minimum qualification requirements (see p. 32) and compensation strategies (see p. 45) requires data not only about early educators who participate in professional development or state programs, but also those who do not participate, in order to understand differences between these groups as well as any barriers to participation. Without the ability to describe and track basic demographic, education, and employment characteristics of early educators across settings, it is impossible to answer questions like "How prepared is the early care and education workforce to provide effective education and care for all children?" and "What policies and investments lead to a skilled and stable early care and education workforce?"[166]

Yet there is no comprehensive, longitudinal data source for tracking the early childhood workforce in its entirety across the United States.[167] Occupational data from the Bureau of Labor Statistics cannot be disaggregated by role or type of program, and federal administrative agencies, such as the Office of Head Start, only collect data on teaching staff who work in those programs. At the state level, there exist similar silos of administrative data depending on where early educators work. For example, teacher certification databases typically include a select group of teaching staff, primarily those working in state-funded pre-K programs. These disparate data sources, each covering only a slice of the workforce, make it very difficult for states to provide a comprehensive estimate of how many teachers are providing early care and education and to design and assess the impact of professional development and compensation initiatives.

Nevertheless, in order to fully understand how policies affect the ECE workforce in each state, states must develop data collection mechanisms, such as workforce registries or surveys, that allow them to provide a robust estimate of total individuals in the early childhood workforce. Without a baseline total, states cannot estimate the reach or participation saturation of specific programs and policies, nor can they understand who lacks access to professional development opportunities and why. Although some states, such as Maryland and Rhode Island, are moving toward this objective by linking data from a variety of administrative data sources,[168] much workforce data remains siloed by program and the agency responsible (Head Start, pre-K, child care licensing). Furthermore, administrative data does not necessarily capture all child care providers if they do not receive state funding or are not licensed.

Few states currently have an ability to estimate the total number of early educators in their state, and those that do may not have information that is usable, given variability in data quality. For example, states with registries may be able to report total participants and estimated coverage, but the data could include inactive participants or may only include those who voluntarily elected to participate, making any findings potentially unrepresentative of the wider workforce. Similarly, states with workforce surveys may have very low and uneven response rates.

The type of data that states collect about the workforce is also crucial.[169] Without information on qualifications and wages, for example, there is a bevy of questions that cannot be answered. Among the most pressing concerns, with the new minimum-wage laws in California and New York, is: What is the magnitude of the impact on the current ECE workforce? Nationally, nearly 75 percent of early educators earn less than $15 an

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hour.[170] We do not have information that reveals whether the context for the California or New York workforce is similar or what differences there may be throughout these two states based on region, workplace auspice and funding source, and job role. This lack of data prevents assessment of what these increased wage floors may mean for staffing in center- and home-based programs, including what will be required to restructure resources in publicly funded early childhood programs.

Another critical question we cannot answer without up-to-date information is: What percentage of the current workforce already meets the Institute of Medicine and National Research Council recommendation that a lead teacher hold a bachelor's degree with specialized training? Nationally, we know that many members of the workforce exceed their state's minimum qualifications for training, but we have no way to estimate how many hold college degrees or in what subject, or to identify variations across the workforce. Similarly, we are unable to estimate information about the demographics of the workforce in order to understand its racial, ethnic, and linguistic characteristics and, again, variations across the states.

Although there has been significant progress with the development of early childhood data systems, in part due to attention to workforce data in CCDBG, and in recent years, competitive federal grants, such as Race to the Top–Early Learning Challenge (see Financial Resources, p. 51), workforce data collection in particular has shown more limited advances.

We focus on four key indicators to establish whether states have in place at least the basic elements of data collection and reporting on the ECE workforce: whether states have a formal mechanism with the potential to collect data on the workforce across settings; whether these data

RAISING STANDARDS FOR ECE DATA SYSTEMS: THE EARLY CHILDHOOD DATA COLLABORATIVE (ECDC)

By identifying 10 fundamentals of coordinated state ECE data systems, the Early Childhood Data Collaborative (ECDC)[171] has been instrumental in setting the agenda for improving data systems in the early care and education sector, including as it pertains specifically to the workforce. For example, fundamental #7 states the need for a unique ECE workforce identifier with the ability to link to program sites and children, while fundamental #8 highlights the importance of comprehensive content within workforce data (demographics, education, and more).

Especially when compared to the steps that have been taken with *child*-level data systems, there has been much more limited progress to date for workforce data: few states have robust workforce data systems that meet the ECDC fundamentals. Key data elements are missing in many states, particularly when relying on registries, which vary widely in scope of what data is required for participants or is even requested. For example, most state registries, given their purpose as a professional development tool, usually include at least some information on participant education and training, and this data is often verified via transcripts. However, fewer states collect employment information necessary to understand the status of the jobs, such as wages and benefit information. Furthermore, data linkages with other systems, such as QRIS, may not exist, or if they do, it is not always clear how the data is being linked and what it includes.

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systems attempt to collect information on staff compensation; whether data is reported publicly; and finally, whether states attempt to gather data across all licensed child care programs. These indicators were chosen as simplified signals of wider elements of good data collection, but they do not encompass all that is needed. Future editions of the *Index* will raise the bar in an effort to promote better practice in this area.

Assessing the States: Workforce Data

Indicator 1: Does the state have at least one formal mechanism to track the ECE workforce across settings?

We focus on data collection mechanisms that have the *potential* to include the entire ECE workforce,[172] including home-based providers, such as workforce registries or surveys. We do not include administrative data that is regularly collected as part of ECE programs, such as pre-K or Head Start, or data that is primarily at the program level, such as QRIS.

Nearly all states (47) currently have a formal data collection mechanism. The vast majority of these (42) include registries.[173] Eighteen states have conducted workforce surveys at some point within the last five years (2011 through 2015),[174] though the majority of these states also have registries. North Carolina, Kansas, and Delaware are currently the only states to conduct surveys without also implementing some form of registry.[175]

Indicator 2: Does the state's mechanism for collecting workforce data include compensation?

Given the many negative consequences of inadequate wages, it is critical that states understand the breadth of the problem across sectors. Comparable compensation has previously been identified by the Department of Education as a key element of quality and an area of focus in Preschool Development and Expansion Grants. Yet according to the 2015 NIEER Preschool Yearbook, only 20 states reported salary data, and of those, only nine reported salary data across all settings and programs, signaling the need to strengthen state strategies to capture this information.[176]

We focus on whether states attempt to collect any information on wages or benefits via their registry or survey. Most states capture at least some data on the education, training, and professional development of the workforce, as well as basic demographic information, although even here, states do not necessarily capture all of this information, verify it, or ensure that it is current. However, there is greater variability in the number of states that collect basic data on the compensation (wages and benefits) of the ECE workforce, contributing to a lack of understanding of the low pay and status of this vital work and its impact on retention and relationship to quality.

In total, 32 states collect some wage or benefit data via their registry or survey. Of the 18 states that have recent workforce surveys, nearly all include information on wages and benefits (17 have data on wages, 16 on benefits). It is less common for registries to collect this information: 25 of the 42 states with registries collect wage data, and 11 states collect information on benefits, although this data is sometimes collected at the program rather than staff level. Detailed data elements are unknown for the following states' registries: South Carolina, Tennessee, and Utah.

Indicator 3: Does the state use the data collected to report publicly on the status of the workforce?

One of the challenges of assessing state-level workforce data is that states do not always report aggregate data publicly. Yet without this information, researchers, advocates, and other stakeholders are unable to understand and evaluate the status of the ECE workforce

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and the barriers to improving working conditions. We assess whether the data that states collect is made available to the public online.

In total, 24 states report aggregate data publicly on a state agency website via survey and/or registry. Nearly all states with workforce surveys (17 out of 18 states) report workforce data online, but only nine states out of a total of 42 with registries publish this information electronically. However, 23 of the 42 states with registries report data internally and/or to select organizations, such as partner agencies or the National Workforce Registry Alliance.[177]

Indicator 4: Does the state attempt to collect comprehensive data across child care settings?
Disparate data sources, each covering only a slice of the workforce, make it very difficult for states to provide a comprehensive estimate of how many teachers are providing early care and education to children and to assess the impact of workforce initiatives. For this first edition of the *Index*, we have focused on whether states are at least collecting data across all child care settings, with the intention being that states will eventually collect data across all ECE.

For registries, we include only those states that mandate inclusion for all licensed settings (a total of 14 states). Some states have other strategies for increasing participation, such as requiring programs within their QRIS to participate (13 states) or providing incentives for participation, like access to scholarships (19 states). While useful in boosting participation, these strategies do not necessarily ensure a comprehensive or representative population of teaching staff. For surveys, we include those that drew their sample from both center- and home-based programs (a total of 16 states).

In total, 25 states attempted to capture information across all child care settings, whether via mandatory registry participation, by survey, or both.

SPOTLIGHT

REGULARLY UPDATING WORKFORCE DATA

While many states are now collecting workforce data, whether through a workforce registry or a survey, fewer states have solid strategies in place to ensure that data remain current via regular updates.

Survey Example: Illinois has legislation to ensure that workforce data is collected regularly. A statewide survey of the workforce within licensed child care facilities must be conducted every two years by the Illinois Department of Human Services (IDHS).

Registry Example: Washington ensures that its registry (MERIT) data is regularly updated, and inactive memberships are culled by keeping MERIT professional records active for one year from the date of registration. Members are notified of their renewal date by email and must update their MERIT record, including any changes in employment, contact information, and confidential workforce data, to remain active.

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State Assessment

Thirteen **stalled** states did not meet at least two indicators; 19 states are **edging forward**, having met at least two of the indicators; and 19 states are **making headway**, having met all four indicators. See Table 4.5 for a state-by-state overview of each indicator and the overall assessment.

Figure 4.5	State Map of Workforce Data Assessment
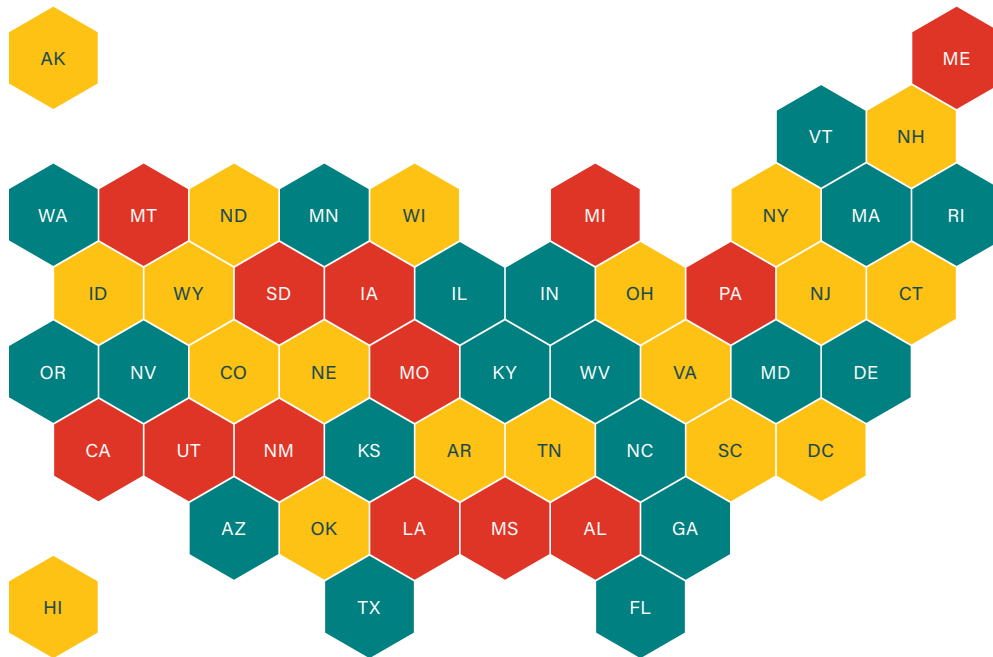
STALLED: the state has made limited or no progress

EDGING FORWARD: the state has made partial progress

MAKING HEADWAY: the state is taking action and advancing promising policies

Policy Recommendation: Workforce Data

- Develop a comprehensive, up-to-date workforce data system of sufficient quality to gain a meaningful assessment of the reach of education and training opportunities and whether they are meeting the professional development needs for all early educators, across settings, whether they work with infants, toddlers, or preschoolers.

For additional policy recommendations, see the Early Childhood Workforce Index Executive Summary.

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Table 4.5	Workforce Data Indicators & Assessment by State				
State	**Formal Data Mechanism**	**Includes Compensation**	**Reports Data Publicly**	**Comprehensive**	**Overall Assessment**
Alabama					Stalled
Alaska	X	X		X	Edging forward
Arizona	X	X	X	X	Making headway
Arkansas	X	X		X	Edging forward
California					Stalled
Colorado	X	X			Edging forward
Connecticut	X		X		Edging forward
Delaware	X	X	X	X	Making headway
District of Columbia	X	X			Edging forward
Florida	X	X	X	X	Making headway
Georgia	X	X	X	X	Making headway
Hawaii	X			X	Edging forward
Idaho	X	X			Edging forward
Illinois	X	X	X	X	Making headway
Indiana	X	X	X	X	Making headway
Iowa	X				Stalled
Kansas	X	X	X	X	Making headway
Kentucky	X	X	X	X	Making headway
Louisiana	X				Stalled
Maine	X				Stalled
Maryland	X	X	X	X	Making headway
Massachusetts	X	X	X	X	Making headway
Michigan					Stalled
Minnesota	X	X	X	X	Making headway
Mississippi	X				Stalled
Missouri	X				Stalled

Table 4.5	Workforce Data Indicators & Assessment by State				
State	**Formal Data Mechanism**	**Includes Compensation**	**Reports Data Publicly**	**Comprehensive**	**Overall Assessment**
Montana	X				Stalled
Nebraska	X	X			Edging forward
Nevada	X	X	X	X	Making headway
New Hampshire	X	X			Edging forward
New Jersey	X	X			Edging forward
New Mexico					Stalled
New York	X	X			Edging forward
North Carolina	X	X	X	X	Making headway
North Dakota	X	X	X		Edging forward
Ohio	X	X	X		Edging forward
Oklahoma	X		X		Edging forward
Oregon	X	X	X	X	Making headway
Pennsylvania	X				Stalled
Rhode Island	X	X	X	X	Making headway
South Carolina	X	N/A		X	Edging forward
South Dakota	X				Stalled
Tennessee	X	N/A	X		Edging forward
Texas	X	X	X	X	Making headway
Utah	X	N/A			Stalled
Vermont	X	X	X	X	Making headway
Virginia	X	X			Edging forward
Washington	X	X	X	X	Making headway
West Virginia	X	X	X	X	Making headway
Wisconsin	X			X	Edging forward
Wyoming	X	X		X	Edging forward
TOTAL	47	32	24	25	

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Endnotes

166 Kipnis, F. and Whitebook, M. (2011) *Workforce Information: A Critical Component of Coordinated State Early Care and Education Data Systems*. Berkeley, CA: Center for the Study of Child Care Employment. Retrieved from http://www.irle.berkeley.edu/cscce/wp-content/uploads/2011/04/CSCCEPolicyBrief_WorkforceInformation_March2011.pdf

167 In contrast to the lack of data for ECE, the School and Staffing Survey provides an ongoing means of examining the characteristics and working environment of the K-12 workforce across the U.S., see https://nces.ed.gov/surveys/sass/

168 See Jordan, E. and King, C. (2015) "Stacking the Blocks: A Look at Integrated Data Strategies" In Harriet Dichter (ed.) *Rising to the Challenge: Building Effective Systems for Young Children and Families, a BUILD E-Book*. Retrieved from http://www.childtrends.org/wp-content/uploads/2015/08/2015-35BuildChap7.pdf

169 See Friese, S., King, C., & Tout, K. (2013). *INQUIRE Data Toolkit*. OPRE Report # 2013-58. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services. Retrieved from http://www.acf.hhs.gov/sites/default/files/opre/inquire_data_toolkit_final_dec_2013_submitted_1_8_13.pdf

170 CSCCE analysis of NSECE (2012).

171 Early Childhood Data Collaborative. (2011). *10 Fundamentals of Coordinated State Early Care and Education Data Systems: Inaugural State Analysis*. Washington, DC. Retrieved from http://www.ecedata.org/files/10%20Fundamentals%20of%20Coordinated%20State%20Early%20Care%20and%20Education%20Systems.pdf

172 Our *Index* is focused primarily on teaching staff, but from a broader perspective, a workforce data collection mechanism could include a wider variety of personnel, not only leadership (such as center directors), but also coaches, trainers, and home visitors.

173 While California formally has a statewide registry, at this time, it is functioning in only three counties (Santa Clara, Los Angeles, and San Francisco) and was excluded for this reason. Similarly, New Mexico has a registry, but only for trainers, and therefore was also excluded. Florida does not currently have a statewide registry, although local registries are in operation in Palm Beach and Miami-Dade counties. Michigan and Indiana have a registry under development.

174 Several states have workforce surveys in progress in 2016: Colorado, Idaho, Iowa, and Wisconsin.

175 Indiana and Florida have also conducted surveys, but as noted previously, Florida currently operates local registries, and Indiana's registry is under development.

176 NIEER (2015).

177 See National Workforce Registry Alliance. Retrieved from http://www.registryalliance.org/

178 Organization of Economic Cooperation and Development (OECD) (2015). "Wage levels" (indicator). Retrieved from http://www.oecd-ilibrary.org/employment/wage-levels/indicator/english_0a1c27bc-en

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