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## **Building an Early Childhood Professional Development System**

### **Executive Summary**

More than 60 percent of children between birth and age 5 today spend time in the care of someone other than their own parent. A growing body of child development research, neuroscience, and program evaluation demonstrates that high-quality early childhood care and education programs improve school readiness and later outcomes for young children. This is especially true for children in low-income families. Research also shows that qualified and well-compensated care providers and teachers are the cornerstone of high-quality early childhood programs. However, studies have found that the majority of professionals who make up the current early childhood workforce are not adequately prepared. Attracting and retaining well-qualified early childhood professionals continues to be a challenge across all types of early childhood care and education programs.

State policies around early childhood preparation and professional development often reflect the fragmented early childhood system itself, which depends on multiple state and federal funding streams and spans multiple types of programs, including home- and center-based child care, Head Start and Early Head Start, and state-funded prekindergarten. Although initiatives directed toward improving overall program quality are emerging across the country, many states continue to struggle with the development of an early childhood professional development system that integrates policies across types of early childhood programs.

Specialized knowledge of how young children develop and learn is critical for members of the early childhood workforce. All members of this workforce need access to preparation programs at two- and four-year colleges and opportunities for ongoing education and development. Unfortunately, many states are not collecting data about professional qualifications and ongoing professional development that could inform measures of program quality and child outcomes.

To build a statewide system of professional development for all program staff and personnel who work with young children, states should work to:

- Coordinate early childhood professional development policies;
- Implement research-based standards for early childhood professional development;
- Ensure access to professional development opportunities; and
- Gather and use data on characteristics of the early childhood workforce to improve professional and program quality.

### **What We Know From Early Childhood Professional Development Research**

The knowledge, skills, and practices of early childhood care providers and teachers are critical factors in their delivery of high-quality developmental and educational experiences to young children. Although research continues to explore important details of how professional skills and competencies interact with other environmental and child characteristics, a growing body of evidence shows that early childhood professionals benefit greatly from professional development opportunities beyond minimal training—and that these benefits are passed on to the children in their care and classrooms.<sup>1</sup> For example:

- Studies of child care and prekindergarten programs have shown that higher-quality instruction and closer teacher-child relationships result in a range of positive outcomes for children, including higher rates of early academic success,<sup>2</sup> fewer behavior problems in kindergarten, and increased language and literacy skills;<sup>3</sup>
- Low-income children who spent more time in high-quality child care between birth and age 5 scored higher on 3rd- and 5th-grade reading and math achievement measures than their peers;<sup>4</sup>
- Gains in cognitive and social-emotional development are strongly linked to how early childhood professionals instruct and relate with young children;<sup>5</sup>
- The quality of child care children receive is associated with providers' educational attainment and participation in advanced training workshops;<sup>6</sup>
- A recent study comparing professional development interventions among pre-school teachers of at-risk children found that teachers who took part in online coursework combined with mentoring and detailed, instructionally linked feedback yielded the greatest improvements in teaching behavior and children's school readiness outcomes;<sup>7</sup> and
- Early childhood professionals with an education specific to early childhood education and care are less likely to leave their current position.<sup>8</sup>

However, studies have found that the majority of professionals that make up the current early childhood workforce are not adequately prepared.<sup>9</sup> Recent national policy research indicates that systemic shifts are needed for states to effectively prepare, recruit, support, and retain a high-quality early childhood workforce. In 2008, the National Association for the Education of Young Children's (NAEYC) Early Childhood Workforce Systems Initiative produced *Workforce Designs: A Policy Blueprint for State Early Childhood Professional Development Systems*,<sup>10</sup> which provides a series of recommendations around building and sustaining a stable, highly skilled, knowledgeable, diverse, and well-compensated professional workforce. To draft the blueprint, early childhood national experts, state policymakers, program administrators, and other stakeholders were consulted for input on key policies they believed are needed to support integrated early childhood education professional development state systems. The NAEYC blueprint identifies six essential areas of policy for an integrated state early childhood professional development system: professional standards, career pathways, articulation, governance, data, and financing. This Issue Brief includes excerpts from and builds off the NAEYC blueprint and identifies the initial steps governors can take to build a comprehensive early childhood professional development system.

### **New Course of Action Required**

Despite the fact that many states have elements of an early childhood professional preparation and development system in place, no truly comprehensive system has been fully implemented yet. Existing policies and initiatives may not be effectively linked across state early childhood programs and the higher education system or tied to other state quality improvement initiatives. Additionally, policymakers need to be able to interpret research that points to key qualifications and skills that

early childhood care providers and educators should have. Data that will help policymakers and program administrators understand the gaps in professional preparation and their relation to program quality and child outcomes may not be systematically collected and analyzed at the state level. As a result, policymakers do not have the data they need to make informed decisions about the current status of their workforce.

A number of federal initiatives are also driving the imperative for states to develop an effective early childhood professional development system. The 2007 Head Start Act includes additional professional development requirements and calls for the creation of state Early Childhood Advisory Councils (ECACs) with a specific focus on professional development systems,<sup>11</sup> while the Higher Education Opportunity Act of 2008 includes a new program that provides grants to states to develop early childhood professional development systems for birth-to-five educators in all sectors of the field—from child care providers to prekindergarten teachers.<sup>12</sup>

As states develop comprehensive systems of early childhood professional development, several challenges must be met. These include:

- A lack of consistent professional development policies;
- A lack of research-based professional development standards;
- A need for increased access to professional development opportunities; and
- A lack of consistently collected and analyzed data.

#### ***A Lack of Consistent Professional Development Policies***

Early childhood professional development policies are inconsistent across programs within states. This lack of policy integration across programs leads to inequity in training standards and a disparity in the quality of services provided to children and families. For example, at least 25 states now have a bachelor's degree requirement for teachers working in state-funded prekindergarten for 3- and 4-year-olds, while many of these same states have no requisite training or education requirements for the staff of center- or home-based child care programs. Early childhood compensation policies reflect similar disconnects. Professionals with the same credentials may receive widely divergent compensation across different program types. For example, a prekindergarten teacher with a bachelor's degree and teaching license working in a child care program may be paid significantly less than a teacher with the same credentials and experience working in a public school setting.

Connections between existing career pathways and higher education systems also need to be clearly defined. Many staff participate in professional development seminars and courses that commonly do not lead to a credential or degree. In addition, there is often no articulation between associate degree and baccalaureate degree programs or with credit-bearing community-based training and education opportunities.

In the next year, many states will move to fulfill the requirement to establish an ECAC—a collaborative governance body intended to coordinate all of the programs and services that may work with young children. ECACs can address policy disconnects in early childhood professional development policies at the gubernatorial level.

#### ***A Lack of Research-Based Professional Development Standards***

While additional research is needed on the intensity, duration, content, and other details of professional development that have the greatest impact on early childhood professionals' practice and quality, existing studies show that all early childhood staff need a fundamental understanding

of the stages of child development. Too few early childhood care providers and educators, however, possess even basic knowledge of child development. This is especially true of staff in settings that serve young children who face multiple health, mental health, and developmental challenges and who would benefit most from a skilled workforce.<sup>13</sup> Professional development standards are necessary to bolster overall program quality and lend structure to statewide professional development systems. Comprehensive standards should also extend beyond staff and personnel who work directly with children to encompass other early childhood professionals, such as child care licensing and regulation staff and school administrators who may oversee an early childhood education program.

Even as states move to develop professional development standards, there are few examples of linkages with statewide quality measurement and improvement initiatives. A state Quality Rating and Improvement System (QRIS) is a measurement and evaluation system and support that gathers and disseminates information about the quality of early childhood care and education programs to parents, policymakers, and practitioners. States often use a star rating system, and may provide technical assistance and financial incentives to further encourage quality improvements. Professional development standards need to be linked with QRIS to reinforce their application and encourage high levels of preparation and professional development among staff in all types of early childhood programs.

#### ***A Need for Increased Access to Professional Development Opportunities***

Nearly every state struggles to attract and retain skilled professionals across all types of early childhood programs. Developmental neuroscience shows that children thrive when they have consistent relationships with qualified early educators over time. Yet, this is rare in most early childhood settings. The annual early childhood care provider and teacher turnover rate averages 30 percent—far exceeding nearly every other industry in the national economy.<sup>14</sup> Many individuals entering the early childhood workforce do not have access or needed supports to obtain professional development, particularly within higher education degree programs. Even when early childhood education or child development degrees are available and required for certain roles, aspiring professionals may face barriers to formal education stemming from limited finances, geographical distance and transportation, and English language proficiency.<sup>15</sup>

Nationally, the need for a diverse high-quality early childhood workforce is increasing. Approximately 45 percent of children younger than age 5 are racially, ethnically, or linguistically diverse, and this percentage is expected to grow over the next decade.<sup>16</sup> It is important that teachers and administrators both represent the diverse populations they serve and have the linguistic skills and cultural competency to work with diverse children and their families.

#### ***A Lack of Consistently Collected and Analyzed Data***

Although data-driven policymaking increasingly drives state early childhood quality improvement initiatives, data about the professional workforce's preparation and ongoing development are not regularly collected or analyzed at the state level. Differing federal and state program reporting requirements continue to dictate most of the information collected about early childhood. Although ECACs are tasked with advising on unified early childhood data system development, state-led efforts to gather professional development data struggle to bridge state agencies and higher education systems, as well as maintain compliance with federal regulations such as the Family Education Rights and Privacy Act (FERPA).

#### **How Governors Can Support an Early Childhood Professional Development System**

While piecemeal policies might target certain challenges that drive down the preparedness and quality of the early childhood workforce, a comprehensive and systematic approach is necessary to

improve current trends. Governors can make an integrated professional development system a critical part of their early childhood education agenda, and they can emphasize that early childhood care providers and educators are essential to preparing young children to learn and to shaping the state's next generation of families and workers. In addition to publicly calling for effective early childhood professional development systems, governors can take steps to advance this new course of action, including:

- Coordinate early childhood professional development policies;
- Implement research-based professional development standards;
- Ensure equal access to professional development opportunities; and
- Gather and use data to improve professional and program quality.

#### ***Coordinate Early Childhood Professional Development Policies***

States need to develop consistent professional development policies that apply to all types of early childhood programs, including home- and center-based child care, Head Start and Early Head Start, and state-funded prekindergarten. Although children's cabinets and other collaborative entities exist in many states, ECACs are particularly suited to taking on the challenge of coordinating professional development policies. Per federal statute, ECACs represent the range of programs and services within a state that serve children from birth to age 5. Governors can lead professional development system coordination efforts by charging the state's ECAC with this essential oversight. ECACs should work closely with other professional development coordinating bodies in the state, as well as the higher education system, to develop, implement, and monitor an early childhood professional development system plan.

The **New York** ECAC's work is guided by a state developed an Early Childhood Plan, which identifies five goals for improving early childhood care and education. The plan articulates a goal that caregivers and other providers should have the knowledge, skills, confidence, and social supports to nurture the health, safety, and positive development of young children.<sup>17</sup> As a result, the New York ECAC is working to establish a Quality Rating and Improvement System (QRIS) and build a "competency-based professional development system for people working in early care and education settings." This includes building the capacity of early care and education trainers through the development of a certification program. New York is also expanding the qualifications of health, education, and human service providers to be sure they "have the knowledge and skills needed to promote positive child and family development."<sup>18</sup>

The Early Childhood **Iowa** Council, formerly known as the Early Childhood Iowa Stakeholders, was created in 2002 to focus on the development of a comprehensive, integrated early care, health and education system. In July 2009, Iowa Governor Chet Culver designated the Early Childhood Iowa Council to serve as the state's Early Learning Advisory Council. The council has six workgroups focused on interrelated policy components: 1) quality services and programs; 2) public engagement; 3) professional development; 4) resources and funding; 5) governance planning and administration; and 6) results accountability. The professional development workgroup made preliminary recommendations to the ECAC that include designing policies that align job opportunities with professional advancement and compensation and also include mentoring support and continuing education in career pathways planning.

Embedding an integrated professional development system in the ECAC infrastructure will contribute to statewide quality improvement initiatives and encourage collaboration between early childhood programs in the state, as well as with state systems of higher education. ECACs can also encourage professional development policies to address how well staff in health and family support programs that serve young children understand the early stages of child development.

***Implement Research-Based Professional Development Standards***

States can develop new or align existing research-based, rigorous standards for professional development. The standards should set expectations for early childhood workforce quality across all program types, including child care, Head Start, and state-funded prekindergarten. State policies should specify the levels and content of professional preparation and ongoing development as requirements for professionals to successfully fulfill their job duties and to keep their knowledge and skills current. Experts and representatives across the range of early childhood programs should be engaged in the development, review, and, if needed, revision of professional standards.

States can link early childhood professional standards with statewide quality measurement and improvement initiatives such as QRIS. Presently, as many as 26 states are engaged in building a state QRIS, and many more are in the initial stages of designing one. Policymakers and QRIS administrators should be engaged in linking professional standards to the QRIS to correlate proficiency and mastery standards with scaled compensation. Policy alignment strategies include establishing a required wage scale linked to levels of qualification.

In 2007, **Pennsylvania's** Office of Child Development and Early Learning (OCDEL) revised its teacher certification requirements specified by their Early Learning Keys to Quality initiative. The state's omnibus K-6 teaching certificate was replaced by either a pre-K-4<sup>th</sup> grade certificate or a 4<sup>th</sup>-8<sup>th</sup> grade certificate, and content requirements were expanded to include preparation for English Language Learners and children with special needs.<sup>19</sup> Additionally, the Department of Education adjusted its own content requirements for the certificates, adding child development, instructional content and practice, and assessment and accountability. OCDEL will use the new content guidelines as the integrated standards for all early childhood professionals across all types of early childhood programs.

***Ensure Access to Professional Development Opportunities***

States can implement recruitment and retention policies that will improve and equalize access to professional development opportunities and compensation, including defining clear career pathways, instituting articulation agreements, and establishing compensation parity.

Career pathways are clearly delineated routes of continuous progress for early childhood professionals and are essential to maintaining a quality workforce. Some states refer to these pathways as career ladders or lattices. These identified routes help early childhood professionals plan the achievement of increased qualifications, understand the professional possibilities, and receive appropriate compensation. Policies should support individuals entering the early childhood professional field from other occupations, as well as those early care and education professionals that have ambition to shift among types of early childhood programs or roles. Onsite training programs and distance learning strategies are important resources in extending career pathway opportunities to all early childhood professionals. **Iowa's** professional development system plan addresses career pathways for professionals in all early care and education programs, including early intervention and special education, as well as those in the related systems of health, mental health, and nutrition and family support.

States can also strengthen recruitment policies for early childhood professionals through a focus on articulation, the transfer of professional development credentials, courses, credits, degrees, and student performance-based competencies from one program or institution to another, ideally without a loss of credits. States should require colleges and universities to form articulation agreements that assist early childhood professionals in moving seamlessly through and across undergraduate and graduate degree programs. Governors should support policies that enable higher

education systems to serve professionals from all sectors, workplace settings, and roles. Policies should require state systems of higher education to publicize information about financial aid and other supports, and document how their programs support qualification requirements for all types of early childhood programs.

In 1990, the **Ohio** Board of Regents approved a framework for statewide articulation and transfer processes. The Governor's office, Board of Regents, and Department of Education collaborated to convene a work group to establish coursework for content knowledge and teacher competencies for early care and education degrees to support articulation and transfer of coursework, certifications, and credits earned across state-supported institutions of higher education. State universities and colleges were invited to nominate a representative to join this articulation workgroup, which also reached out to additional early education stakeholders such as the state child care resource and referral agency and Head Start association. Since March 2008, the workgroup has worked to develop a plan for articulation between associate and baccalaureate degree granting programs. Its efforts have produced a draft Transfer Assurance Guide, which specifies courses for early childhood education that are matched to a specific set of learning outcomes established by the Ohio Board of Regents. These courses, currently under review by state universities and colleges, are also guaranteed to transfer, and apply directly to the specified major.

In April 2008, **Washington's** Department of Early Learning (DEL), which has the lead responsibility for the professional development priority, established the cross-sector Professional Development Consortium. The consortium began meeting in September 2008 to plan the creation of an integrated professional development system. In 2009, the state passed legislation detailing the consortium's role and its development of the state professional development plan. The plan is required to address, at a minimum: core competencies (part of professional standards); requirements for articulation; creation of a professional development registry to capture and promote workforce data; an analysis of gaps; incentives for increased education and professional development; and comprehensive career pathways that specifically include professional development opportunities in languages other than English. The consortium will provide final recommendations for building an integrated system of preparation and continuing professional development by December 31, 2010.

Compensation parity represents a key component of effective retention policies, ensuring that compensation is equal across program types and equivalent to other similar fields. States can ensure that professional standards and QRIS policies address compensation parity. Several compensation initiatives have been implemented at the state level, including the T.E.A.C.H.® Early Childhood Project and Child Care Wage\$ as well as other state and local initiatives that provide incentives and rewards linked to an individual attaining higher education credentials and remaining in the field. However, the base level of compensation, including health care and retirement benefits, has not increased in most states in many years. Early care and education represents one of America's lowest wage occupations. According to a 2007 report, only 18 occupations out of 770 surveyed by the Bureau of Labor Statistics reported having lower mean wages than child care workers, which earn an average wage of \$9.60 an hour.<sup>20</sup> Policymakers may also opt to address low compensation rates as they develop approaches to achieve compensation parity.

#### ***Gather and Use Data to Improve Program Quality and Child Outcomes***

States can improve the collection and analysis of early childhood workforce data. Early childhood workforce data are essential to governors planning and evaluating the impacts of state professional development systems. Ultimately, it is necessary to be able to map levels of professional preparation, qualifications, and ongoing development to individual programs in order to understand

early childhood outcomes and the progress of state quality improvement initiatives. Workforce and professional development data also inform the impact of broader system developments and track the effective investment of resources.

Early childhood workforce data may be gathered and maintained by partnerships between agencies and higher education institutions. Thirty-one states currently maintain a workforce registry database, a computerized record of a state's early childhood professionals' qualifications, credentials, and ongoing professional development. **Connecticut** is one of these, and its cross-agency relationships, which drive the necessary data sharing for its workforce registry, have been codified through a Memorandum of Understanding. Five state agencies partner in the development of this data system: the departments of Children and Families, Education, Higher Education, Public Health, and Social Services. Over the past fiscal year, the registry gathered data on more than 4,000 employees in the early care and education sector, with an initial focus on those working staff in state-supported preschool programs.

State policies should foster cross-agency and cross-program data collection, sharing, and alignment. Policies also should require comprehensive workforce studies at regular intervals and ongoing collection of professional development utilization and improvement indicators. States should ensure workforce data sharing takes place between state agencies, as well as between higher education institutions.

In 2005, **Massachusetts** consolidated its state-level administration of early childhood programs into one agency, the Department of Early Education and Care (EEC). The governor-appointed EEC board is legislatively mandated to annually collect and analyze several types of professional development data. The board is required to (1) conduct an inventory and assessment of the current resources and strategies available for workforce and professional development across all early childhood programs;<sup>21</sup> (2) analyze current data on the experience and training of the early education and care workforce;<sup>22</sup> and (3) assess the workforce capacity necessary to meet the state's early education and care needs in the future."<sup>23</sup> Examined together, these analyses show the full impact of professional development strategies at the individual, program, and system levels.

ECACs can also play a central role in spearheading the collection and analysis of early childhood workforce data as they develop recommendations for a unified early childhood data system. Governors can promote data integration across agencies and programs by appointing a lead agency or entity to coordinate policy approaches to data issues.

### **Next Steps for States**

Research is clear that children who attend high-quality early childhood education programs are more likely to be ready for school and for life. A well-prepared and continually supported early childhood professional workforce is key to providing such quality education and care. The lack of integrated state professional development systems creates a serious barrier to providing high-quality education for all young children. Governors can play a leading role in helping states plan and implement comprehensive professional development systems.

Much of the policy change needed to support the development of these systems is low-cost. Governors should coordinate federal and state resources and establish public-private partnerships to fund professional development system needs. The American Recovery and Reinvestment Act funds allocated to the Child Care and Development Fund and Head Start can be used to help states supplement existing funds and better align professional development policies to improve quality and expand access across the full range of early childhood programs. The state ECAC can also

perform cost assessments and projections of comprehensive professional development recommendations, particularly around issues of compensation.

Over the last year, national early childhood policy change has taken place at an incredible rate. Despite the economic conditions most states face, there are timely opportunities for governors to prioritize systemic changes that will better prepare and sustain a highly skilled early childhood professional workforce.

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## Notes

<sup>1</sup> M. Welch-Ross et al., “Improving Connections Between Professional Development Research and Early Childhood Policies,” in *Critical Issues in Early Childhood Professional Development*, ed. M. Zaslow and I. Martinez-Beck (Baltimore: Paul H. Brookes, 2006), 369-394

<sup>2</sup> C. Howes et al., “Ready to Learn? Children’s Pre-Academic Achievement in Pre-Kindergarten Programs,” *Early Childhood Research Quarterly*, 23, no. 3 (2008): 429-430.

<sup>3</sup> Sara Rimm-Kaufman et al., “The Contribution of Children’s Self-Regulation and Classroom Quality to Children’s Adaptive Behavior in Kindergarten,” *Developmental Psychology*, in-press. See also NICHD ECCRN, “A Day in Third Grade: A Large-Scale Study of Classroom Quality and Teacher and Student Behavior,” *Elementary School Journal*, 105 (2005): 305-323.

<sup>4</sup> E. Dearing, T. Beck, and K. McCartney, “Does Higher Quality Early Child Care Promote Low-Income Children’s Math and Reading Achievement in Middle Childhood?” *Child Development*, 80, no. 5, 1329-1349.

<sup>5</sup> Andrew Mashburn et al., “Measures of Classroom Quality in Pre-Kindergarten and Children’s Development of Academic, Language, and Social Skills,” *Child Development*, 79, no. 3 (2008): 732-749.

<sup>6</sup> NICHD Early Child Care Research Network, “Nonmaternal care and family factors in early development: An overview of the NICHD Study of Early Child Care,” *Journal of Applied Developmental Psychology*, 2 (2001): 457-492.

<sup>7</sup> Susan H. Landry et al., “Effectiveness of Comprehensive Professional Development for Teachers of At-Risk Preschoolers,” *Journal of Educational Psychology*, 101, no. 2 (May 2009): 448-465.

<sup>8</sup> Child Care Human Resources Sector Council, *Estimates of Workforce Shortages: Understanding and Addressing Workforce Shortages in Early Childhood Education and Care (ECEC) Project* (Ottawa, Ontario, Canada: Child Care Human Resources Sector Council, 2009).

<sup>9</sup> S. Herzenberg, M. Price, and D. Bradley, *Losing Ground in Early Childhood Education: Declining Workforce Qualifications in an Expanding Industry, 1979–2004*, (Washington, DC: Economic Policy Institute, 2005).

<sup>10</sup> S. LeMoine, *Workforce Designs: A Policy Blueprint for State Early Childhood Professional Development Systems*, (Washington, DC: National Association for Education of Young Children, 2008), [www.naeyc.org/policy/ecwsi#blueprint](http://www.naeyc.org/policy/ecwsi#blueprint).

<sup>11</sup> Improving Head Start for School Readiness Act of 2007, Public Law 110–134, 110<sup>th</sup> U.S. Congress.

<sup>12</sup> Higher Education Opportunity Act of 2008, Public Law 110-315, 110<sup>th</sup> U.S. Congress.

<sup>13</sup> E. Votruba-Drzal, R.L. Coley, and P.L. Chase-Lansdale, “Child Care Quality and Low-Income Children’s Development: Direct and Moderated Effects,” *Child Development*, 75 (2004): 296–312;

<sup>14</sup> D. Bellm and M. Whitebook, *Roots of Decline: How Government Policy Has De-Educated Teachers of Young Children*, (Berkeley, CA: Center for the Study of Child Care Employment, 2006).

<sup>15</sup> F. Chang, D. Early, and P. Winton, “Early Childhood Teacher Preparation in Special Education at 2- and 4-Year Institutions of Higher Education,” *Journal of Early Intervention*, 27(2005): 110-124.

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<sup>16</sup> U.S. Census Bureau, *Racial and Ethnic Composition: Percentage of U.S. Children by Race and Hispanic Origin from Interim National Population Projections for 2008 through 2018*, (Washington, DC: U.S. Census Bureau, 2004).

<sup>17</sup> For more information, visit

<http://www.ccf.state.ny.us/initiatives/EccsRelate/EccsResources/ECPlanComplete.pdf>.

<sup>18</sup> For more information, visit [http://www.nyc.gov/html/acs/downloads/pdf/rethinking\\_new.pdf](http://www.nyc.gov/html/acs/downloads/pdf/rethinking_new.pdf).

<sup>19</sup> Pennsylvania Administrative Code § 49.2.

<sup>20</sup> For more information, visit <http://www.bls.gov/ncs/ocs/sp/ncbl0910.pdf>.

<sup>21</sup> Including but not limited to Head Start trainings, community-based trainings, higher education programs, child care resource and referral agency trainings, state and federally funded workforce development trainings/programs, and public school system trainings/credentialing.

<sup>22</sup> Including work experience, certifications, education, training opportunities, salaries, benefits, and workplace standards.

<sup>23</sup> Massachusetts General Laws Annotated, Part I: Administration of the Government (Ch. 1-82), Title II: Executive and Administrative Officers of the Commonwealth (Ch. 6-28A), Chapter 15D. Department of Early Education and Care, §5 Workforce development system; implementation plan.