

February 2012

EARLY CHILD CARE AND EDUCATION

HHS and Education Are Taking Steps to Improve Workforce Data and Enhance Worker Quality



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Highlights of [GAO-12-248](#), a report to the Chairman, Committee on Finance, U.S. Senate

Why GAO Did This Study

Research shows that well trained and educated ECCE workers are key to helping children in care reach their full developmental potential. Federal and state governments spend billions of dollars each year to improve ECCE programs, including the quality of its caregivers and teachers. Because of the importance of this workforce and the federal investment in it, GAO examined (1) what is known about the composition, education, and income of the ECCE workforce and how these characteristics relate to quality, and (2) what activities are the Departments of Health and Human Services (HHS) and Education, and the states financing to improve worker quality? GAO surveyed state child care administrators, interviewed HHS, Department of Education (Education), and other federal and state officials; interviewed ECCE experts and researchers; analyzed Census Bureau and Head Start data; conducted a literature search; and reviewed relevant federal laws and regulations.

What GAO Recommends

GAO is not making recommendations in this report. HHS and Education generally agreed with the report's findings and conclusions and also provided additional information on several specific points in the report.

View [GAO-12-248](#) or key components. For more information, contact Kay E. Brown at (202) 512-7215 or brownke@gao.gov.

EARLY CHILD CARE AND EDUCATION

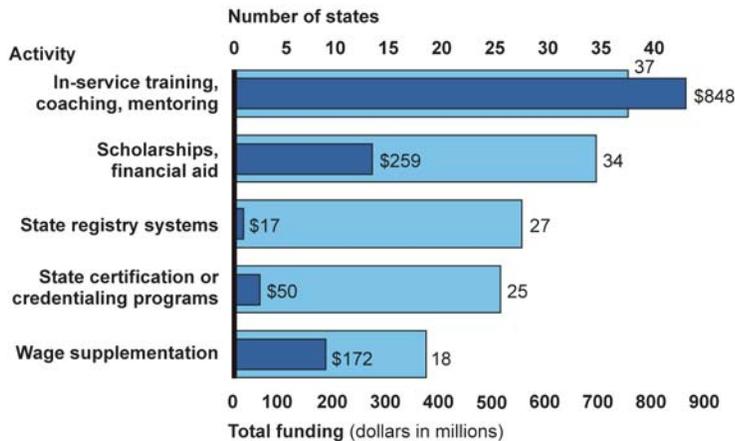
HHS and Education Are Taking Steps to Improve Workforce Data and Enhance Worker Quality

What GAO Found

The paid early child care and education (ECCE) workforce was made up of approximately 1.8 million workers in a range of positions, most of whom had relatively low levels of education and income, according to Census's 2009 American Community Survey (ACS) data. For example, nearly half of all child care workers had a high school degree or less as did 20 percent of preschool teachers. Average yearly income ranged from \$11,500 for a child care worker working in a child's home to \$18,000 for a preschool teacher. Experts and government officials that we spoke with said, in general, better educated and trained ECCE workers are more effective than those with less education and training. They also noted the need for more comprehensive workforce data—such as on workers with specialized ECCE training. While existing ECCE workforce data provide valuable insight into worker characteristics, critical data gaps exist. For example, these data omit key segments of ECCE workers, such as some caregivers who provide child care in their own homes, and also do not separately identify preschool teachers working in elementary schools. HHS and Education have taken steps to improve ECCE workforce data, such as providing guidance and funding to states to encourage the collection of state-level data and working with federal agencies to improve workforce data collected nationally.

HHS, Education, and the states use training, scholarships, and other activities to improve ECCE worker quality, but program and funding data are scarce. For example, HHS funded online training to help Head Start teachers meet new teacher credentialing requirements. Both HHS and Education have collaborated on initiatives to improve ECCE worker quality, such as the Race to the Top-Early Learning Challenge Grants. For the most part, however, neither HHS nor Education track expenditures on worker quality improvement. In our survey, states reported that the most common workforce improvement activities were in-service training, coaching, and mentoring for current workers (all 37 state survey respondents) and scholarships to workers enrolled in higher education programs (34 states)(see fig.). Of those who knew funding sources for these activities, states reported relying primarily on state and federal child care funds.

Responding States' Workforce Improvement Activities and Funding, FYs 2007 through 2010



Source: GAO analysis of state survey data, 37 of the 51 states responded (including the District of Columbia).

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Abbreviations

ACS	American Community Survey
BLS	Bureau of Labor Statistics
CCDF	Child Care and Development Fund
CDA	Child Development Associate
Census	U.S. Census Bureau
ECCE	early child care and education
Education	U.S. Department of Education
GED	General Educational Development
HHS	U.S. Department of Health and Human Services
IDEA	Individuals with Disabilities Education Act
NACCRRRA	National Association of Child Care Resource & Referral Agencies
NIEER	National Institute for Early Education Research
OIG	Office of Inspector General
PIR	Program Information Report
TANF	Temporary Assistance for Needy Families
Title I	Improving the Academic Achievement of the Disadvantaged

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Accountability * Integrity * Reliability

United States Government Accountability Office
Washington, DC 20548

February 15, 2012

The Honorable Max Baucus
Chairman
Committee on Finance
United States Senate

Dear Mr. Chairman:

Many of this country's children spend time in nonparental care arrangements,¹ making high-quality early child care and education (ECCE) essential to the healthy development of children and the peace of mind of working families. Research indicates that a critical component of a high-quality ECCE program is qualified caregivers and teachers. A child's successful development depends on sensitive and stimulating relationships with adults, and well-trained and skilled ECCE caregivers and teachers are better able to develop such relationships. Yet the qualifications of this workforce vary due to differences in professional requirements across states and ECCE programs, and challenges in attracting and retaining well educated and trained workers. While improving the quality of ECCE is important for all children, experts and government officials say it is especially critical for children from low-income families because research shows the existence of academic achievement gaps, at or before kindergarten, between children living in poverty and their more affluent peers. Access to high-quality child care and early learning programs, research finds, can improve these children's cognitive, social-emotional, and language development, and resultant academic performance.

The federal government helps to improve access to high-quality ECCE programs by subsidizing program costs. The two largest federal efforts are the Head Start program, funded at approximately \$7.2 billion, and the Child Care and Development Fund (CCDF), funded at approximately \$5.0 billion in fiscal year 2010. These funding sources, as well as billions of

¹The U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program estimated, for example, that in 2005 60 percent of this nation's children, infants through prekindergarten, were in nonparental care. This is the most current data available and it counted children in child care arrangements; thus if a child was in several arrangements, that child was counted more than once.

dollars in other ECCE federal funding, are overseen by the Departments of Health and Human Services (HHS) and Education (Education) and the relevant state agencies to which these monies are allocated. For Head Start, the federal government allocates funding directly to local organizations that run the program; for CCDF and many other ECCE programs, federal monies go to the relevant state agencies that administer the programs.² The state agencies must follow applicable laws and regulations when spending these funds. Such laws and regulations can be broad and this results in state discretion in how the funds are used. Depending upon the funding stream, for example, federal law either allows or requires that states or local grantees set aside portions of these funds for activities to improve the quality of ECCE programs, including worker quality through education, training, wage incentives, and other activities. Little is known, however, about how states and local grantees use such funding. Further complicating an assessment of how well these funds are used to improve worker quality is the fact that national data gaps exist about the composition and characteristics of this workforce, making it difficult for policymakers to have a reliable baseline from which to determine if effective activities are being used and if the workers who would most benefit from them are being targeted.

You asked us to examine issues associated with ECCE worker quality and efforts to improve it. We addressed the following questions: (1) What is known about the composition, education, and income of ECCE workers and how these characteristics relate to quality? and (2) What activities are HHS, Education, and the states financing to improve ECCE worker quality? For our review, we focused on paid ECCE workers who care for and educate infants to prekindergarten and school-age children in before- and after-school programs. We used the U.S. Census Bureau's (Census) American Community Survey (ACS), an annual survey of approximately 3 million households to obtain information on these workers, because of its large sample size and detailed information on the education level of

²Other federal agencies also oversee, or provide support for, ECCE programs. For example, the Department of the Interior oversees the Indian Child and Family Education program, which includes ECCE services. The Department of Labor has programs that provide supportive services to its clients, including child care services, to enable them to participate in training programs. The Department of Housing and Urban Development's Community Development Block Grant Program for Entitlement Communities can be used for a variety of public services, including early education and child care.

respondents.³ We also analyzed data pertaining to Head Start and Early Head Start teachers and teaching assistants from HHS's Head Start program for the 2008-2009 program year. We assessed the reliability of these data and found them sufficiently reliable for the purpose of describing the ECCE workforce. In addition, we surveyed state child care directors in the 50 states and District of Columbia about activities and spending to improve ECCE worker quality. We requested the state lead agency child care administrators obtain data and information from their counterparts in their state educational or other agencies on activities or funding not under their purview. We obtained responses from 37 states, a 73 percent response rate; the results of this online survey are not generalizable to all states.⁴ The responding states accounted for approximately 86 percent of children under the age of five in 2010, according to Census data. We interviewed HHS, Education, and state child care officials, and representatives of academic and research groups about activities used and challenges faced to improve education, wages, training, and other aspects of ECCE worker quality, and reviewed relevant federal laws and regulations. We also conducted a literature search and consulted experts in the field to learn about the characteristics and quality of ECCE caregivers and teachers, and the relationship between the two. (For more information on our methodology, see appendix I.) We conducted this performance audit from June 10, 2010, through February 15, 2012, in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

Experts see ECCE as a loosely connected system of programs that crisscross private and public sectors and serve the dual goals of providing child care for working families and promoting children's readiness for

³We used 2009 ACS data, the most recent available at the time of our analysis. Unless otherwise noted, all ACS estimates had a 95 percent confidence interval within plus or minus 10 percent of the estimate.

⁴We conducted this survey between April 20 and July 1 of 2011.

school.⁵ Multiple programs and settings exist because early care and education takes many forms, from individuals caring for children in the child's home to centers and preschools offering full-time care and education (see table 1).

Table 1: Types of ECCE Settings and Programs

Type of ECCE settings	Programs
Child care and early learning programs (child care programs)	<p>Programs may be subsidized by federal, state, and/or local funds. They include:</p> <ul style="list-style-type: none"> • <i>Center-based:</i> Typically located in nonresidential settings, such as churches, schools, or community centers; may care for infants and toddlers and/or children ages 3 to 5 and focus on promoting school readiness. If care is for school-aged children, it is referred to as before- and after-school programs, and can include academic support such as tutoring. • <i>Family-based:</i> Located in residential settings, often the home of the provider, and serves small groups of children in personalized, home-like environments. • <i>Private household caregiver:</i> Individuals who care for a child in the child's home.
Preschool programs	<p>Child care center or school locations; primarily serves children ages 3 to 5 and can be subsidized by states. State-funded preschool programs called prekindergarten programs tend to target children from low-income families in most, but not all, states, with the primary goal to promote school readiness.</p>
Head Start and Early Head Start programs	<p>Local organizations awarded grants from HHS to provide education, nutrition, health, and family support to low-income children from birth through kindergarten entry and low income pregnant women; key service is providing early care and education to promote social, emotional, and cognitive development, including school readiness.</p>

Sources: For child care and early learning programs, see [GAO-02-897](#) and [GAO-04-786](#); and *BLS Career Guide to Industries*, 2010-2011, Child Care Day Services; and interviews with ECCE experts. For preschool programs, see the National Institute for Early Education Research (NIEER), Rutgers School of Education, *The State of Preschool 2010*. For Head Start and Early Head Start Programs, see <http://www.acf.hhs.gov/programs/ohs/>.

⁵GAO has conducted work assessing fragmentation, overlap, and duplication among ECCE programs. See GAO, *Early Education and Care: Overlap Indicates Need to Assess Crosscutting Programs*, [GAO/HEHS-00-78](#) (Washington, D.C.: Apr. 28, 2000), and GAO *Update on the Number of Prekindergarten Care and Education Programs*, [GAO-05-678R](#) (Washington, D.C.: June 2, 2005).

Definitions of High-Quality Early Child Care and Education

While definitions of high-quality ECCE are not precise, research and professional practices have included two broad features: environmental (such as fewer numbers of children per staff member or adequate physical floor space) and the quality of interactions between children and their caregivers or teachers. Researchers and ECCE experts characterize high-quality interactions in various ways, including an adult responding to the needs of children in sensitive and caring ways and participating in children's play and activities in ways that promote language development, and school readiness or advancement. Moreover, studies have shown that consistent, high-quality interactions are associated with positive social, emotional, and cognitive outcomes for children. Lastly, researchers and ECCE experts also believe such interactions are most often created by caregivers and teachers who possess needed skills and competencies (i.e., well educated and trained workers). However, they continue to debate which skills and competencies are most effective and how to best foster them in ECCE workers.

Role of Federal and State Governments in Early Child Care and Education

Both federal and state funds provide significant support for ECCE. Funding at the federal level is primarily administered by HHS and Education (see fig. 1). State human services and educational agencies also provide funding (for example, states spent about \$5.4 billion on prekindergarten programs in the 2009-2010 academic year) and distribute federal funds to local organizations or eligible families. While federal requirements exist for how states can spend federal ECCE funds, states have spending flexibility.⁶ Moreover, a single ECCE program can receive funding from multiple federal and/or state funding sources.

⁶For example, states are required to use a portion of their CCDF to improve the quality of ECCE programs, but states have flexibility in determining what quality-improvement activities to pursue. 42 U.S.C. § 9858e.

Figure 1: Key Federal Funding Sources and Expenditures for ECCE Programs

	Administering office	Funding source	FY 2010 estimated spending on ECCE	Primary uses
Department of Health and Human Services (HHS)	Office of Head Start (OHS)	Head Start and Early Head Start	\$7.2 billion	Direct federal grants to local organizations to provide services to low-income children and their families to promote school readiness for children from birth through kindergarten entry.
	Office of Child Care (OCC)	Child Care and Development Fund (CCDF)	\$5.0 billion	Grants to states to help subsidize child care costs for low-income working families; states establish eligibility criteria within federally set parameters.
	Office of Family Assistance (OFA)	Temporary Assistance for Needy Families (TANF)	\$1.4 billion	Federal benefits to eligible families with dependent children; states administer TANF program and can elect to use TANF funds to directly subsidize child care costs for these families or use a portion for CCDF. If used for CCDF, transferred funds are subject to CCDF rules.
Department of Education (Education)	Office of Academic Improvement and Teacher Quality Program (AITQP)	21st Century Community Learning Centers (21st Century)	\$1.2 billion	Grants to states to subsidize before- and after-school programs for children at low-performing schools.
	Office of Special Education Programs (OSEP)	Individuals with Disabilities Education Act (IDEA)	\$1.0 billion ^a	IDEA provides, in part, grants to states and other entities to provide early intervention, special education, and related services to eligible infants, toddlers, children, and youths with disabilities.
	Office of Elementary and Secondary Education (OESE)	Improving the Academic Achievement of the Disadvantaged (ESEA Title I)	\$0.3 billion ^b	Grants to state and local educational agencies for K-12 education; these agencies may use some of these funds for preschool programs in elementary schools that serve high percentages of low-income students and families.

Sources: HHS and Education's websites (www.acf.hhs.gov and www.education.gov); FY2012 Department of Health and Human Services Administration for Children and Families Justification of Estimates for Appropriations Committees; FY2012 Department of Education Justifications of Appropriation Estimates to the Congress.

^aThis consists of IDEA grants for preschools (Part B), infants and toddlers (Part C), and three National Activities (Part D)—State Personnel Development, Technical Assistance, and Personnel Preparation. Not all Part D funds were used exclusively for ECCE.

^bEducation estimated in 2009 that states spent approximately 2 percent of Improving the Academic Achievement of the Disadvantaged grants (Title I) on ECCE program worker salaries. Education officials told us that this is the best estimate available, but because Title I funds can be used for more than just ECCE worker salaries, it may underestimate the total amount of Title I funds spent on ECCE.

With the exception of Head Start, the states generally determine the education and training standards for ECCE workers, through licensing requirements imposed by state human service or education agencies. The scope and stringency of these regulations vary by state and program,

according to surveys conducted by the National Association of Child Care Resource & Referral Agencies (NACCRRA) and the National Institute for Early Education Research (NIEER), including stipulated minimum education and continuing training⁷ (see fig. 2).

Figure 2: Reported State Education and Training Requirements for ECCE Workers

Type of ECCE worker		Minimum education requirements		Continuing training requirements	
		Most common requirement	Range	Most common requirement	Range
Child care	<i>Center-based provider^a</i>	An equal number of states require less than high school diploma as require a high school diploma or GED ^b	Less than a high school diploma to a bachelor's degree	11 to 15 hours annually	0 to 40 hours annually
	<i>Family-based provider</i>	No requirement	No requirement to some college or CDA ^c	9 to 16 hours annually	0 to 24 hours annually
Pre-kindergarten	<i>Teacher</i>	Bachelor's degree	High school diploma to bachelor's degree	15 hours annually ^d	0 to 60 hours annually ^d
	<i>Teaching assistant</i>	High school diploma or GED	No requirement to CDA or associate degree	15 hours annually ^e	0 to 45 hours annually ^e

Sources: For center-based child care, We Can Do Better, 2011 Update (NACCRRA's Ranking of State Child Care Center Regulations and Oversight); for family-based child care, Leaving Children to Chance: 2010 Update (NACCRRA's Ranking of State Standards and Oversight of Small Family Child Care Homes); for prekindergarten, The State of Preschool, 2010 NIEER.

^aNACCRRA refers to these providers as lead teachers in its compilation of state licensing regulations.

^bThe General Educational Development (GED) credential is an alternative credential to a high school diploma for individuals who did not complete a regular high school program of study.

⁷According to NACCRRA, states often exempt some types of facilities or workers from regulations; for example, relatives providing child care for a family member, programs affiliated with religious organizations, small family-based providers, and those caring for six or fewer children.

^cThe Child Development Associate (CDA) is a nationally recognized education credential earned through coursework and ECCE work experience which certifies an ECCE worker has a basic understanding of early child development.

^dIn nine states, at least one program in the state had a credit-hour requirement instead of a clock hour requirement, according to 2010 NIEER survey data. Because credit hours and clock hours are difficult to compare, we excluded these programs from our count. We also excluded one program where the requirement for teacher continuing training was determined locally.

^eIn five states, at least one program either allowed assistant teacher continuing training to be determined locally, or did not specify what the requirement was, according to 2010 NIEER survey data. We excluded these programs from our counts. One state also had a credit-hour requirement instead of a clock hour requirement. Because credit hours and clock hours are not comparable, we also excluded this program from our count.

Under federal law, the federal government establishes education and training requirements for those working in Head Start centers⁸ (see table 2).

Table 2: Federal Education and Training Requirements for Head Start Workers

Position	Education requirement		Continuing training requirement
	Date	Description	
Head Start teacher	By Sept. 30, 2013	50 percent must have a bachelor/advanced degree in early childhood education; or a bachelor/advanced degree and coursework equivalent to a major in a related field, and preschool teaching experience.	15 hours annually
	As of Oct. 1, 2011	Center-based Head Start classrooms must have a teacher who meets one of the 2013 requirements; or has an associate degree in early childhood education; or an associate degree in a related field, coursework equivalent to a major relating to early childhood education, and preschool teaching experience; or a bachelor's degree, admitted to Teach For America, pass an early childhood content exam and meet other training requirements.	
Early Head Start teacher (children under age 3)	As of Sept. 30, 2010	Must have a CDA credential and be trained (or completed equivalent coursework) in <i>early childhood development</i> .	N/A
	By Sept. 30, 2012	Have training (or complete equivalent coursework) in early childhood development <i>focusing on infants/toddlers</i> .	
Head Start teaching assistants	By Sept. 30, 2013	Must have a CDA credential; or be enrolled in a program leading to an associate or bachelor's degree; or be enrolled in a CDA program to be completed within 2 years.	N/A

Source: GAO analysis of relevant federal laws.

⁸HHS's Office of Inspector General (OIG) reported in August 2011 that about 81 percent of Early Head Start teachers had the required CDA and, of the 19 percent who did not, more than half were pursuing them. OIG further reported teachers from established programs were more likely to have a CDA than teachers from newer programs developed using American Recovery and Reinvestment Act funds. See HHS, OIG, *Most Early Head Start Teachers Have the Required Credentials, But Challenges Exist*, OEI-10-00240 (August 2011).

In addition to requirements set by federal and state governments, professional organizations have established voluntary standards which include education and training. These voluntary standards were typically developed because requirements in many states were seen as insufficient. They include the following:

- The National Association for the Education of Young Children recommends that at least 75 percent of an ECCE program's teachers have a bachelor's degree or equivalent and all teachers have a minimum of an associate degree or equivalent.
- NIEER recommends that ECCE teachers have a bachelor's degree.
- The American Academy of Pediatrics, the American Public Health Association, and the National Resource Center for Health and Safety in Child Care recommend that ECCE teachers or caregivers have a state or national child care certificate.

Data Sources on Early Child Care and Education Workers

Both federal and state governments collect data on some, but not all, ECCE workers. The following lists a few federal data efforts:

- *Annual data collection on Head Start and Individuals with Disabilities Education Act (IDEA) teachers:* Head Start data are provided in Program Information Reports (PIR) which contain information on the education level and salaries of all Head Start directors, teachers, teaching assistants and, with the exception of salary information, family-based child care providers and are submitted to HHS by local Head Start grantees.⁹ Data on IDEA workforce—teachers who work with children and youth with disabilities—are submitted by states to Education and include information on the number of teachers and teaching assistants, their education levels, and whether they meet IDEA teacher qualifications.
- *Annual surveys by Census and the Department of Labor:* The Census Bureau and the Department of Labor's Bureau of Labor Statistics (BLS) include data on ECCE workers in three annual surveys of U.S. households and businesses. Census conducts two of these surveys—

⁹PIR also collects similar information on Head Start personnel who conduct home visits of Head Start program participants and Head Start Family/Community Partnership staff.

the ACS and the Current Population Survey. Both gather information on the demographics, occupations, and income of households using standardized industry and occupation codes to classify workers.¹⁰ BLS conducts the third survey—the Occupational Employment Survey—which is an annual survey of business establishments that uses the same occupational and industry codes. Although ACS has the most detailed information on ECCE workers, none of these surveys capture all ECCE worker types or workplace settings.

The following lists a few state data efforts:

- *Establishing state registries:* Many states have computerized registries, which track education, training, and employment histories of individual ECCE workers. Registries are housed in state educational agencies or other organizations, such as universities or child care resource and referral agencies. According to the National Registry Alliance, in most states, registry participation is voluntary, so not all ECCE teachers and caregivers are included.
- *Developing longitudinal data systems on preschool teachers:* State educational agencies are increasingly using longitudinal data systems to obtain information on teachers and students, and some include data on the ECCE workforce. Longitudinal data link student performance to teachers and also indicate the education and training that teachers have received. If federal Education funding is used to help pay for the system, Education has guidance on system requirements to afford comparisons across states.

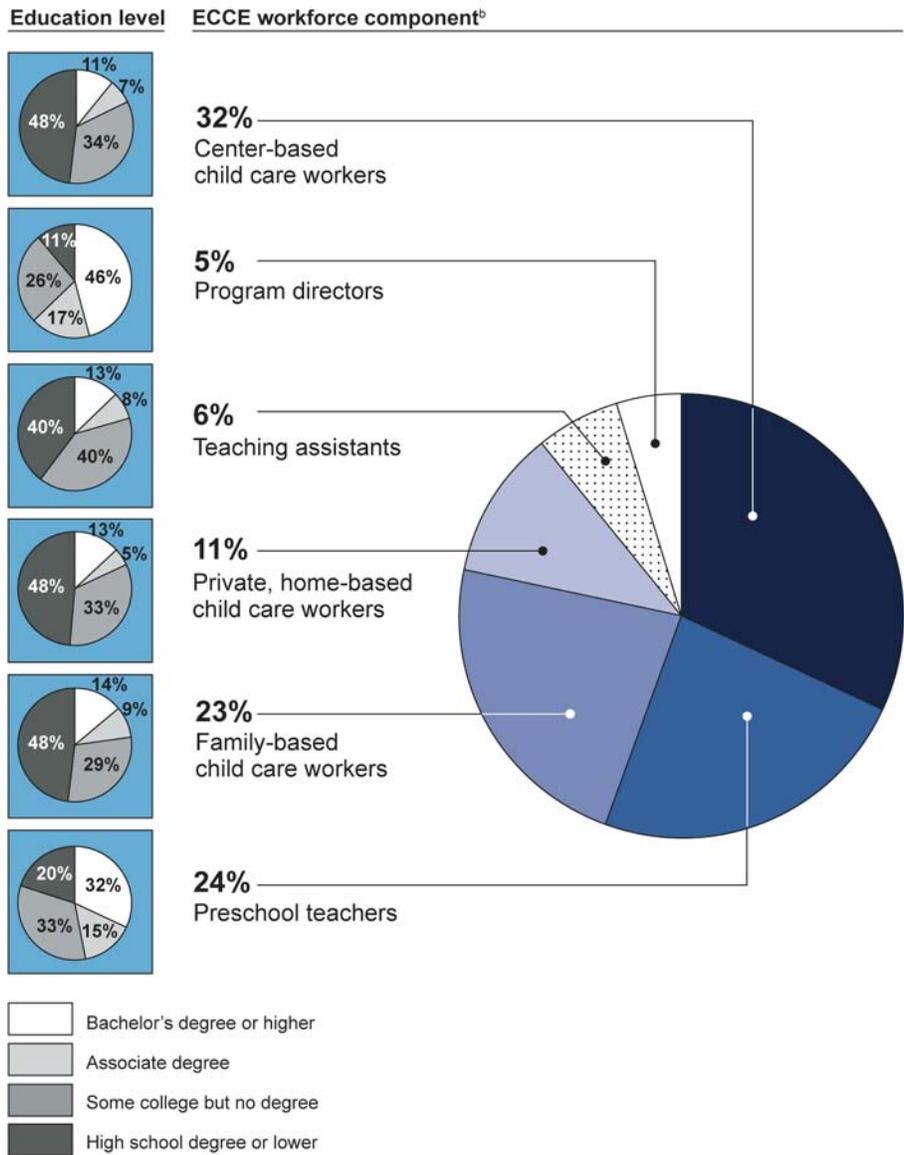
¹⁰Industry codes depict the types of products or services produced, and occupation codes focus on the types of work performed. For example, an individual may work in the “child day care services” industry under the occupation “child care worker” or “janitor.” Industry codes for the Census and BLS surveys are from the North American Industry Classification System and occupation codes are from the Standard Occupational Classification system. The Office of Management and Budget oversees revisions to these systems using interagency committees.

Education and Wages Low, but Data Gaps Limit Knowledge about Early Child Care and Education Workforce

Data on the Composition, Education, and Income Levels of Early Child Care and Education Workers Have Limitations

The Census Bureau's ACS provides important insight into the composition, education level, and income of the ECCE workforce. According to these data, there were nearly 1.8 million ECCE workers nationwide in 2009 in a range of ECCE positions. About 72 percent of these workers lacked an associate degree or higher. However education level varied by type of worker, with program directors, preschool teachers, and teaching assistants being the most educated (see fig. 3). Among the 333,000 ECCE workers and directors with a bachelor's degree included in ACS, approximately 93 percent, or nearly 300,000, did not have degrees specifically in early childhood education. For example, 29 percent had a degree in other education, 7 percent in psychology, and 3 percent in sociology.

Figure 3: ECCE Workers —Total Workforce 1.8 Million^a



Source: GAO analysis of 2009 ACS Census data.

Note: Some percentages do not total 100 percent due to rounding.

^aHead Start teachers are not a separate category of ECCE workers in ACS data. Thus, if a respondent to the ACS survey taught in a Head Start preschool program, he or she would be included with other preschool teachers.

^bSee appendix I for definitions of ECCE workforce components.

ECCE workers with some of the highest education levels are in Head Start programs, and such workers are not separately identified in ACS data (see table 3).

Table 3: Types of Degrees Held by Head Start Workers

Head Start position ^a	Type of degree			
	CDA/State equivalent credential	Associate degree in child development	Bachelor degree or higher in child development	No degree in child development ^b
Head Start and Early Head Start Teachers	17%	34%	44%	4%
Teaching assistants	31%	14%	6%	49%

Source: Head Start PIR Data, 2008–2009 program year. Percentages do not total 100 percent due to rounding.

^aEducation level of Head Start program directors is not reported because PIR data do not track directors in a way that enables such reporting.

^bWorkers in this category either have a degree in a field other than child development or do not have any degree. This is because PIR data track only degrees relating to child development, in order to monitor compliance with the degree requirements set forth in federal law.

In terms of income, ECCE occupations are often low-paying, according to research and government data sources. Our analysis of ACS data found that, in 2009, 77 percent of full- and part-time ECCE workers—and 61 percent of full-time workers—earned less than \$22,000 per year, approximately the federal poverty level for a family of four. Average income ranged from \$11,500 to \$18,000 per year for the various ECCE worker positions¹¹ and was around \$33,000 per year for program directors. Moreover, with the exception of program directors, the difference in average annual incomes between the highest and lowest paid full-time ECCE position was small, ranging from \$20,000 to \$22,500.

Our analysis of Head Start PIR data submitted by grantees to HHS found that, although Head Start program teachers and teaching assistants were paid more than other ECCE teachers, their average annual income lagged behind average income earned by workers in general with similar

¹¹Private, home-based child care workers averaged \$11,500 per year, center-based child care workers averaged \$12,500, family-based child care workers averaged \$17,500, teaching assistants averaged \$13,000, and preschool teachers averaged \$18,000.

levels of education. PIR data for the 2008-2009 program year showed that, on average, Head Start teachers earned about \$28,000 per year, and teaching assistants earned about \$18,000 per year. However, when PIR data for Head Start teachers is compared to ACS data on the average annual income of workers in general with similar levels of education (i.e., those with associate degrees), general workers earned \$41,500 per year, or \$13,500 more than Head Start teachers.

Although ACS contains important nationwide data on ECCE workers, its exclusion of some types of workers and consolidation of others into single categories creates an incomplete picture of this workforce's numbers, components, education and income. These limitations include the following:

- *Family, friends, and neighbors who regularly care for other people's children for a fee, but do not identify ECCE as their primary occupation:* Obtaining data on these workers is important because they are a primary source of child care for many families, especially those who are low-income. One study estimated that as much as 38 percent of all care is provided through this type of care.¹²
- *Preschool teachers working in elementary schools:* ACS data do not distinguish preschool teachers in elementary schools from kindergarten teachers. Obtaining discreet data on preschool teachers in elementary schools is important because they are a key component of the ECCE workforce, often teaching children in state-funded prekindergarten programs in elementary schools. In the past decade (academic year 2001-2002 through academic year 2009-2010), children served in state-funded preschool programs have increased by almost 600,000 to approximately 1.3 million children, according to NIEER data.
- *Staff in before- and after-school programs:* ACS classifies these ECCE workers as child care workers and combines them with those who care for much younger children. Combining these two groups is a concern, according to ECCE experts and researchers, because the needed skills are different. For example, one expert told us that after-school workers need training in how to manage the behavior of older children and in

¹²Elaine Weiss, Manager, The PEW Center on the States, and Richard Brandon, Director, Human Services Policy Center and Senior Research Fellow, Evans School of Public Policy, University of Washington, *The Economic Value of the U.S. Early Childhood Sector* (Seattle, Wash.: July 2010).

strategies that help connect after-school activities to school-day curricula. ECCE workers who work with young children, in contrast, may benefit more from training in how to stimulate early language and math skills.

- *Classification of workers as preschool teachers or child care providers:* ECCE experts frequently express concern that the distinction ACS and other federal statistical surveys make between child care workers and preschool teachers is not necessarily meaningful because both of these occupations include tasks related to educating children.

ACS data on workers' education levels are also limited. ACS captures high school diplomas, General Educational Development (GED) credentials, and degree or course credit earned through colleges and universities, but not other credentials or training. For example, the Child Development Associate (CDA) credential is one of the most recognized ECCE credentials across the country. It requires 120 hours of training in early childhood education and passing an assessment by the Council for Professional Recognition. Yet in ACS data, an ECCE worker who has a CDA would be listed as having only a high school degree/GED (because such a degree is required before getting these credentials) or some college, but no degree (if the credential's training options included college-level courses, this was the option that an individual chose, and such an individual had no other college degree).

ACS also has only limited data on fields in which degrees are earned. ACS began collecting this information for workers in its 2009 survey, but only for bachelor's degrees. ACS does not indicate those who have studied early childhood education but not yet earned a degree, or those with an associate, master's, or doctorate degree in the ECCE field. As a result, education levels and training may be underreported for large numbers of the workforce.

Workforce data on workers in a particular occupation, like ECCE workers, can be used to assess the overall quality of a workforce and to develop

strategies to improve its quality.¹³ According to ECCE experts and researchers, a lack of statewide and national ECCE workforce data disadvantages policymakers when assessing ECCE needs and planning improvements and allocating limited funds. For example, a lack of workforce data can make it difficult for policymakers to assess demand and supply trends for ECCE workers or the extent to which ECCE workers have specialized education or training in early child development. They also told us that, without knowing the extent to which ECCE workers care for and educate children of varying ages or other traits, such as children with disabilities or English language learners, it is difficult for policymakers to know how to best target limited quality improvement training funds among worker types.

HHS and Education Are Taking Steps to Improve Workforce Data

Both federal and state officials reported that HHS and Education are trying to improve the comprehensiveness of data collected on ECCE workers, as follows:

- HHS sponsored a National Academy of Sciences workshop in 2011 for ECCE government officials, researchers, and experts, which included a BLS presentation on ECCE worker data in federal statistical surveys.¹⁴
- HHS's Office of Planning, Research and Evaluation is sponsoring a nationwide child care survey that will include data on the education, training, and income of ECCE workers across different types of child care settings, such as center-based and home-based settings.¹⁵ The last time a similar survey was conducted was more than 20 years ago.

¹³Federal initiatives designed to encourage state collection of worker data attest to the importance of workforce data when trying to improve worker quality. For example, both the Department of Labor and Education have initiatives which fund state development of data systems that include the collection of workforce data to improve worker quality in the job-training and education sectors. The Department of Labor's initiative is the Workforce Data Quality Initiative and Education's is the Statewide Longitudinal Data Systems project.

¹⁴See <http://www.iom.edu/Reports/2011/The-Early-Childcare-and-Education-Workforce-Challenges-and-Opportunities.aspx> for an electronically republished version of the report summarizing this workshop.

¹⁵At the time of this report, HHS had not made any decision regarding whether this survey will be a one-time or on-going survey.

HHS officials said that the contract for this study will run through September 29, 2014.

- HHS has provided guidance and funding for state registry systems. Thirty-two states use these systems to gather data on the demographics, completed and ongoing education and training, and employment status of ECCE workers, according to a 2011 policy brief issued by the Center for the Study of Child Care Employment.¹⁶ However, according to the National Registry Alliance, in most states, participation in these registries is voluntary or, if required, applicable to only some ECCE workers, hindering development of a complete picture of all ECCE workers in a state.
- Education has provided grants for statewide longitudinal data systems that contain data linking children and teachers, including ECCE teachers in some states. Teacher data may include information on training, education, and compensation.

Officials from both BLS and Census told us that additional avenues exist for improving ECCE workforce data collected in federal statistical surveys and that these improvements are often contingent upon federal agencies proactively pursuing them. For example, BLS officials described standardized 5-year revision cycles, which the Office of Management and Budget oversees, to improve the occupation and industry codes used in ACS and other federal statistical surveys. These cycles consist of federal interagency committees investigating if and how such codes should be revised, with the public and government agencies not part of these committees providing input through the public comment process published in the Federal Register. BLS chairs the interagency committee to revise the occupational codes, and this committee completed its most recent revision cycle in March 2009. According to BLS officials, Education actively participated in this revision cycle, successfully showing that the tasks special education preschool teachers perform are sufficiently different from the tasks general preschool teachers perform; and this in turn justified creating a new occupational code specific to special education preschool teachers. The next revision cycle is expected to start in 2013, with revisions issued by 2018. Census chairs the interagency

¹⁶See Fran Kipnis and Marcy Whitebook, Center for the Study of Child Care Employment, *Workforce Information: A Critical Component of Coordinated State Early Care and Education Data Systems*, Policy Brief 2011.

committee to revise industry codes; the results from the 2012 revision cycle are expected to be published soon, and none of the revisions affected ECCE industries.

A second possible avenue to improve ECCE data, according to BLS and Census officials, is for HHS, Education, or both to request that periodic supplemental survey questions be added to one of the federal statistical surveys. BLS and Census use such supplemental surveys to gather additional information on specific subpopulations on an ongoing basis. For example, officials from both agencies told us that a supplement might be one way to gather data on before- and after-school workers distinct from ECCE workers of very young children; however, this option is not without its challenges in terms of timing and sample size.

BLS and Census officials also told us that improving ECCE workforce data (or other data collected in federal statistical surveys) is often contingent upon federal agency subject-matter experts actively requesting and discussing such improvements. For example, Census officials are investigating changing how they present data on ECCE workers in their publicly available ACS files in response to questions we raised with them related to this study. Specifically, we asked about the practice of combining the separate occupation codes for preschool teachers and kindergarten teachers into a single code when they work in elementary schools. In response to our questions about this practice, Census investigated and determined that it is feasible to report ACS data separately for these two types of teachers and is considering changing this.

HHS and Education told us they have taken steps to proactively influence the revision of occupational and industry codes in the next revision cycles. HHS told us, for example, that they are consulting with research experts regarding proposed revisions to occupational codes for ECCE workers and that they have developed a workplan and timeline to ensure that they fully participate in the five-year revision cycle of these codes scheduled to start in 2013 (see appendix IV). Education also told us that they are working with or planning to work with BLS and Census to improve ECCE data. For example, they mentioned that they are working with Census on ways to expand upon and improve data gathered through household surveys in general on educational certificates and other credentials and that any enhancements resulting from this work may extend to ECCE workforce data (see appendix V).

Increased Education and Training Can Improve Worker Quality

Experts and government officials that we spoke with said that in general, better educated and trained ECCE workers are more effective than those with less education and training because they are able to acquire the skills and knowledge necessary to more effectively work with children. Some research has concluded that teachers and caregivers with higher degrees, especially those with a concentration in early childhood education or development, were more effective than those with less education or no degree.¹⁷ Other research did not find as clear a link.¹⁸ Some of the discrepancies in these findings are attributed to the wide variability of study designs and not taking the environment in which teachers work into account (e.g., staff-to-child ratios and adequate materials and physical settings). In terms of income, research has found that better educated ECCE workers can command higher salaries, but that salaries do not necessarily increase worker quality in and of themselves.¹⁹ It appears that better educated teachers and caregivers are more competitive in the marketplace, and thus are better able to select jobs that pay more, and these jobs tend to be associated with higher quality ECCE programs.

¹⁷See, for example, Olivia N. Saracho and Bernard Spodek, "Early Childhood Teachers' Preparation and the Quality of Program Outcomes," *Early Child Development and Care*, vol 177, no. 1 (January 2007): 71-91. This study reviewed 40 previous studies conducted over a 15-year period that were peer reviewed and met other explicit criteria.

¹⁸See, for example, Diane M. Early, Kelly L. Maxwell, Margaret Burchinal, et al., "Teachers' Education, Classroom Quality, and Young Children's Academic Skills: Results from Seven Studies of Preschool Programs," *Child Development*, vol. 78, no. 2 (March/April 2007): 558-580. This study reviewed seven previous studies with similar methodologies on preschool programs for children age 4. Five of the seven studies were statistically representative of populations—for example, a nationally representative sample of Head Start children in 2003 or children participating in full-day, full-year preschool programs in Georgia.

¹⁹See for example Richard Brandon with Juliet Scarpa, *Supply, Demand, and Accountability: Effective Strategies to Enhance the Quality of Early Learning Experiences Through Workforce Improvement*, an HSPC Whitepaper, Human Services Policy Center, Evans School of Public Affairs, University of Washington (May 2006). Also, Julia C. Torquati, Helen Raikes, and Catherine A. Huddleston-Casas, "Teacher Education, Motivation, Compensation, Workplace Support and Links to Quality of Center-Based Child Care And Teachers' Intention to Stay in Early Childhood Profession," *Early Childhood Research Quarterly*, vol. 22, no. 2 (2007): 261-275.

**Worker Quality
Improvement
Activities Include
Training and
Scholarships, but
Program and Funding
Data Are Scarce**

**HHS and Education Use
Existing Programs and
Newer Initiatives to
Improve Worker Quality**

HHS and Education administer six key ECCE programs that provide states and other grantees the flexibility to spend federal dollars for ECCE purposes—sometimes from program funds set aside to improve general program quality—on a variety of workforce quality improvement activities. HHS and Education do not have complete information on all program workforce quality improvement activities, including the amount of funds spent, at least in part because states have discretion over how they use program funds. However, such activities can include professional development, wage supplementation, and scholarships (see fig. 4). For example, HHS’s Head Start program has funded online professional development for staff in rural and other areas where staff find it difficult to meet credentialing requirements.²⁰ Because of this targeted professional development intervention and other efforts, more staff have been able to get the training needed to satisfy those requirements, according to HHS officials.

²⁰See 42 U.S.C. § 9843a(a). Head Start programs in rural areas and areas serving migrant and tribal populations face a deficit of staff who meet the new professional requirements, according to officials.

Figure 4: Examples of Federal ECCE Programs and Activities to Improve Worker Quality

Agency	Program	Funding requirements	Types of ECCE worker quality improvement uses
HHS	CCDF	At least 4 percent of awarded grants must be used for program quality improvement activities, among other things, which can include ECCE worker quality improvement activities. ^a	<p>Program quality improvement includes workforce training and wage supplementation, among others. States may use these funds</p> <ul style="list-style-type: none"> to build state career development systems and quality rating improvement systems; to train infant and toddler caretakers, such as on sudden infant death syndrome; and for scholarships and wage supplementation to individuals. Funds have, for example, gone to the Teacher Education and Compensation Helps Early Childhood Project, which gives scholarships to child care workers to attend college classes related to child development.
	Head Start and Early Head Start	From 2.5 percent to 3 percent must be used to fund training and technical assistance activities, some of which is reserved for Early Head Start programs. Additional funds are reserved for improving program quality.	<p>Technical assistance and program quality improvement funds may be used for multiple worker improvement activities, including improving staff qualifications, implementing career development programs, wage supplementation, and scholarships. HHS has provided Head Start funds for</p> <ul style="list-style-type: none"> training one staff member per grantee to use Head Start's Classroom Assessment Scoring System to promote instructional quality; and wage supplementation and scholarships, such as a 2009 one-time program that helped grantees meet degree requirements.
	TANF	No specific requirements for amount that must be spent on ECCE worker or quality improvements.	States may use up to 30 percent of their TANF funds for CCDF, and those funds may then be used for all CCDF-eligible expenditures, including professional development activities, increasing payment rates to allow for better compensation of child care workers, and establishing or enhancing incentives for providers who attain accreditation.
Education	Programs under IDEA, especially Part D	No specific requirements for amount that must be spent on ECCE worker or quality improvements.	<p>IDEA's Part D provides some funding for improving quality of ECCE workers, including for professional development and training. For example, IDEA funding has been used for</p> <ul style="list-style-type: none"> credentialing programs, such as the Combined Priority for Personnel Preparation grants, to increase the number and quality of workers credentialed to serve infants, toddlers, and children with disabilities; training using such funds as Paraprofessional Pre-Service Program Improvement Grants, which support enhancing program curricula in early intervention, early childhood special education, and early childhood paraprofessional programs.
	Improving the Academic Achievement of the Disadvantaged (ESEA, Title I)	No specific requirements for amount that must be spent on ECCE worker or quality improvements.	<p>Title I funds can be used</p> <ul style="list-style-type: none"> for training on effective teaching practices, professional development that aligns with state content standards, or coaching for preschool teachers in public elementary school with high numbers of children from low-income families; and in conjunction with other funding such as Head Start.
	21st Century	Up to 1 percent is reserved for national activities.	21st Century funding reserved for national activities can include technical assistance and training to improve the quality of the after-school programs workforce. For example, Education hosts a 21st Century program institute each summer that includes technical assistance, and last summer's institute included a discussion of workforce development. Additionally, states may use up to 3 percent of the funds for their own technical assistance, which can include professional development and ECCE worker quality improvement activities.

Sources: Interviews with HHS and Education officials and HHS and Education websites and relevant federal laws and regulations.

^aWhile CCDF requires that at least 4 percent of the fund be used by state grantees for general program quality improvement activities, among other things, states usually use more than that amount, spending almost \$1 billion (about 11 percent) on general program quality improvement activities in 2009, for example. Workforce quality improvement activities are part of such general program quality improvement activities, but are not tracked separately.

HHS and Education officials said states and other grantees are not required to report expenditures on activities to improve the quality of ECCE workers. For example, Head Start officials noted that about half of the fiscal year 2010 \$176 million allocated for training and technical assistance was provided to local grantees. Those officials also noted that there is no readily available way to disaggregate the money used for workforce quality improvement training and technical assistance from money spent on other items in a grantee's budget. Likewise, Education officials explained that, although their programs maintain data on the amount awarded to state or other grantees, it would be difficult to determine how much was used on activities to improve the quality of ECCE workers.

However, one program—CCDF—has begun collecting more data from the states on the use of CCDF to improve worker quality through the biannual CCDF state plan process beginning in fiscal year 2012-2013.²¹ HHS's Office of Child Care will require states to assess their efforts to create an effective and well-supported child care workforce, including availability of ECCE degree programs offered in a state, quality assurance mechanisms for training programs and technical assistance, and descriptions of workforce data available to them. An HHS official told us that such information should help policymakers determine how to best use CCDF program quality funds to improve worker quality.

In addition to these longstanding programs, HHS and Education have recently worked together and separately on several initiatives to, among other areas, improve the quality of ECCE workers.²² Examples of the agencies' collaboration include:

- Convening the Early Childhood 2010 conference in August 2010, which highlighted the benefits of improving the quality of the ECCE workforce and including ECCE information in state longitudinal data systems. The conference brought together policymakers and experts to improve collaboration at the federal, state, and local levels in

²¹The 37 states responding to our survey reported that CCDF funding accounted for the vast majority of all federal funding used on workforce quality improvement activities (see fig. 6).

²²Both HHS and Education have appointed a senior-level staff member as a "point person" to coordinate with other federal agencies and raise awareness of the importance of early care and education. In HHS, this position is Deputy Assistant Secretary and Inter-Department Liaison for Early Childhood Development; in Education it is Senior Advisor to the Secretary on Early Learning.

support of the development of integrated state early learning and development systems.

- Jointly administering the Race to the Top-Early Learning Challenge grant, which is intended to improve the quality of ECCE for children. In May 2011, HHS and Education announced \$500 million in funding for the Race to the Top-Early Learning Challenge competitive grants awarded in December 2011.²³ These competitive grants to states support ECCE infrastructure, such as more coherent early childhood systems and developing data on ECCE workers. The grants also encourage states to increase retention and educator quality by supporting their ECCE workers with professional development, career advancement opportunities, and incentives to improve their skills. Administration, monitoring, and oversight of these grantees by the two agencies are ongoing, according to Education officials.
- Convening interagency study groups in September 2009 to increase coordination and collaboration on early learning issues. The agencies tasked the groups with identifying and helping articulate key components of a high-quality, coordinated state system of early learning and development. The groups identified seven such systems, including workforce and professional development systems, program standards, and data systems, and the groups informed the development of criteria for the Race to the Top-Early Learning Challenge grants. These groups met for about a year, and as of September 2011, there were no plans to resume them.
- Conducting several “listening tours” to obtain input on workforce issues at meetings across the country. One of these tours focused exclusively on ECCE workers and professional development.

In addition to their recent collaborative work, HHS and Education have each worked to improve ECCE worker quality with their own initiatives. For instance, HHS officials noted two new national centers to provide child care technical assistance to states, territories, and tribes on improving the quality of care for preschool and school-age children, including improving

²³The Race to the Top-Early Learning Challenge grants were funded by the Department of Defense and Full-Year Continuing Appropriations Act, 2011. Pub. L. No. 112-10, § 1832, 125 Stat. 38, 163.

ECCE worker quality.²⁴ In addition to the Early Learning Challenge grants, Education also included an ECCE focus as a priority in prior Race to the Top grants and Investing in Innovation grants, whereby a few applications targeted ECCE workers.²⁵ Education officials said they hoped to reach those in informal home-based settings as well. At the time of our review, it was too soon to assess the impact of these initiatives on the quality of ECCE workers.

States Used Over \$1 Billion in CCDF and State Funds for Worker Training and Other Activities

In our survey of state child care directors, the 37 states that responded reported spending at least \$1.4 billion on activities to improve ECCE worker quality over fiscal years 2007 through 2010.²⁶ The two most heavily funded activities were worker in-service training and scholarships.²⁷ All 37 states reported pursuing in-service training, coaching, and mentoring, and 34 states said they offered scholarships or other financial aid to students in postsecondary education. States responding reported spending more on training than scholarships: nearly 60 percent, or about \$848 million, of all funds dedicated to ECCE worker quality went to training while less than 20 percent, or about \$259 million, went to scholarships (see fig. 5). Neither the overall level of funding nor

²⁴One center, the National Center on Child Care Professional Development Systems and Workforce Initiatives, jointly funded by Head Start and CCDF, plans to build state capacity for creating career paths for early childhood educators and after-school teachers through higher qualifications and improved compensation. HHS officials also noted that Head Start's new National Center on Quality Teaching and Learning is providing technical assistance with the goal of ensuring that Early Head Start and Head Start agencies and teachers have access to a professional development system that provides individualized support and guidance.

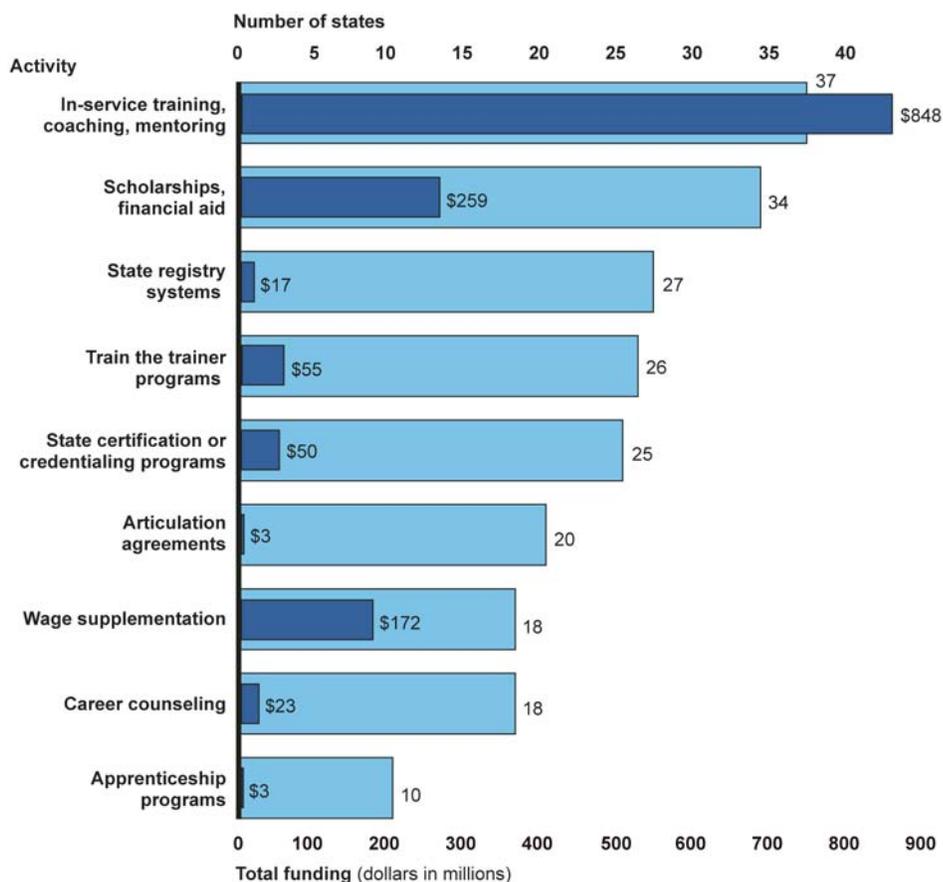
²⁵Education provided an invitational priority for Race to the Top grant applications that included programs to improve educational outcomes for high-need students in prekindergarten through third grade, though no additional points are awarded for invitational priorities. Nine of the 12 Race to the Top grantees for these funds included some focus on ECCE in their applications, and 3 of those specifically planned to invest in ECCE workers. For the Investing in Innovation grants, Education provided a competitive preference—awarded additional points—to those applicants with an ECCE focus, and several grantees included an ECCE focus.

²⁶States indicated spending an additional approximately \$204 million during the 4-year period on other worker quality improvement activities that they did not believe fit into the specified worker improvement activities listed in the survey. See appendix I for more information on our survey methodology.

²⁷See appendix II for a full description of each of the activities from our survey.

the number of states pursuing specific activities changed substantially from 2007 to 2010.

Figure 5: Responding States' Workforce Improvement Activities and Funding, FYs 2007 through 2010



Source: GAO analysis of state survey data, 37 of the 51 states responded (including District of Columbia).

Wage supplementation was the activity with the third-highest funding total reported by our survey respondents, who said they spent about 12 percent of total funds for ECCE worker quality on wages, or about \$172 million from fiscal years 2007 through 2010. Nineteen of 37 states reported supplementing wages and 3 of those accounted for almost all—81 percent—of these expenditures. Wage supplementation can encourage increased professional development and worker retention by paying workers who obtain additional formal education or in-service training a higher amount, according to several state officials. While the supplemental wages may require workers to stay in their current program

for a specified amount of time, the increases provide a greater incentive for workers receiving them to remain in these occupations, according to several state officials. For example, officials from two states we surveyed said they believe wage supplementation has increased professional development and retention of ECCE workers in their states. These officials noted state research that suggested the wage supplementation increased worker retention and an interest in pursuing further education.²⁸

The types of ECCE workers targeted by states' quality improvement activities varied among our survey respondents, but across all activities, center-based child care workers were targeted most and private home-based child care workers the least.²⁹ For example, 34 states reported targeting training activities to center-based workers to a great or very great extent in fiscal year 2010, while only 2 states said they targeted training to private home-based workers to a great or very great extent. Several state officials we spoke to said they most frequently target center-based child care workers because those centers care for far more children than private in-home workers. Moreover, research has suggested that private in-home workers may be less interested in formal training workshops and instead prefer less formal learning approaches, such as home visits. Research has also suggested that on-site training and visits to family-based child care providers can be effective for workers in that setting.³⁰

²⁸Likewise, Education officials offered the example of New Jersey, which they said was mandated in a court decision to provide high-quality prekindergarten programs with quality teachers to all high-poverty school districts. To attract high-quality teachers, the state found it had to increase prekindergarten teachers' salaries to match levels paid to K-12 teachers. Turnover consequently diminished, Education officials said.

²⁹Family-based child care workers, preschool teachers and assistant teachers, and ECCE program directors were also targeted, but not to the extent of center-based child care workers.

³⁰See, Juliet Bromer, *The Family Child Care Network Impact Study: Promising Strategies for Improving Family Child Care Quality*, Herr Research Center for Children and Social Policy at Erikson Institute, Policy Brief No.1 (2009) and Diane Pausell, Toni Porter, and Gretchen Kirby, *Supporting Quality In Home-Based Child Care: Final Brief*, Mathematica Policy Research, Inc. (Mar. 31, 2010).

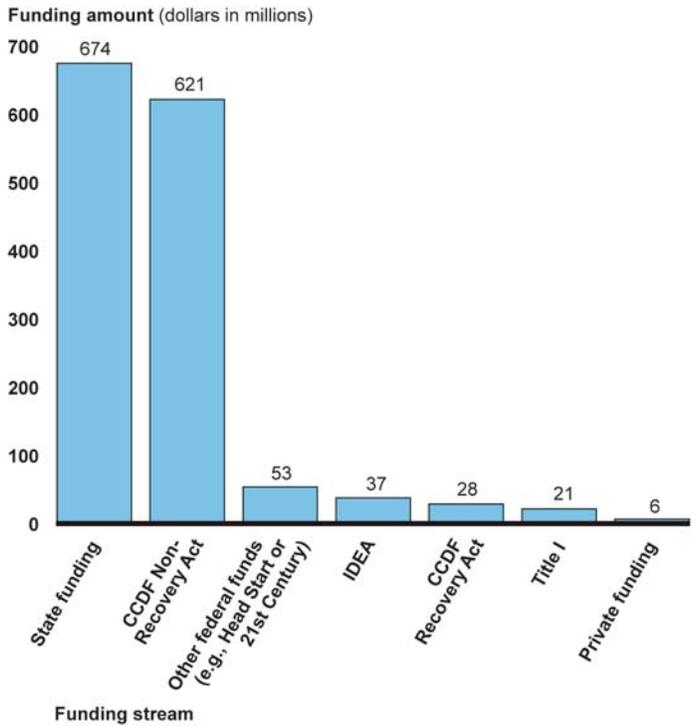
Overall, responding states that could identify the funding streams used reported relying primarily on CCDF³¹ and state funds for worker quality and improvement activities.³² Specifically, CCDF and state funding streams each accounted for more than 40 percent of the total funding and together close to 90 percent (about \$1.3 billion) of all funding identified by the state respondents from fiscal years 2007 through 2010. Other sources of funding included IDEA and Improving the Academic Achievement of the Disadvantaged (Title I), as well as Head Start and other federal funding and private funds (see fig. 6).³³

³¹Our survey specified whether CCDF funds were funded under the American Recovery and Reinvestment Act of 2009 or not.

³²State child care directors in 15 of the 37 responding states did not always know whether they used a specific program's funds for any given ECCE worker quality improvement activity, or if they knew that a specific program's funds were used, they did not know the amount. This may result, at least in part, because states can use funds from a variety of sources to support unified services. Officials from one state reported, for example, that they did not know whether the state used state, CCDF, Title I, IDEA, or other federal funds to train ECCE workers.

³³The survey did not ask how states spent Head Start funds, since those funds generally go to grantees directly rather than the states.

Figure 6: State-Reported Sources of ECCE Worker Quality Funding, FYs 2007-2010



Source: GAO analysis of state survey data, 37 of the 51 states responded (including District of Columbia).

Note: Some percentages do not add to 100 percent due to rounding. These data reflect only the 37 of 51 states (including the District of Columbia) that responded to our survey.

Concluding Observations

The existing gaps in national data on the ECCE workforce make it difficult to describe these workers and whether they have the necessary education, training, and skills to help children reach positive outcomes. Not knowing the true size of this workforce and its education and training levels inhibits research needed to link worker characteristics to worker quality, and to positive outcomes, including academic achievement of children, particularly those from low income families. Lack of data also hinders development of targeted support for these workers. However, data collection can be expensive and burdensome to both the agency conducting the collection effort as well as the public responding to these efforts. Hence careful consideration is needed when thinking through options, costs, and the resultant value of the data to be collected. The federal government is uniquely positioned to improve national data collection, while balancing these considerations, because of its experience in conducting nationwide household and business surveys

and its administration of programs and grants and accompanying reporting requirements. HHS and Education have taken a number of steps to improve data collection, such as funding a survey of caregivers and teachers, and beginning to work with BLS and Census to determine how best to improve federal statistical surveys, which include data on ECCE workers across program settings; however, it is too early in the process to assess the impact of these changes on federal data collection efforts in general, let alone their ultimate success in improving federal data on the ECCE workforce in particular.

Agency Comments and Our Evaluation

We provided a draft of this report to the Departments of Health and Human Services and Education for review and comment. HHS's written comments are reproduced in appendix IV, and Education's comments are reproduced in appendix V. Technical comments from both agencies were incorporated in the report as appropriate.

In their written comments, both Education and HHS generally agreed with the report's conclusions, namely that data on the ECCE workforce need to be improved. Both agencies also provided additional information in their comments that gave us cause to reconsider a recommendation put forth in the draft report that they reviewed. This additional information was not provided to us at the time of our study or at exit meetings held with the agencies when we discussed the findings to be included in our draft report. It outlined how HHS and Education are working with or plan to work with OMB, BLS and Census to improve national data on the ECCE workforce currently available through the American Community Survey and other federal statistical surveys. Our draft report contained a recommendation to this effect, but in light of the new information, we have deleted it. The additional information is contained in HHS and Education's written comments and has been incorporated into the report as appropriate.

HHS's comments suggested that GAO develop a recommendation related to the capacity of the higher education system to provide adequate professional development opportunities for all ECCE workers who may want them, noting the information we present in the report about the percentage of ECCE teachers without college degrees. While we acknowledge that this is an important concern for HHS, our study's objective was to describe what we knew about the characteristics of this workforce, which in turn led to a discussion about the data limitations and problems. To develop a recommendation such as the one suggested by HHS would require us to delve into more depth about the characteristics

of the ECCE workforce, such as why education levels are low, which was outside the scope of our study.

HHS objected to our statement used in the Highlights page that said, “some research indicated that ECCE workers who are better educated and trained are more effective teachers, but other research did not find as clear a link.” Due to space considerations on the Highlights page, this sentence truncated the details laid out in the report, and as such, we have revised it to more closely reflect the report text. That said, we stand by our conclusions about the research as presented in the report, which is based on interviews with experts—including HHS officials—as well as our own review of the literature.

HHS also objected to the statement in our report that HHS and Education do not have complete information on all program workforce improvement activities, including how they are funded. In its comments, HHS noted that it was developing such information and provided the example of the CCDF. For example, HHS stated that the Office of Child Care has asked states about their professional development activities using CCDF, including new information to be submitted beginning in December 2012. The statement in our report, however, reflects the workforce improvement activities across six ECCE programs pursued at both HHS and Education, not just CCDF and we have clarified this in the report. Moreover, we mention the new CCDF reporting requirements in the report as an example of how some information is being gathered on workforce quality improvement activities.

Lastly, HHS outlined other efforts that they have undertaken over the past 2 years to improve ECCE workforce data. Many of these examples were already in the report, although we did incorporate some additional details on them from HHS’s comments where appropriate.

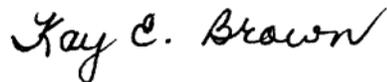
In its comments, Education cited concerns that not all data limitations raised in the report could be solved through improving ACS or other federal statistical data. We agree with this perspective and do not believe that we suggest this in the report. We highlight the ACS and the other federal surveys because they are the current vehicles by which the federal government is collecting ECCE data through agencies such as BLS and Census. We assume that any effort among the various federal agencies about how to improve the data would delve more explicitly into what data were needed by the agencies and which changes, if any, made sense for any particular database. Education also cited the balance that Census in particular has struck between the need for more data and the

public burden of responding to such data collection efforts. Again, we fully agree with the need to balance data collection and public burden and have cited the need for this balance in our concluding observations.

We are sending copies of this report to the Secretary of Health and Human Services, the Secretary of Education, the appropriate congressional committees, and other interested parties. In addition, this report is available at no charge on the GAO website at <http://www.gao.gov>.

If you or your staff members have any questions regarding this report, please contact me at (202) 512-7215 or brownke@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made major contributions to this report are listed in appendix VI.

Sincerely yours,



Kay E. Brown
Director,
Education, Workforce,
and Income Security Issues

Appendix I: Scope and Methodology

The objectives of our report on the quality of Early Child Care and Education (ECCE) workers were to determine (1) What is known about the composition, education, and income of ECCE workers and how these characteristics relate to quality? and (2) What activities are the Department of Health and Human Services (HHS), the Department of Education (Education), and the states financing to improve worker quality? For this review, we focused on paid ECCE workers who care for and educate infants to prekindergarten and school-age children in before- and after-school programs.

What We Know about the ECCE Workforce and How These Characteristics Relate to Quality

To address the first objective, we analyzed data on the composition, education level, and income of the ECCE workforce from the U.S. Census Bureau's (Census) American Community Survey (ACS) and HHS's Head Start Program Information Report (PIR); interviewed ECCE experts, researchers and government officials; reviewed relevant federal laws and regulations; and identified and reviewed studies on the characteristics and quality of the ECCE workforce.

ACS is an ongoing national survey of 3 million households, which replaced the decennial census long form questionnaire as a source for social, economic, demographic, and housing information in 2000. We chose this source because of its large sample size and detailed information on the education levels of its respondents. Using ACS 2009 data, we identified ECCE workers based on the following criteria:

- The individual was an employed civilian.
- If not self-employed, the individual had positive wage or salary income.
- The individual fell into one of the following categories (with ACS industry or occupation number in parentheses):
 - Family-based child care worker: Individual was self-employed, worked in the child day care services industry (8470) under the child care worker occupation (4600) or under the education administrator occupation (0230).
 - Center-based child care worker: Individual was not self employed and worked in either the child day care services industry (8470) or in the elementary or secondary school industry (7860) under the child care worker occupation (4600).
 - Teaching Assistant: Individual worked in the child day care services industry (8470) under the assistant teacher occupation (2540).

- Preschool teacher: Individual worked in the child day care services industry (8470)¹ under either the preschool or kindergarten teacher occupation (2300) or under the special education teacher occupation (2330).
- Private home-based child care worker: Individual worked in the private household industry (9290) under the child care worker occupation (4600).
- Director of programs: Individual was not self-employed and worked in the child day care services industry (8470) under the education administrator occupation (0230) or under the director of religious activities and education occupation (2050).

Unless otherwise noted, all ACS estimates had a 95 percent confidence interval within plus or minus 10 percent of the estimate. We assessed the reliability of these data by reviewing available documentation, discussing the strengths and limitations of the data with Census officials, and conducting reliability tests on the data that we used. We determined that the data were sufficiently reliable for the purposes of describing the composition, education level, and income of the ECCE workforce.

We also examined Head Start and Early Head Start PIR data. Head Start grantees report on the Head Start and Early Head Start programs they administer annually to HHS using HHS's PIR reporting system; we used data from the 2008-2009 program year.² We assessed the reliability of these data by reviewing available documentation, discussing the strengths and limitations of the data with HHS Head Start officials, and conducting computerized reliability tests on the data that we used. We determined that the fields relating to education and salary of Head Start

¹As noted above, a limitation of this occupation was that the preschool and kindergarten teachers were combined into a single category. However, an alternate data source, the Occupational Employment Statistics, showed that while the vast majority of preschool teachers were in the Child Care Industry, and thus included, the overwhelming majority of kindergarten teachers were in the elementary and secondary school industry, and excluded from our group.

²PIR data contain information on all Head Start workers nationwide, of which there were 97,475 teachers, teaching assistants, and family child care providers nationwide in the 2008-2009 program year. ACS's 2009 survey included 16,385 randomly selected ECCE workers. Thus, although it is possible that some of these ECCE workers were Head Start teachers, teaching assistants, or family child care providers, such overlap would likely be very small and would not be likely to alter the results of our analysis.

and Early Head Start teachers, as well as teaching assistants, were sufficiently reliable to include in this report. Because salary data for teachers and teaching assistants were reported as an average by position for each Head Start or Early Head Start program, we averaged these data across all programs and weighted them by program size and numbers of teachers and teaching assistants in order to report them as an average for all programs by Head Start position.

Although PIR data contain education and salary information on Head Start program directors, we did not report these data for two reasons. First, PIR data do not uniquely identify program directors and this can result in double counting because one director can oversee multiple programs, according to HHS Head Start officials. Second, HHS officials also told us that Head Start program directors often oversee programs that are much larger and more varied than a typical child care or preschool program, thus they are not necessarily comparable to directors of these other program types.

We also interviewed ECCE experts and federal officials to obtain their perspectives on ECCE worker quality and on the availability and limitations of ECCE workforce data. We identified experts and government officials by reviewing studies and policy papers, attending two conferences, and reviewing applicable websites. Experts and government officials we interviewed included those from the National Association for the Education of Young Children; the National Institute for Early Education Research; the Center for the Study of Child Care Employment; HHS's Office of Planning, Research, and Evaluation; HHS's Administration for Children and Families; Education's Office of Special Education and Rehabilitative Services; Education's Office of Elementary and Secondary Education; the Human Services Policy Center, Evans School of Public Policy, University of Washington; the National Association of State Child Care Administrators; the Charles Stewart Mott Foundation; and the National Association for Family Child Care. Our discussions on ECCE worker quality covered such topics as perspectives on quality of the ECCE workforce as a whole, as well as for workers in particular ECCE workplace settings (e.g., child care, preschools, or Head Start programs) and if and how education and income levels relate to worker quality. Our discussions on the availability of ECCE workforce data sought to identify data collection efforts that organizations were currently undertaking—for example, state efforts to collect workforce data through registries.

We also identified relevant studies on the characteristics and quality of the ECCE workforce while conducting the above interviews and by

searching the literature. Our search emphasized studies conducted from 2006 through 2011, although we also included several older relevant studies. Likewise, although our search emphasized studies that were national in scope, we also included key studies that pertained to only a portion of the country or the workforce. We searched a number of bibliographic databases, including ERIC, ProQuest, PsycINFO, Social SciSearch, and PolicyFile. Our search used such search terms as child care workers, preschool teachers, and early childhood care providers. Two analysts, at least one of whom was a social scientist with expertise in research methodology, reviewed all studies cited in this report to ensure their reliability and to ensure that we presented their findings accurately. Appendix III lists the key studies we cited in this report.

Government Activities to Improve Worker Quality

To address the second objective and obtain background information, we surveyed the 50 states and the District of Columbia; interviewed officials from HHS and Education, contacted several states for follow-up information; and reviewed relevant federal laws and regulations.

We surveyed the 50 states and the District of Columbia about the types of activities states pursued to improve ECCE worker quality from fiscal years 2007 through 2010 and the amount of federal, state, and private funds used to finance these activities.³ The survey further categorized federal funds as follows: Child Care and Development Fund (CCDF) not funded by the American Recovery and Reinvestment Act of 2009; CCDF/American Recovery and Reinvestment Act of 2009; Improving Academic Achievement of the Disadvantaged (Title I); Individuals with Disabilities Education Act (IDEA); and other federal funds (such as Head Start and 21st Century Community Learning Centers). We sent the survey to state lead agency child care administrators because they are responsible for managing government child care programs and subsidies in their states, including the administration of CCDF. To get as complete information as possible, these child care administrators were requested to contact the state educational agencies in their states and other relevant departments about funding for activities in their states. We developed protocols that facilitated coordination between the state lead agency child care administrators and state departments of education to encourage full

³See appendix II for a description of these activities and an explanation as to why three activities were dropped from our analysis.

participation in the survey. We pretested the survey in five states and made appropriate revisions to the survey in response to these pretests. The survey also contained questions about the reliability of the state data systems that housed the funding data reported in the survey. All states responding to our survey indicated that these systems were sufficiently reliable for the purposes of reporting funding figures requested in the survey. Thirty-seven states responded to our survey (a 73 percent response rate) and these responses are not generalizable nationwide.

Because this was not a sample survey, there are no sampling errors. However, the practical difficulties of conducting any survey may introduce nonsampling errors. For example, difficulties in how a particular question is interpreted, in the sources of information that are available to respondents, or how data are analyzed can introduce unwanted variability into survey results. We took steps in the development of the questionnaire, the data collection, and the data analysis to minimize such errors. For example, a GAO social science survey specialist designed the questionnaire, in collaboration with GAO staff with subject-matter expertise. As we mentioned earlier, the draft survey was pretested and was reviewed by a second GAO social science analyst. When data were analyzed, an independent GAO analyst verified the statistical program used for the analysis. Since this was a web-based survey, respondents entered their answers directly into the electronic questionnaire, thereby eliminating the need to have the data keyed into a database and avoiding data entry errors. We conducted this survey between April 20 and July 1, 2011.

We also interviewed HHS, Education, and several state officials to determine the types of activities and strategies agencies pursued to improve workforce quality; the federal and state funding sources most commonly used to finance these activities and strategies; perspectives regarding if and how worker quality was improved as a result; and how the agencies track the relevant spending and results. We also reviewed relevant federal laws and regulations. Finally, we reviewed other documentation pertaining to the HHS and Education ECCE funding efforts to determine if and how these funds could be used to improve worker quality.⁴

⁴These funding efforts include CCDF, Head Start, Temporary Assistance for Needy Families, Improving Academic Achievement of the Disadvantaged, IDEA, and 21st Century Community Learning Centers.

Appendix II: State Workforce Improvement Activities

The GAO workforce quality improvement activity survey of the 50 states and the District of Columbia included the following activities and descriptions.

Activity name	Activity description
In-service training, coaching or mentoring	Initiatives that provide or give ECCE workers opportunities to obtain relevant and ongoing training. These opportunities focus, at least in part, on how to become a more effective early-learning teacher. Examples of in-service training include workshops, classes, and conferences. Coaching and mentoring include ongoing one-on-one support from more experienced child care professionals.
Student scholarships or other forms of financial aid	Scholarships or other forms of financial aid available to students attending institutions of higher education. For example, scholarships through the Teacher Education Assistance for College and Higher Education program that subsidize a student obtaining a degree or other financial aid programs which subsidize higher education coursework, but not necessarily a degree.
Develop, redesign, or improve state registry systems (i.e., an automated data system that tracks the workforce)	State registry systems or other automated data systems that collect data on the ECE workforce and/or track and approve ECE trainers and classes.
Programs or initiatives that directly provide or increase access to “train the trainer” programs	Train the trainer programs that are focused, at least in part, on how to improve the quality of the ECCE workforce. One example is train the trainer programs, which have a sole or partial focus on effective mentoring or coaching strategies for improving the interactions between ECCE workers and the children in their care. Another example is train the trainer programs, which have a sole or partial focus on effective strategies for developing early-learning teaching skills in language, literacy, pre-reading and early math.
State certification or credentialing programs for the ECCE workforce	Initiatives that provide the ECCE workforce with educational and/or experiential opportunities to upgrade their job skills and which result in state certificates or credentials. Examples are early childhood certificates or credentials, associate certificates or credentials, administrator certificates or credentials, and after-school education credentials.
Develop or increase articulation agreements among programs offering degrees, credentials, or certificates to the ECCE workforce	Initiatives which initiate or increase agreements between two or more colleges, universities, or state-credentialed or certification programs, whereby course credits that students earned from one educational institution can apply toward a higher degree at another institution.
Supplementation of workforce wages	Wage supplemental programs, regardless of whether the program ties such supplementation to an ECCE worker obtaining progressively higher levels of education or training.
Programs or initiatives that directly provide or increase access to career counseling for the prospective and existing ECCE workforce	Initiatives that are designed to help prospective and existing ECCE workers get information and advice on a variety of career planning topics such as skills assessments, career advancement in general or according to a state’s specified career path, and employment opportunities.
Apprenticeship programs	Apprenticeship programs are usually in partnership with the U.S. Department of Labor and/or state departments of labor and provide both instruction on early childhood learning and on-the-job training under the supervision of an ECCE professional.

Source: GAO survey instrument.

The GAO survey contained questions about three other activities that were not included in the final results. Two activities' survey questions allowed space for respondents to record other workforce improvement activities that they did not believe fit into the specified worker improvement activities noted in the table above. GAO did not include the results of these two "other" categories because, upon review, some responses did not seem to be appropriate for inclusion in these other categories. For example, it seemed that a number of the activities listed by some states did not seem to be activities primarily designed to improve the quality of ECCE workers. The total amount of funds states attributed to these two other categories was approximately \$204 million. The third activity not included in the final results was monetary or other incentives given to child care or prekindergarten programs for workforce quality improvement activities. We did not include this in our results because the majority of the funding information on this activity was for payments to child care providers for child care, rather than activities to improve ECCE worker quality. States that had reported most of the funding for this activity noted that there was no way to separate the funds given to providers for earning higher education—the ECCE worker quality improvement activity—from funds given to those same providers for the underlying provision of child care. Since we could not identify the funds spent on ECCE worker quality activities for vast majority of the funds reported, we did not report on the funding for the category as a whole.

Appendix III: Cited Studies in the Report

Early Education and Care: Overlap Indicates Need to Assess Crosscutting Programs. [GAO/HEHS-00-78](#). Washington, D.C.: April 28, 2000.

GAO Update on the Number of Prekindergarten Care and Education Programs, [GAO-05-678R](#). Washington, D.C.: June 2, 2005.

HHS, Office of Inspector General. *Most Early Head Start Teachers Have The Required Credentials, But Challenges Exist.* OEI-05-10-00240. August 2011.

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Brandon, Richard with Scarpa, Juliet. *Supply, Demand and Accountability: Effective Strategies to Enhance the Quality of Early Learning Experiences Through Workforce Improvement.* Human Services Policy Center Whitepaper, Evans School of Public Affairs, University of Washington. May 2006.

Saracho, Olivia N., Spodek, Bernard. "Early Childhood Teachers' Preparation and the Quality of Program Outcomes." *Early Child Development and Care*, vol. 177, no. 1 (January 2007): 71-91.

Torquati, Julia; Raikes, Helen; Huddleston-Casas, Catherine. "Teacher Education, Motivation, Compensation, Workplace Support, and Links to Quality of Center-Based Child Care and Teachers' Intention to Stay in the Early Childhood Profession." *Early Childhood Research Quarterly*, vol. 22, no. 2 (2007): 261-275.

Early, Diane, Maxwell, Kelly, Burchinal, Margaret, et al. "Teachers' Education, Classroom Quality, and Young Children's Academic Skills: Results from Seven Studies of Preschool Programs." *Child Development*, vol. 78, no. 2 (March/April 2007): 558-580.

Bromer, Juliet. *The Family Child Care Network Impact Study: Promising Strategies for Improving Family Child Care Quality.* Herr Research Center for Children and Social Policy at Erikson Institute, Policy Brief 2009, No.1.

Paulsell, Dianne; Porter, Toni; Kirby, Gretchen. *Supporting Quality In Home-Based Child Care: Final Brief.* Mathematica Policy Research Inc. March 31, 2010.

Kipnis, Fran and Whitebook, Marcy. *Workforce Information: A Critical Component of Coordinated State Early Care and Education Data Systems*, Policy Brief 2011. Center for the Study of Child Care Employment.

Appendix IV: Comments from the Department of Health and Human Services



DEPARTMENT OF HEALTH & HUMAN SERVICES

OFFICE OF THE SECRETARY

Assistant Secretary for Legislation
Washington, DC 20201

Kay Brown, Director
Education, Workforce, and Income Security Issues
U.S. Government Accountability Office
441 G Street NW
Washington, DC 20548

JAN 17 2012

Dear Ms. Brown:

Attached are comments on the U.S. Government Accountability Office's (GAO) draft report entitled, "EARLY CHILD CARE AND EDUCATION: Improved Workforce Data Could Benefit Efforts to Enhance Worker Quality" (GAO 12-248).

The Department appreciates the opportunity to review this report before its publication.

Sincerely,

A handwritten signature in black ink that reads "Jim R. Esquea".

Jim R. Esquea
Assistant Secretary for Legislation

Attachment

GENERAL COMMENTS OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES (HHS) ON THE GOVERNMENT ACCOUNTABILITY OFFICE'S (GAO) DRAFT REPORT ENTITLED, "EARLY CHILD CARE AND EDUCATION: IMPROVED WORKFORCE DATA COULD BENEFIT EFFORTS TO ENHANCE WORKER QUALITY" (GAO-12-248)

The Department appreciates the opportunity to review and comment on this draft report.

GAO Recommendation

To improve the government's ability to describe the characteristics of this country's early child care and education workforce and assess the ability of this workforce to help achieve positive outcomes for children, we recommend the Secretaries of HHS and Education address shortcomings in national data on ECCE workers by working with OMB, BLS, and the Census Bureau to develop more comprehensive, ongoing, education levels, training and income.

Administration for Children and Families (ACF) Response

ACF acknowledges and appreciates the GAO's recommendation to strengthen the data on the early care and education workforce. We share that goal and have undertaken significant steps to improve the data available on early care and education workers. In just the last two years, ACF has funded a National Academy of Sciences workshop on the status of the workforce. We have significantly revised data collection under the Child Care and Development Fund (CCDF) to capture State's efforts to improve the workforce and data that will indicate the effectiveness of workforce initiatives and investments. We have taken several critical steps to work with the Census Bureau and the Department of Labor to improve the information available on the Early Child Care and Education (ECCE) workforce through national surveys. We are working with the Department of Education to contribute to the Common Education Data Standards that are being developed for early childhood, including data standards related to the workforce.

ACF believes GAO has the opportunity to build upon this recommendation in light of the data presented that currently exist on the workforce and efforts to improve ECCE worker quality. As the GAO reports, the available data shows that the ECCE workforce education and training levels are low, almost three-fourths lack an associate's degree or higher, and most workers' incomes are at the poverty level, less than \$22,000 per year. GAO's findings on the inadequate training and poor compensation of the workforce are concerns that we share. Each year, we work with States to invest in the quality of the child care workforce through the CCDF. In Head Start, we focus on coordination and collaboration among early childhood programs, including for training and professional development and partnerships with institutions of higher education to provide opportunities to increase education levels of staff. Both programs, Head Start and Child Care, have funded national technical assistance (TA) centers to help maximize the effectiveness of current workforce initiatives and investments. The Child Care and Development Block Grant (CCDBG), last reauthorized in 1996, is long overdue for a reauthorization that takes into account the current status of program and teacher quality. Head Start reauthorization is also on the horizon. Given these upcoming reauthorizations, we would like to consider GAO's important findings on the status of the ECCE workforce and work with members of Congress to ensure that our youngest children are taught by highly qualified teachers who will help them prepare for school.

The 2007 reauthorization of the Head Start Act shows how Congress and the Administration, working together, can make a tremendous impact on the education and training of early care and

GENERAL COMMENTS OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES (HHS) ON THE GOVERNMENT ACCOUNTABILITY OFFICE'S (GAO) DRAFT REPORT ENTITLED, "EARLY CHILD CARE AND EDUCATION: IMPROVED WORKFORCE DATA COULD BENEFIT EFFORTS TO ENHANCE WORKER QUALITY" (GAO-12-248)

education teachers. As GAO notes, the Head Start Act pays particular attention to improving the quality of the workforce and focuses on coordination and collaboration among early childhood programs, including for training and professional development and partnerships with institutions of higher education to provide opportunities to increase education levels of staff. With this mandate, Head Start has been a leader in the field in improving teacher quality. As of October 1, 2011, Head Start successfully met the mandate for all teachers to have an associate's degree. Building on the Head Start success, it is time to look at how we can improve the qualifications of teachers in the child care system who are responsible for the care and education of millions of children each week. The Administration has put forward core principles for the reform of the CCDBG. One of the President's core principles for CCDBG reform is to improve quality by supporting professional development systems that improve qualifications of child care teachers which demonstrates our commitment to improving the quality of the workforce.

ACF strongly believes that professional development is key to improving quality. ACF has invested considerable resources to ensuring a strong ECCE workforce, including strong data collection, beyond what is currently mandated for the ECCE workers. Highlights of ACF investments include:

- **New Administrative Data Collection:** Program office efforts such as the Office of Child Care's continued collection of information on professional development through its biennial Plan and the Office of Head Start's ongoing refinements to the Program Information Report (PIR) data collection tool to ensure the most useful data is collected from States and local Head Start grantees on the workforce and efforts to improve professional development.
- **New National Technical Assistance Centers:** Funding two new technical assistance centers that are focused on ECCE worker quality – the National Center on Child Care Professional Development Systems and Workforce Initiatives that is providing technical assistance to build State capacity to produce qualified child care professionals which is jointly funded by the Office of Child Care and the Office of Head Start; and the Office of Head Start's National Center on Quality Teaching and Learning that is providing technical assistance to ensure that every Early Head Start/Head Start agency and teacher has access to a strong and flexible professional development system that provides individualized support and guidance.
- **Research efforts related to the ECCE workforce,** including the National Academy of Sciences "Early Childhood Care and Education Workforce: A Workshop," which began its 18 month project period in December 2010. A report from the workshop was issued on November 15, 2011¹. This workshop was sponsored by the ACF and was designed to look at some of the issues that the GAO mentions in their report. Reports on the meetings with ECCE experts are available to the public and additional research papers will come from this project. Also, the National Survey of Early Care and Education which is currently in the field which will collect data on the care and early education

¹ <http://www.iom.edu/Reports/2011/The-Early-Childhood-Care-and-Education-Workforce-Challenges-and-Opportunities.aspx>

GENERAL COMMENTS OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES (HHS) ON THE GOVERNMENT ACCOUNTABILITY OFFICE'S (GAO) DRAFT REPORT ENTITLED, "EARLY CHILD CARE AND EDUCATION: IMPROVED WORKFORCE DATA COULD BENEFIT EFFORTS TO ENHANCE WORKER QUALITY" (GAO-12-248)

workforce, the types of programs where these workers are employed, and the socio-economic contexts where they work, in order to be able to answer many of the questions of interest addressed in the GAO report.

- **Inter-departmental Data Coordination:** Inter-departmental efforts with federal statistical agencies to improve data collection on the Early Child Care and Education (ECCE) workforce. ACF and HHS have participated in interagency efforts with the Department of Education to contribute to the Common Education Data Standards that are being developed for early childhood including data standards related to the workforce.

Regarding pages 16-17, the following activities have happened since May of 2011.

- Meeting on May 20, 2011, between the Office of Child Care (OCC), Office of Planning, Research and Evaluation (OPRE) and representative from Bureau of Labor Statistics (BLS) on the process to submit proposals for changes to the Standard Occupational Classification of child care and early education workers in federal statistical surveys;
- Follow-up meeting in July 2011 between the OCC and OPRE to plan process for submitting proposed changes to the SOC Policy Committee;
- OPRE and OCC are currently consulting with expert researchers (Martha Zaslow from Child Trends and the Society for Research in Child Development, Richard Brandon from RNB Consulting, Margaret Burchinal from FPG Child Development Institute, Marcy Whitebook and Fran Kipnis from the Center for the Study of Child Care Employment, and Roberta Weber from Oregon State University) to develop documentation in support of the proposed changes to the SOC; and,
- A workplan and timeline has been developed to follow submission requirements to request to OMB changes to the SOC during the 2013 cycle.

ACF believes that GAO could say more about the capacity of higher education training and education mandates, and about the Child Development Associate (CDA) credential. As noted on page 11, given the size of the ECCE workforce and that the majority did not have a college degree; we believe the GAO could consider a recommendation related to the capacity of the higher education system to provide adequate professional development that would help the current workforce increase their education and training levels. A national report showed that in 2006 there were over 1,200 institutions of higher education that offered some type of degree program in early childhood education, with over 60 percent offering an associate's degree and 40 percent offering a bachelor's degree, with some offering both. We believe that the efforts by the Office of Head Start to support meeting the mandates of the Head Start Act illustrates the importance of partnering with higher education and utilizing online learning opportunities to ensure there is adequate capacity to meet any education and training mandates. Also, while the GAO mentioned the lack of data on CDA in the report, we believe it should receive more attention. HHS helped create the Child Development Associate credential and for decades

GENERAL COMMENTS OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES (HHS) ON THE GOVERNMENT ACCOUNTABILITY OFFICE'S (GAO) DRAFT REPORT ENTITLED, "EARLY CHILD CARE AND EDUCATION: IMPROVED WORKFORCE DATA COULD BENEFIT EFFORTS TO ENHANCE WORKER QUALITY" (GAO-12-248)

subsidized the training so that ECCE providers, both in Head Start and other programs, could obtain the credential. CDA is the nationally recognized credential for ECCE professionals and indicates training and skills development in the area of early childhood care and education. It is required by the Head Start Act for Head Start workers and by many state child care licensing standards for child care workers. As such, it is essential to include CDA in any description of ECCE teacher education, training, and credentials.

ACF does not agree with the broad statement, "Some research indicates that ECCE workers who are better educated and trained are more effective teachers, but other research did not find as clear a link." There is considerable research evidence that indicates that more education and training is linked to child care quality and more effective practice. Findings from a recent comprehensive review of the literature on the relationship between qualifications of the workforce, professional development, and quality of ECE highlight that,

- More education, particularly with specialization in early childhood development, is related to higher quality in ECE programs and interactions between teachers and children²;
- Coursework paired with coaching in support of improved practice is more effective in changing practices to support children's outcomes in specific domains of learning than coursework alone³;
- Workforce credentialing in early childhood development, such as that achieved through the Child Development Associate (CDA) which requires demonstration of competencies and which focused on developing knowledge and skills relevant to early childhood development, is associated with higher quality of ECE in those areas most relevant for supporting children's development, e.g., interactions with children⁴;
- Furthermore, recent research in this area of inquiry also highlights the importance of cultivating a "culture of quality"; work by Raikes et al.⁵ identifies provider-level and program-level variables that together contribute to better quality of ECE in support of children's development. Provider-level variables like education, receiving a CDA, compensation, training, and on-site coaching combined with program-level variables such as licensing, accreditation, participation in the Adult Care Food Program and partnerships with programs that link families to other services, and formal

² Tout, K., Zaslow, M., & Berry, D., (2006). **Quality and Qualifications: Links between Professional Development and Quality in Early Care and Education Settings.** In *Critical Issues in Early Childhood Professional Development.* Martha Zaslow, Ivelisse Martinez-Beck, I. (Eds.), (pp. 77-110). Baltimore: Brookes Publishing.

³ Zaslow, M, Tout, K., Halle, T., Whittaker, J., & Lavelle, B. (2010). **Emerging Research on Early Childhood Professional Development.** In *Preparing Teachers for the Early Childhood Classroom: Proven Models and Key Principles.* Susan B. Neuman, Michael L. Kamil, (Eds.) Paul H. Brookes Publishing Co., Inc.

⁴ Same as footnote 1.

⁵ Raikes, H., Torquati, J., Hegland, S., Raikes, A., Scott, J., Messner, L., Peterson, C., Thornburg, K., Houf, B., & Scott, S. (2006). **Studying the Culture of Quality in Early Education and Care.** In *Critical Issues in Early Childhood Professional Development.* Martha Zaslow & Ivelisse Martinez-Beck, (Eds.), (pp.111-136). Baltimore: Brookes Publishing.

GENERAL COMMENTS OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES (HHS) ON THE GOVERNMENT ACCOUNTABILITY OFFICE'S (GAO) DRAFT REPORT ENTITLED, "EARLY CHILD CARE AND EDUCATION: IMPROVED WORKFORCE DATA COULD BENEFIT EFFORTS TO ENHANCE WORKER QUALITY" (GAO-12-248)

communication with parents together were highly related to quality of care and early education.

GAO's statement (page 20) regarding available information on program workforce quality improvement activities is inaccurate and conflicts with the information presented on page 22. ACF's Office of Child Care has asked states about their professional development activities through its biennial Plan since 1999, with more specific questions starting in 2003. Since 2003, states have reported on activities related to core knowledge and competencies for the workforce, career lattices, professional development capacity (e.g., technical assistance, training/trainer approval, articulation agreements), access to professional development (e.g., scholarships, career advisors), and compensation and benefits (e.g., wage supplements, bonuses or merit pay upon completion of professional development through their descriptions of their professional development activities. For example, in our most recent plans 48 States and Territories reported establishing expectations for the workforce knowledge and skills (referred to as core knowledge and competencies); 46 States and Territories have established pathways which define the sequence of qualifications (career lattices); and, 38 provide salary bonuses for completing a training or education program. Additionally, the most recent Plan for FY2012-2013 includes an Appendix – called the Quality Performance Report – which will ask the states to annually report on workers' education levels, inclusion in the registries, participation in training and technical assistance, and financial supports provided to workers. States will begin submitting this report in December 2012.

Appendix V: Comments from the Department of Education



UNITED STATES DEPARTMENT OF EDUCATION
OFFICE OF THE SECRETARY

January 11, 2012

Ms. Kay E. Brown
Director, Education, Workforce and Income Security Issues
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Ms. Brown:

Thank you for providing the Department of Education with a draft copy of the U.S. Government Accountability Office's report entitled, "Early Child Care and Education: Improved Workforce Data Could Benefit Efforts to Enhance Worker Quality" (GAO-12-248) for review and comment.

There is one recommendation for the Department of Education in the report – *To improve the government's ability to describe the characteristics of this country's early child care and education workforce and assess the ability of this workforce to help achieve positive outcomes for children, we recommend the secretaries of HHS and Education address shortcomings in national data on ECCE workers by working with OMB, BLS, and the Census Bureau to develop more comprehensive, ongoing, education levels, training, and income.*

Department's response – The report highlights some gaps in our understanding of the early child care and education (ECCE) workforce, and the primary message of the report is that more regular data are needed below the national level to help policymakers make data-driven decisions. We agree generally with this conclusion, but it is important to stress that apart from obtaining more detailed labor force information, the kinds of data called for in the GAO report may not be readily obtained through adjustments to existing Bureau of Labor Statistics and Census Bureau data collections. The Department of Education plans to work with these agencies to improve labor categorization rules in an effort to ensure that ECCE labor force members can be more readily identified in the data.

Beyond better occupation and industry coding, the other kinds of information that GAO recommends be collected are more challenging to collect on a regular basis, particularly below the national level. Data collection vehicles recommended in the report for such information, primarily the American Community Survey (ACS), may not be best suited to the task. For instance, the report indicates that better coordination with Census could lead to capturing information about certifications earned outside of traditional colleges and universities. Data collection for ACS is done through household-level contacts. One person in the household responds for all household members. Evidence from other household studies suggests that one person in a household often lacks accurate information about certifications of other household members. The Department of Education has been working with the Census Bureau on this issue

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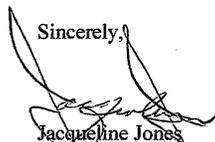
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more generally to determine how best to capture information about certifications in household studies. Also, adding additional questions to capture more information on the ACS forms is challenging in and of itself. The collection gathers a wealth of information from the public. The Census Bureau has struck a sound balance between data needs and public response burden. Adding items to the ACS to capture more ECCE specific information would require removing existing items that gather data on other topics. Given that the ACS may not be the best study to collect such data (outside of improved occupational coding), the trade-off may not generate sufficient improvements in our understanding of ECCE to warrant such change. We will examine other data collection possibilities, while being mindful of the need to balance the value of the data collected with the burden.

At the same time, through efforts with the Department of Health and Human Services, such as the joint administration of the Race to the Top – Early Learning Challenge program, we expect to receive significant information on the quality of the ECCE workforce.

I am enclosing technical comments for your consideration. Please let us know if you have any questions about our comments. We appreciate the work that went into the draft report and thank you for the opportunity to review it.

Sincerely,



Jacqueline Jones
Senior Advisor on Early Learning
to the Secretary of Education

Enclosure

Appendix VI: GAO Contact and Staff Acknowledgments

GAO Contact

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Staff Acknowledgments

In addition to the individual named above, others making key contributions to this report include Janet Mascia (Assistant Director), Nancy Cosentino, Shelby Kain, Carla Rojas, Andrew Nelson, Susan Aschoff, Alex Galuten, Shana Wallace, Ben Bolitzer, Stewart Kaufman, Cathy Hurley, Christine San, and Ashley McCall.

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