

*Transforming the* \_\_\_\_\_  
**Early Childhood Workforce**  
\_\_\_\_\_ *in Colorado*

# Colorado Early Childhood Workforce Survey 2017 Final Report

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# Colorado Early Childhood Workforce Survey 2017

## Final Report

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## INTRODUCTION

Early childhood is an important period in every individual's life. It is a time of rapid brain growth, development, and learning. It is also a critical period in which the relationships and environments that children experience can have profound and lasting effects on their later learning, social behaviors, and success into adulthood<sup>i</sup>. Consequently, early childhood is a period of great opportunity. Yet it is also a time of great vulnerability in which adverse early experiences such as poverty, and the lack of resources and stress that accompany it, can place children at risk for later academic and social difficulties<sup>ii</sup>.

High-quality early childhood education (ECE), including community-based ECE centers, Head Start programs, public school-based pre-kindergarten programs, and family child care hold the potential of mitigating these risks and supporting the positive development and learning of children across income groups. Indeed, several decades of research have now firmly established the benefits of high-quality ECE to children's short and longer-term social-emotional, cognitive, and language outcomes<sup>iii</sup>. Research also points to the important role that high-quality ECE can play in narrowing the achievement gap between lower-income children and their higher-income peers<sup>iv</sup>. Early educators are considered the linchpins to providing high-quality ECE services, as young children thrive when their teachers and family child care providers have the knowledge and skills that they need to forge positive and security-enhancing relationships with children and when they can respond to children's individual learning needs<sup>v</sup>.

In recent years, advances in the field's understanding of the science of early learning, and the important role that early educators can play in fostering children's positive development have resulted in increased job expectations for many early educators in the field<sup>vi</sup>. In addition to supporting young children's social and emotional development and early friendships, many early educators now provide instruction in literacy, math, and science. Many are also tasked with the responsibility of narrowing the achievement gap between lower-income children, many of whom have recently immigrated to the United States and are English language learners, and their more economically-advantaged, English-speaking peers. Many also support the care and learning of children with special health, behavioral, and learning challenges. Early educators certainly have a complex job; consequently, they must possess a complex set of knowledge and skills necessary to be effective and to promote positive outcomes of the diverse array of young children that they serve.

Despite the fact that the demands and responsibilities of early educators' jobs have expanded in recent years, the professional qualifications required and the compensation and work environments that early educators experience do not adequately reflect the professional nature of the work. For example, in most states, including Colorado, the expectations for the professional preparation for many early educators have not kept pace with the field's growing understanding of early learning and

development and do not match the complexity and expectations of the job. Currently, Colorado requires just 15-semester hours at the associate's (A.A.) degree level in ECE coursework for lead teachers in community-based centers and 24 credits at the A.A. level to direct an ECE center. No formal education requirements exist for providers who care for children in licensed family child homes. The educational requirements for lead teachers working in Head Start and public school-based ECE programs are often higher than for lead teachers in community-based centers. Head Start now requires that at least 50% of lead teachers hold a bachelor's (B.A.) degree in ECE, while educational requirements for public school-based lead teachers vary widely by school district and range from 15 credits in ECE coursework to a bachelor's degree with ECE licensure. Given the important role that early educators play in the lives of children and families, calls have been made by the Institute of Medicine and National Research Council<sup>vii</sup> to raise educational requirements for teachers to the level of a B.A. degree to better reflect the minimum level of professional knowledge needed to be effective in the job.

Similarly, the wages that most early educators make also do not reflect the professional nature of the work and are often comparable to those of dog walkers and janitors<sup>viii</sup>. A recent national study documenting the compensation of ECE teachers in center-based settings found that their average hourly wage was only \$13.70 an hour, with median annual salaries qualifying many for public assistance in nearly every state<sup>ix</sup>. The Bureau of Labor Statistics and U.S. Department of Labor also reported a median hourly wage of only \$9.38 for home-based child care providers<sup>x</sup>. Many early educators, especially if they work outside public-school settings, have limited or no benefits, including health insurance, employer sponsored retirement savings accounts, or paid sick and vacation days<sup>xi</sup>. As a result, many early educators struggle to pay for basic necessities, and some receive public benefits or take a second job to make ends meet<sup>xii</sup>.

In addition, many early educators' work environments do not reflect the professional needs of educators or the types of practice environments that enable effective instruction or the types of interactions with children that foster security-enhancing relationships. For example, many early educators work in settings that are often under-staffed, where they have unreliable work schedules in which they are either sent home without pay if child attendance is low or in which they move in and out of different classrooms throughout the day to meet state teacher-child ratio requirements<sup>xiii</sup>. Many also have limited or no paid planning time or professional development days and work in settings in which attaining more education and specialized training is not linked to substantial increases in wages.<sup>xiv</sup>

These workplace conditions can not only constrain an early educator's ability to deliver high-quality services to young children, but also contribute to occupational burnout and to high turnover rates and persistent difficulties in attracting and retaining effective educators in the field. Indeed, turnover rates among early educators are one of the highest in the education profession. Nationally, approximately 30% leave their jobs each year, a figure that is four times higher than observed

among elementary school teachers<sup>xv</sup>. When early educators leave, important information about the care and learning needs of individual children leave with them. Consequently, early childhood programs with high rates of staff turnover have been linked to decreases in children's school readiness skills, and the lack of stability in the classroom can also lead to increases in children's challenging behaviors and to increased stress and burnout among the staff who remain<sup>xvi</sup>.

Consequently, if ECE is to live up to its promises of narrowing the achievement gap and preparing children for elementary school and beyond, it is critical to elevate the profession – including improving the status and prestige of the field, the policies and infrastructure that support the professional preparation, and ongoing professional learning opportunities available to early educators, and improving the compensation, practice environments, and general working conditions of the professionals in the field.

## **TRANSFORMING THE EARLY CHILDHOOD WORKFORCE IN COLORADO**

Recognizing the importance of early childhood professionals to children's development, Early Milestones Colorado, in partnership with the Colorado Department of Health and Human Services and the Colorado Department of Education has spearheaded the *Transforming the Early Childhood Workforce in Colorado* project. The goal of this project is to develop strategies to support and retain a well-qualified early educator workforce, and to assure that they are appropriately compensated to be able to attract talented new professionals into the field.

As a part of the *Transforming the Early Childhood Workforce in Colorado* project, this study has been designed to identify the current strengths, gaps, and unmet needs in the early educator workforce in Colorado. The purpose of this study is to inform workforce recruitment, retention, and professional development efforts, as well as to identify areas of improvements to policies and infrastructure that are needed to better support the workforce. Consequently, this study addresses the following overarching research questions:

1. What are the demographics of a sample of early educators in Colorado?
2. How prepared are early educators to meet the diverse needs of Colorado's children and families?
3. What barriers do early educators face in accessing professional development and higher education?
4. What wages and benefits do early educators receive, and how do they perceive their economic well-being?
5. How do early educators experience their work lives?
6. What are the turnover rates among early educators?
7. What strategies are center-based ECE programs using to recruit and retain early educators?
8. What factors predict turnover and early educators' well-being and intentions to stay in or leave their jobs?

## PROCEDURES

**Recruitment.** To address these research questions, an invitation to participate in this study and a link to an electronic *Colorado Early Childhood Workforce Survey* was emailed to approximately 18,000 early childhood professionals through Colorado's Early Childhood Professional Development and Information System (PDIS). The PDIS is a voluntary registry that awards credentials to early childhood professionals across a variety of job roles in the field. The study invitation and survey link were also sent electronically via a number of other state and local early childhood professional association listserves across Colorado. Respondents who completed the survey were awarded two professional development hours through the PDIS, which could be used to meet annual professional development hours needed for Colorado Child Care Licensing. Respondents were also entered into a drawing to win one of several \$200 cash prizes; 10 respondents received these awards.

## INSTRUMENTS

All survey respondents were administered an electronic survey and completed specific sections of the survey based on their job role.

**Overall Workforce Survey.** This section of the survey, completed by all respondents, queried individuals about their background, including their home county, languages spoken, educational attainment, age, gender, ethnicity, and tenure in their current job, and in the field. It also asked respondents about features of their job, including their position, their hours per week worked, and wages and benefits they received through their employer. Respondents were also asked about their economic situation, including whether they had a second job, received any public benefits, their household income, and family size. They also completed an adapted version of the *Perceived Economic Pressure Survey*<sup>xvii</sup>, which included a 3-item *Financial Strain* scale that asked about their abilities to make ends meet and a *Material Hardship* scale that asked about any sacrifices they made in the last 12 months, such as using savings to pay the bills, or forgoing medical or dental treatments.

**Center-Director Survey.** One center director per organization completed this section of the survey. The survey began by asking for the center's name and address. It followed by asking about the characteristics of the center, including the center's profit status, service sector, child tuition funding sources, hours and days per week the center was open, and whether the center operated on an academic or calendar year. It also asked directors to report on the composition of children in their center, including total enrollment by age group, and numbers of children enrolled who were dual-language learners, received Colorado Child Care Assistance Program (CCCAP) subsidies, had special needs, were housing unstable, and who exhibited challenging behaviors. Directors were also asked about the staffing and turnover in their centers. They reported on the numbers of staff that they employed by job role

and age groups served, and the number of staff in each job role and age group served that had left their center over the past 12 months, the length of time it took to fill their last open position, the types of work situations teachers pursued after leaving their center, their own job intentions, and their perceptions of the impact of turnover on their program.

**Teacher Survey.** Lead teachers, assistant teachers, and floater<sup>1</sup> teachers working in center and public school-based programs were administered this section of the survey. Teachers were first asked to provide their center's name and address to be able to link teachers' responses with their director's responses. They were then asked about characteristics of their center and classroom, including the center's profit status, service sector, hours and days per week their classroom was open, the number of sessions in their classroom, and whether their classroom operated on an academic or calendar year. It continued by asking teachers to report on the composition of children in their classroom, including total enrollment by age group, and numbers of children enrolled who were dual-language learners, had special needs, and who exhibited challenging behaviors. They also reported on the different languages spoken by children in their classroom.

The second part of the survey asked teachers about their professional preparation and access to professional development. Teachers used a 4-point scale to report on how prepared they felt to support the care and learning of different types of children and to provide instruction across different curricular areas. They were also asked to report on whether they were enrolled in a higher education program, their desire to pursue higher education in ECE, the supports that they would need pursue a degree, and the barriers they experienced in accessing in-service professional development.

The third section of the survey focused on teacher's perceptions of their work life. Teachers were asked to complete a 30-item scale that asked them to rate the quality of their work environment with respect to: *Shared Vision, Collaborative Leadership, Distractions from Teaching, Individual Leadership Support, and Collegial Relationships*. Teachers also reported on their three most significant job frustrations, the main reason they were motivated to stay in their job, and whether they intended to stay in their job over the next two years. The final section of the survey focused on teachers' well-being. Teachers were administered a 9-item, shortened version of the *Maslach Burnout Inventory*<sup>xviii</sup> and a 10-item, shortened version of the *Center for Epidemiology Studies Depression Scale*<sup>xix</sup>.

**Family Child Care Provider Survey.** This section of the survey was completed by providers operating licensed family child care homes. Family child care providers were first queried about characteristics of their program, including their type of license, hours per day open, and days of operation per week. They were also asked

<sup>1</sup>Floater teachers are considered a type of assistant teacher who is not assigned to a particular classroom, but instead provides support across multiple classrooms in a center.

about the composition of children enrolled including total enrollment by age group, and number of children enrolled who were dual-language learners, Colorado Child Care Assistance Program (CCCAP) subsidy recipients, identified with special needs, housing unstable, and exhibited challenging behaviors. Providers also reported on the languages spoken by children in their program and whether they cared for their own children or grandchildren, received payments for all of the children in their care, and whether they employed another caregiver in their program.

The second part of the survey asked providers about their professional preparation and access to professional development. Providers used a 4-point scale to report on how prepared they felt to support the care and learning of different types of children and to provide instruction across different curricular areas. They were also asked to report on whether they were enrolled in a higher education program, their desire to pursue higher education in ECE, the supports that they would need to pursue a degree, and the barriers they experienced in accessing in-service professional development. The third section of the survey focused on provider's perceptions of their work life. Providers reported on their three most significant job frustrations, the main reason they were motivated to stay in their job, and whether they intended to stay in their job over the next two years. The final section of the survey focused on providers' well-being. Providers were administered a 9-item, shortened version of the *Maslach Burnout Inventory* and a 10-item, shortened version of the *Center for Epidemiology Studies Depression Scale*.

## METHODS

***Descriptive statistics.*** Descriptive statistics were calculated to provide an overview of the characteristics of the workforce, aspects of the settings in which they work, their perceptions of their work lives and well-being, and their perceptions of barriers to higher education and professional development. In instances where key differences among types of teachers or service sectors are highlighted, the differences are statistically significant at the 0.05 level. In addition, for items where teachers enrolled in the same center are expected to give similar responses (e.g., items relating to wages or benefits), statistical tests accounted for the clustering of responses from teachers within the same center.

***Linear Regressions.*** Ordinary least squared regressions were used to identify factors that predict turnover, early educator well-being indices, and early educators' intentions to stay in or leave their jobs. For center-based analyses, teacher surveys and director surveys were matched by street address, and statistical tests accounted for the clustering of responses.

***Missing data on survey items.*** Approximately two thirds of respondents completed the entire survey, and an additional one-quarter of respondents completed at least 50% of the survey. To address missing data, a multivariate model was used as a basis to impute 10 sets of plausible values, with the stipulation that the distributions

of the imputed variables remain similar to the observed data<sup>xx</sup>. Model results were then aggregated across these multiply imputed datasets using standard procedures.

***Nonresponse weights.*** Survey non-response was adjusted through post-stratification weights. To do this, a roster of all early childhood professionals within Colorado's PDIS was obtained. The roster was used to generate a count of early childhood professionals by job role and by region. Non-response weights were then calculated so that the sample characteristics matched those of the PDIS population with respect to job role and region. Thus, the figures presented in this report are representative of teachers, assistant teachers, floaters and substitutes, assistant directors, directors, and family care providers within Colorado's PDIS, but may not be representative of the population of early educators in Colorado.

## **SAMPLE**

In total, 6,514 early childhood professionals responded to the survey. Of the surveys received, 711 were from center directors, 88 were from assistant directors, 2,306 were from lead teachers, 1,026 were from assistant teachers, 92 were from floater teachers, and 496 were from family child care providers working with children birth through five. The remaining responses were collected from early childhood professionals who were in job roles such as trainers, coaches, or infant mental health specialists, who were not the focus of this study. Consequently, their responses were not used in the analytic sample.

Of the lead, assistant, and floater teachers who responded to the survey, approximately 69% worked in classrooms serving preschool aged children, while the remaining 31% worked in classrooms serving infants and toddlers. Of these teachers, approximately 45% worked in community-based ECE centers, 30% worked in Head Start centers, and 25% worked in public school-based ECE programs. For the purposes of this study, community-based ECE centers are defined as programs that are not housed in public schools and do not receive Head Start funding, Head Start centers are defined as centers receiving Head Start funding but not located in public schools, and public school-based ECE programs are defined as any classroom that is located in a public school and/or governed by a school district. It is, however, possible for teachers to work in classrooms with multiple funding sources (e.g., public school-based programs with Head Start funding), but given the sample size of this study, delineating the many combinations of funding sources was not possible.

The surveys collected for this study yielded information from 711 unique ECE centers and 496 unique family child care homes, representing approximately 35% of the licensed center and public school-based ECE programs and 22% of the licensed family child care homes in Colorado. Of the directors who responded to the survey and reported on turnover in their programs, 70% worked in community-based

ECE centers, 16% worked in Head Start centers, and 14% worked in public-school programs. Of the community-based ECE centers, 54% were considered non-profit organizations and 46% were considered for-profit organizations.

Table 1 displays the number of early educators who responded to the survey in different regions throughout Colorado.

<b>Table 1. Number of Responses and Response Rates by Region</b>			
Region (Counties)	Number of Directors/Asst. Directors (%)	Number of Teachers/Asst. Teachers (%)	Number of Family Child Care Providers (%)
Metropolitan (Adams, Arapahoe, Broomfield, Boulder, Denver, Douglas, Jefferson Counties)	417/2093 (20%)	2063/5428 (38%)	206/468 (44%)
Northern (Larimer, Logan, Morgan, Phillips, Sedgwick, Weld, Yuma Counties)	111/357 (31%)	393/1942 (21%)	132/314 (42%)
Pikes Peak (Cheyenne, Kit Carson, Elbert, El Paso, Fremont, Lincoln, Teller Counties)	94/353 (27%)	361/1942 (19%)	71/214 (33%)
Mountain (Chafee, Clear Creek, Eagle, Gilpin, Grand, Lake, Park, Pitkin, Summit Counties)	41/159 (26%)	180/706 (25%)	13/49 (27%)
Western (Delta, Garfield, Gunnison, Hinsdale, Jackson, Mesa, Moffat, Montrose, Ouray, San Miguel, Rio Blanco, Routt Counties)	66/214 (31%)	225/911 (25%)	35/103 (34%)
Southern (Alamosa, Baca, Bent, Crowley, Costilla, Custer, Huerfano, Kiowa, Los Animas, Saguache, Otero, Pueblo, Prowers Counties)	36/134 (27%)	103/638 (16%)	24/56 (43%)
Four Corners (Archuleta, Conejos, Dolores, La Plata, Mineral, Montezuma, Rio Grande, San Juan Counties)	34/71 (48%)	99/360 (28%)	15/33 (45%)
<i>Note. The first figure represents the number in the sample and the second figure represents the total participating in the PDIS in the region.</i>			

It is important again to note that the sample drawn for this study was weighted to reflect the population of early educators in Colorado's Early Childhood Professional Development and Information System (PDIS). It is likely that early educators who do not participate in the PDIS are in some ways different from those who do participate. For example, those participating in the PDIS may be more committed to improving their professional qualifications than those who do not, or may work in centers with more resources that can be devoted to quality improvement and teacher development than those who do not participate. Thus, the inferences drawn from this study should be restricted to early educators and the programs in which they work that participate in the PDIS and Colorado Shines, and generalizations should not be made to the population of all early educators or ECE programs in Colorado.

## ORGANIZATION OF REPORT

The following sections of this report provide an overview of the characteristics of this sample and of the settings in which they work, and explore factors that predict early educator turnover, job intentions, and aspects of their well-being. The report is organized into a series of topical research briefs that can be read and disseminated separately or can be read and disseminated as a whole. *Brief 1* focuses on the basic demographic characteristics of the sample and their educational attainment and background. *Brief 2* explores how prepared early educators feel to meet the demands of their jobs and the barriers they face in accessing professional development and higher education. *Brief 3* reports on the compensation and economic well-being of the sample and examines the relationships among educational attainment and compensation. *Brief 4* describes the turnover rates among center-based programs, the job intentions of staff in these centers, and the impact of turnover, from the perspective of center directors.

*Brief 5* reports on teachers' perceptions of their work lives, including the quality of their work environment, their greatest job frustrations, and the reasons that they stay in their jobs. The brief concludes with a description of the occupation burnout and depression rates among the sample of teaching staff in centers. *Brief 6* pays special attention to family child care providers by examining their work lives, job challenges, and levels of occupational burnout and depression, and explores the personal, workplace, and policy factors associated with their job intentions and well-being. *Brief 7* describes the teacher retention strategies implemented by the sample of centers in the study and concludes by examining the personal, workplace and policy factors that predict staff turnover, teachers' intentions to stay in their jobs, and aspects of teacher well-being. The report concludes with a discussion of the study's findings and policy and practice implications for Colorado.

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