Describing the Preparation and Ongoing Professional Development of the Infant/Toddler Workforce: An Analysis of the National Survey for Early Care and Education Data







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Abstract

The analyses presented in this brief describe the professional development activities of the nation's infant/ toddler (I/T) workforce, based on nationally-representative data collected by the National Survey of Early Care and Education (NSECE; NSECE Project Team, 2012). The goal of this brief is to help the field better understand the strengths and needs of the I/T workforce in center-based as well as home-based early care and education (ECE) programs. Findings are presented separately for I/T teachers and caregivers in centerbased and home-based settings. Results indicate that I/T teachers and caregivers tended to have low levels of education; furthermore, endorsements such as the Child Development Associate Credential (CDA) or state certifications were uncommon. However, most of the I/T workforce had some exposure to college coursework. Among I/T teachers and caregivers in center-based programs, participation in professional development activities varied both by extent of previous education and whether the degree was in ECE or a related field. In general, participation in professional development activities was most common among teachers and caregivers with higher levels of education. For home-based I/T teachers and caregivers, professional development activities tended to be one-time workshops as opposed to more intensive forms of professional development, such as a workshop series or coaching. Only at higher levels of education did a substantial proportion of home-based I/T teachers and caregivers report meeting regularly with others who were looking after children. Professional development for home-based I/T teachers and caregivers tended to focus on health and safety and curriculum. Professional development for center-based I/T teachers and caregivers tended to focus on health and safety and supporting children's social-emotional development. Time release and other supports for professional development varied by education level for both centerbased and home-based I/T teachers and caregivers. However, only 15 percent of home-based I/T workforce reported having received financial support for professional development in the past 12 months. Findings are discussed in terms of implications for professional development systems.



Describing the Preparation and Ongoing Professional Development of the Infant/Toddler Workforce: An Analysis of the National Survey for Early Care and Education Data

Introduction

In 2012, approximately 343,000 center-based teachers and caregivers worked only with children under the age of 3. In addition, approximately 101,000 home-based providers who were paid and included on a national or state administrative list (such as for Early Head Start or child care licensing) worked with at least one child under the age of 3¹ (NSECE Project Team, 2012). These teachers and caregivers make up the nation's formal infant/toddler (I/T) workforce. Recent research indicates that the educational gap between advantaged children and their less-advantaged counterparts emerges as early as 18 months (Fernald, Marchman, & Weisleder, 2013). Having a skilled I/T workforce is one way to support the development of disadvantaged children during an important period of social and cognitive development.

There are clear indications that the I/T workforce differs from the broader early care and education workforce. Recent work shows that just 19 percent of I/T teachers and caregivers have a bachelor's degree or higher, compared to 45 percent of teachers and caregivers working with preschool-aged children (ages 3 to 5). Differences are also demonstrated in staff wages, with I/T teachers and caregivers receiving an average of \$9.30 per hour, compared to \$11.90 per hour for preschool teachers and caregivers (NSECE Project Team, 2013).

¹ This number includes only home-based providers who appear on state or national lists of providers and are being paid to care for at least one child with whom they had no prior personal relationship.

Purpose of This Brief

The analyses presented in this brief describe the professional development activities of the nation's I/T workforce, based on nationally-representative data collected by the National Survey of Early Care and Education (NSECE; NSECE Project Team, 2012). The analyses presented in this brief will help the field better understand the strengths and needs of the I/T workforce in center-based as well as home-based early care and education (ECE) programs. Because the results are nationally representative, estimates reveal the potential scale of future efforts aimed at improving the preparation of this important workforce.

Currently, few empirical studies have asked whether there is an association between the professional development activities of I/T teachers and caregivers and either quality of care or child outcomes (Epstein et al., 2016). Among those studies that have examined such associations, the evidence has been mixed. Burchinal, Cryer, Clifford, and Howes (2002) found that I/T teachers who had a bachelor's degree in ECE or a related field had higher quality classrooms, compared to those with less than a BA degree. However, several large-scale studies looking at the effects of I/T teacher education did not find an association between teacher degree and program quality, although there was an effect seen of more formal education on more positive caregiving practices (NICHD Early Child Care Research, 1996; NICHD, 2000). The current state of the evidence suggests that the results from this brief should be interpreted cautiously, as higher qualifications may—or may not—be associated with higher quality care or better child outcomes.

Description of Data Source and Analytic Sample

The NSECE (NSECE Project Team, 2012) is a set of four nationally representative surveys conducted in 2012. The NSECE included separate surveys of households with children under age 13, home-based providers of ECE, center-based providers of ECE, and the staff employed by center-based ECE (i.e., the center-based workforce). The center-based provider survey was conducted with directors of ECE programs and obtained information about the center and its workforce, such as funding sources and provision of comprehensive services for children. The center-based workforce survey was conducted with a single teacher or caregiver in each center to obtain teacher- and classroom-specific information, such as education level and interactions with children's parents.

The analyses described in this brief focus on the I/T workforce. To obtain this sample, we examined data from both *home-based providers* and the *center-based workforce*. Only teachers and caregivers who were paid, and who worked with children under age 3, were included in analyses.² We also limited the home-based sample to providers who appeared on state- or national-level administrative ECE lists and who cared for at least one child with whom they had no prior personal relationship.

In total, we analyzed data from 1,402 center-based teachers and caregivers and 3,265 home-based teachers and caregivers. Survey weights were applied to all analyses so that our findings represent national estimates for the I/T workforce.

Findings

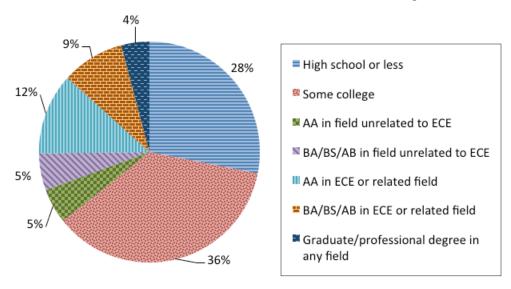
Results indicated that I/T teachers and caregivers tended to have low levels of education, and CDAs/state certifications were uncommon. In addition, professional development activities were generally one-time workshops as opposed to more intensive forms of professional development, such as a workshop series or coaching. Below, we describe the findings for center-based and home-based I/T teachers and caregivers.

² Of the center-based providers, we only included teachers and caregivers who worked exclusively with children under age 3. Of the home-based providers, we included those who worked with at least one child under age 3. Because many home-based providers serve infants and toddlers as well as preschoolers, limiting the sample to those who only care for children under age 3 would have greatly reduced the sample

Center-based I/T teachers and caregivers

While few I/T teachers and caregivers had a college degree, most had some exposure to college coursework. Figure 1 reveals the variation in the education of center-based I/T teachers and caregivers. While only about 35 percent of center-based I/T teachers and caregivers had a college degree (associate degree or higher), an additional 36 percent of teachers and caregivers had completed some college. In other words, most teachers and caregivers have experience with college coursework.

Figure 1 Education levels of center-based infant/toddler teachers and caregivers

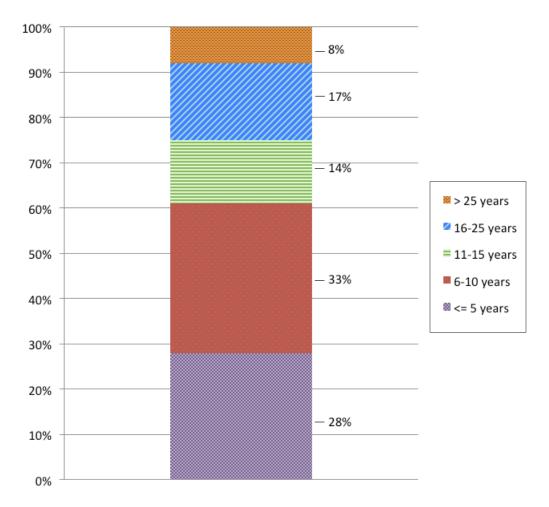


Education levels of center-based I/T teachers and caregivers in the NSECE. The analysis sample included center-based providers who only worked with children under age 3. Respondents who responded "don't know" or refused to answer were excluded from the analysis sample. Numbers do not add up to 100 percent due to rounding.

Most I/T teachers and caregivers had been caring for children under age 13 for fewer than 10 years.

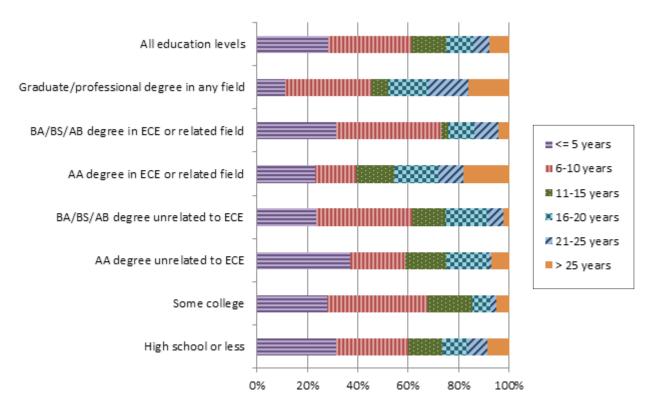
As shown in Figure 2, 33 percent have been working with children under age 13 between five and 10 years, and slightly more than one quarter (28 percent) of teachers and caregivers have been working for five years of fewer. Just 8 percent have been working for more than 25 years. As shown in Figure 3, experience varied across teachers with different qualifications. At least 1 in 5 teachers at every education level—with the exception of teachers and caregivers with graduate degrees—had just five years of experience or fewer. In fact, nearly 40 percent of teachers and caregivers with an associate degree in ECE or a related field had just five years of experience or fewer.

Figure 2 Center-based infant/toddler teachers' and caregivers' experience caring for children under age 13



Years of experience caring for children under age 13, among center-based I/T teachers and caregivers in the NSECE. The analysis sample included center-based providers who only worked with children under age 3. Respondents who responded "don't know" or refused to answer were excluded from the analysis sample.

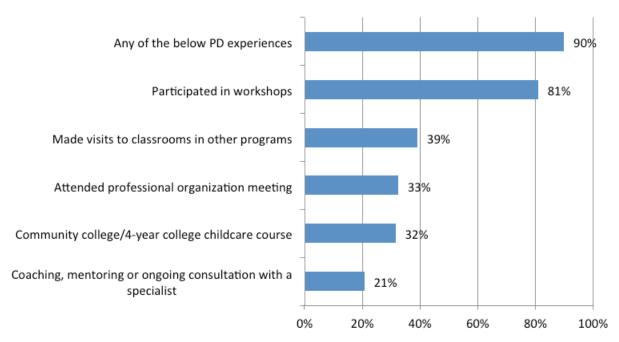
Figure 3 Center-based infant/toddler teachers' and caregivers' experience caring for children under age 13, by level of education



Years of experience caring for children under age 13, among center-based I/T teachers and caregivers with various levels of education in the NSECE. The analysis sample included center-based providers who only worked with children under age 3. Respondents who responded "don't know" or refused to answer were excluded from the analysis sample.

While most center-based I/T teachers and caregivers attended workshops in the past year, more intensive forms of professional development were uncommon. I/T teachers and caregivers participated in a variety of professional development activities (Figure 4). Most teachers and caregivers (81 percent) had attended a workshop in the past year. Of those who had attended a workshop, 54 perent of teachers and caregivers reported that their most recent workshop was a stand-alone workshop, whereas 46 percent reported attending a workshop series. Just 21 percent of teachers and caregivers had received coaching, mentoring, or ongoing consultation in the past year.

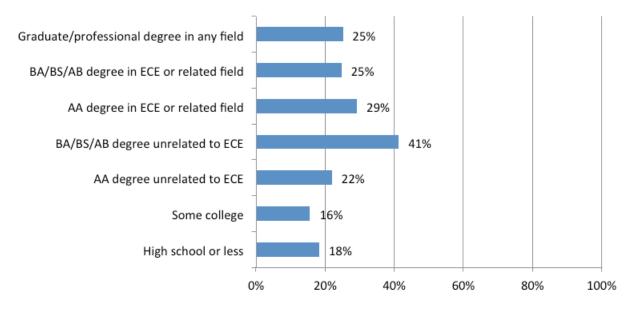
Figure 4 Center-based infant-toddler teachers' and caregivers' participation in various professional development (PD) activities in the past 12 months



Professional development experiences of center-based I/T teachers and caregivers in the NSECE. The analysis sample included center-based providers who only worked with children under age 3. Respondents who responded "don't know" or refused to answer were excluded from the analysis sample.

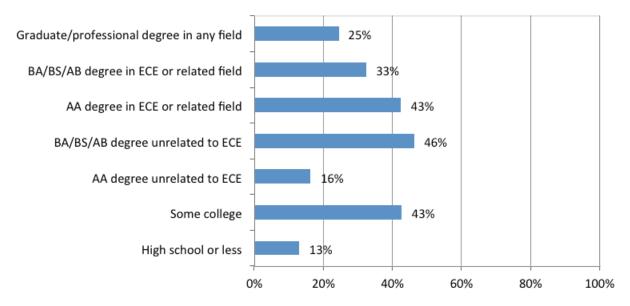
Participation in professional development activities varied both by extent of previous education and whether the degree was in ECE or a related field. In general, participation in professional development activities was most common among teachers and caregivers with higher levels of education. For instance, Figure 5 shows that 25 percent of teachers and caregivers with a bachelor's degree in ECE received individualized support from coaching, mentoring, or consultation in the past 12 months, as opposed to 18 percent of teachers and caregivers with high school or less. Figure 6 and Figure 7 show participation in other types of professional development, by education level.

Figure 5 Center-based-infant/toddler teachers and caregivers who received coaching, mentoring, or consultation in the past 12 months, by education level



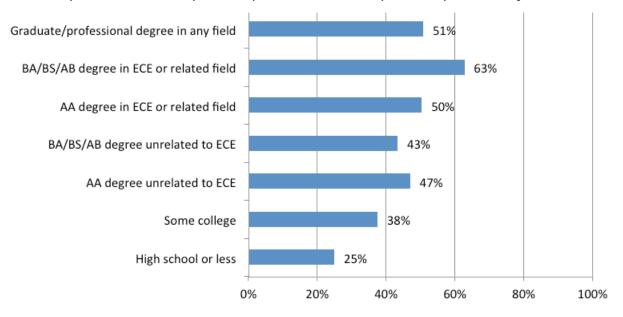
Percentage of center-based I/T teachers and caregivers at various education levels, in the NSECE, who received coaching, mentoring, or consultation in the past 12 months. The analysis sample included center-based providers who only worked with children under age 3. Respondents who responded "don't know" or refused to answer were excluded from the analysis sample.

Figure 6 Center-based infant/toddler teachers and caregivers who enrolled in a college course relevant to working with children, in the past 12 months, by education level



Percentage of I/T teachers and caregivers at various education levels, in the NSECE, who were enrolled in a college course relevant to work with children in the past 12 months. The analysis sample included center-based providers who only worked with children under age 3. Respondents who responded "don't know" or refused to answer were excluded from the analysis sample.

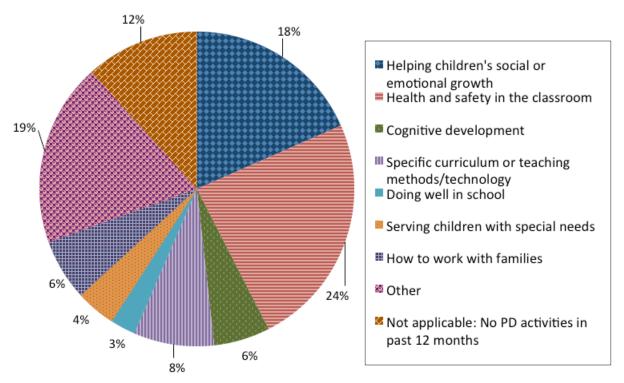
Figure 7 Center-based infant/toddler teachers and caregivers who made visits to classrooms in other programs in the past 12 months as part of a professional development experience, by education level



Percentage of I/T teachers and caregivers at various education levels, in the NSECE, who made visits to classrooms in other programs as part of a professional development experience in the past 12 months. The analysis sample included center-based providers who only worked with children under age 3. Respondents who responded "don't know" or refused to answer were excluded from the analysis sample.

Professional development for center-based I/T teachers and caregivers tended to focus on maintaining children's health and safety and developing children's social-emotional skills. As shown in Figure 8, these two topics were commonly reported when teachers and caregivers were asked about their most recent professional development activity (reported by 24 percent and 18 percent of those with recent professional development, respectively). In contrast, just 6 percent of teachers and caregivers reported that their most recent professional development activity focused on children's cognitive development, and just 8 percent reported focusing on a specific curriculum, teaching method, or technology.

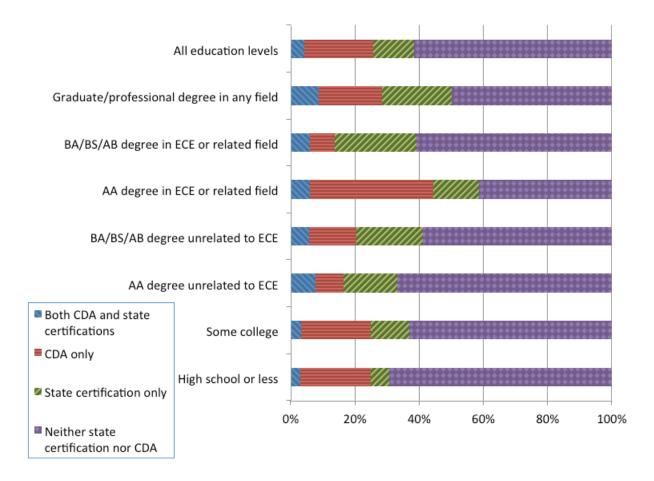
Figure 8 Main topic of most-recent professional development activity among center-based infant/toddler teachers and caregivers in the past 12 months



Main topic of most-recent professional development activity among center-based I/T teachers and caregivers in the NSECE in the past 12 months. The analysis sample included center-based providers who only worked with children under age 3. Respondents who responded "don't know" or refused to answer were excluded from the analysis sample.

Only 26 percent of teachers and caregivers working with infants and toddlers had a CDA, a small percentage of whom also had a state credential. Another 13 percent held a state credential only. When examined separately by teacher/caregiver education (Figure 9), these endorsements were relatively more common among teachers and caregivers with an associate degree in ECE or a related field: 59 percent of teachers and caregivers with an associate degree in ECE reported having a CDA and/or state certificate.

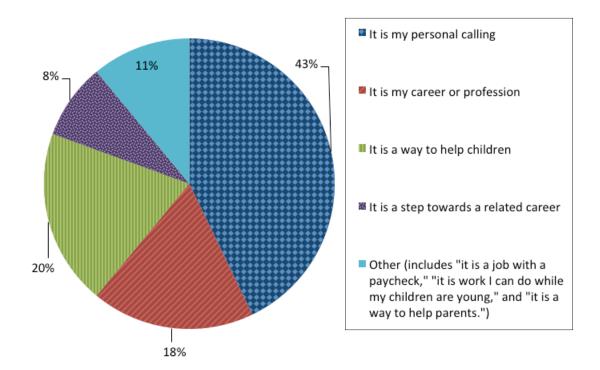
Figure 9 Credentials/certifications of center-based infant/toddler teachers and caregivers, by education level



Credential and certification receipt among center-based I/T teachers and caregivers in the NSECE. The analysis sample included center-based providers who only worked with children under age 3. Respondents who responded "don't know" or refused to answer were excluded from the analysis sample.

As shown in Figure 10, a large portion of center-based I/T teachers and caregivers (42 percent) reported that their main reason for working with young children was that it was their personal calling. Some teachers and caregivers (20 percent) reported that working with young children was their way to help children or that it was their career or profession (18 percent).

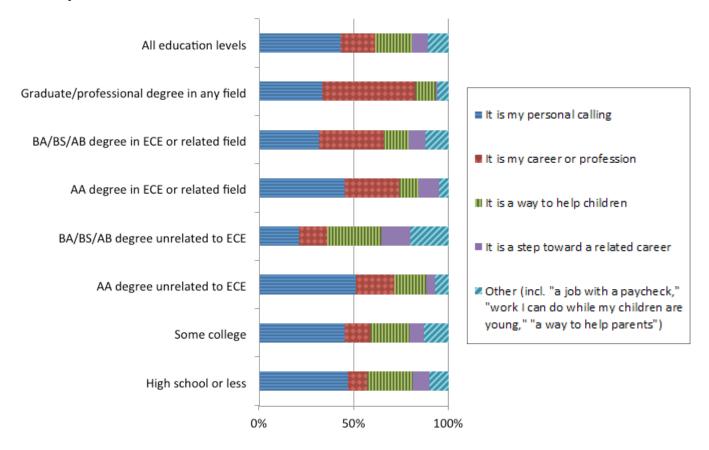
Figure 10 Center-based infant/toddler teachers' and caregivers' main reasons for working with young children



Main reasons for caring for children among center-based I/T teachers and caregivers in the NSECE. The analysis sample included center-based providers who only worked with children under age 3. Respondents who responded "don't know" or refused to answer were excluded from the analysis sample.

As shown in Figure 11, in general, I/T teachers and caregivers with higher levels of education tended to report that their main reason for working with young children was that it was their career or profession, while teachers or caregivers with lower levels of education were more likely to report that it was their personal calling. In addition, those with a bachelor's degree unrelated to ECE varied widely in their main reason for their work, including 13 percent who reported that their main reason to work with young children was to earn money (not shown).

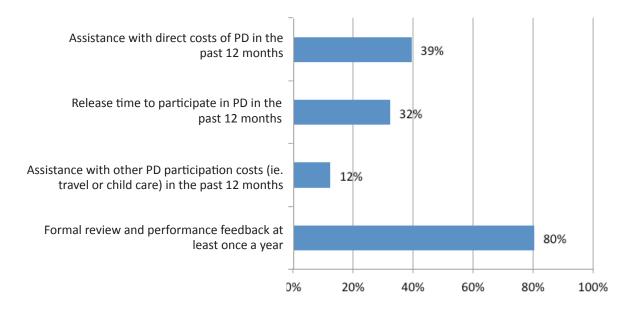
Figure 11 Center-based infant/toddler teachers' and caregivers' main reason for working with young children, by education level



Main reasons for caring for children among center-based I/T teachers and caregivers with various levels of education in the NSECE. The analysis sample included center-based providers who only worked with children under age 3. Respondents who responded "don't know" or refused to answer were excluded from the analysis sample.

As shown in Figure 12, most center-based I/T teachers and caregivers (80 percent) had a formal review with performance feedback at least once a year, while only some received assistance with direct costs of PD (39 percent) or release time to participate in PD (32 percent). A smaller percentage (12 percent) received assistance with other PD participation costs, like travel or child care.

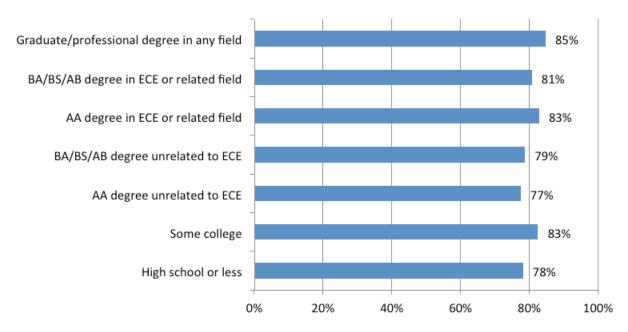
Figure 12 Support for professional development received by center-based infant/toddler teachers and caregivers



Support for professional development received by center-based I/T teachers and caregivers in the NSECE. The analysis sample included center-based providers who only worked with children under age 3. Respondents who responded "don't know" or refused to answer were excluded from the analysis sample.

As shown in Figure 13, about 80 percent of center-based I/T teachers and caregivers in every education level received performance feedback at least once per year (78 to 85 percent).

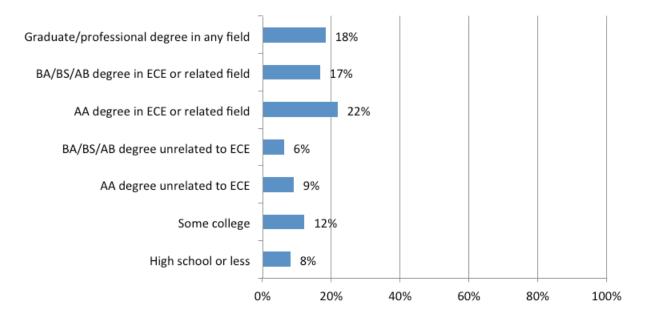
Figure 13 Center-based infant/toddler teachers and caregivers who received performance feedback at least once per year, by education level



Percentage of center-based I/T teachers and caregivers in the NSECE who receive performance feedback at least once per year. The analysis sample included center-based providers who only worked with children under age 3. Respondents who responded "don't know" or refused to answer were excluded from the analysis sample.

Center-based I/T teachers and caregivers with an associate degree in ECE or a related field reported receiving assistance with other professional development participation costs (like travel costs or child care) the most (22 percent), while those with a bachelor's degree in a field unrelated to ECE reported receiving assistance with these other costs the least (6.3 percent). As shown in Figure 14, I/T teachers and caregivers with other degrees and majors reported receiving assistance with other professional development participation costs at rates that were somewhere in between (8 percent to 18 percent).

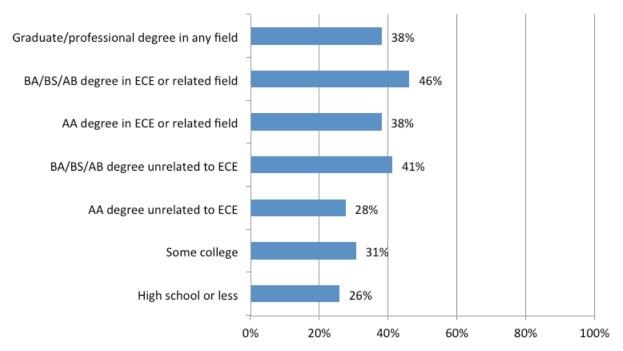
Figure 14 Center-based infant/toddler teachers and caregivers who received assistance with other PD participation costs (for example, travel or child care) in the past 12 months, by education level



Percentage of center-based I/T teachers and caregivers in the NSECE who received assistance with other professional development participation costs. The analysis sample included center-based providers who only worked with children under age 3. Respondents who responded "don't know" or refused to answer were excluded from the analysis sample.

Center-based I/T teachers and caregivers with a bachelor's degree in ECE or a related field (46 percent) or a bachelor's degree in a field unrelated to ECE (41 percent) were especially likely to report having time released for professional development. As shown in Figure 15, those with a high school degree or less were least likely to report having time released (26 percent).

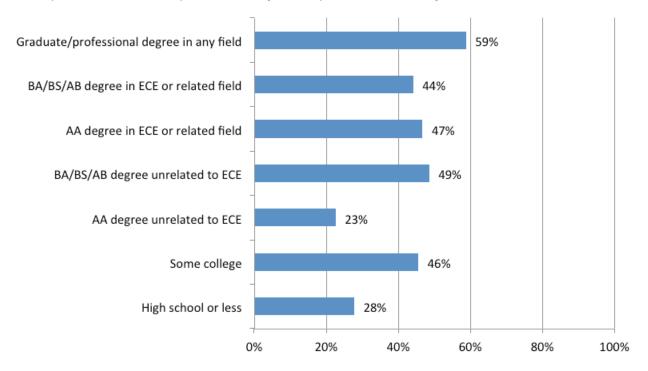
Figure 15 Center-based infant/toddler teachers and caregivers who received release time in the past 12 months to participate in a professional development activity, by education level



Percentage of center-based I/T teachers and caregivers in the NSECE who received release time for professional development in the past 12 months. The analysis sample included center-based providers who only worked with children under age 3. Respondents who responded "don't know" or refused to answer were excluded from the analysis sample.

As shown in Figure 16, center-based I/T teachers and caregivers with a graduate/professional degree in any field received the most support (59 percent) for direct professional development costs, like tuition. Teachers and caregivers with an associate degree in a field unrelated to ECE were the least likely (23 percent) to receive this type of professional development support, followed by those with a high school diploma or less (28 percent).

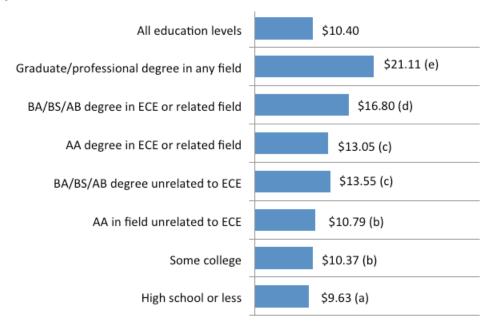
Figure 16 Center-based infant/toddler teachers and caregivers who received assistance with the direct costs of a professional development activity in the past 12 months, by education level



Percentage of center-based I/T teachers and caregivers in the NSECE who received assistance with direct costs for professional development. The analysis sample included center-based providers who only worked with children under age 3. Respondents who responded "don't know" or refused to answer were excluded from the analysis sample.

The average hourly wage (before taxes and deductions) for center-based infant/toddler teachers and caregivers was \$10.40. Hourly wages for center-based infant/toddler teachers and caregivers tended to increase with level of education, with some exceptions. There was no difference in estimated wages between those with some college and an associate degree in a field unrelated to ECE, or between those with a bachelor's degree in a field unrelated to ECE and an associate degree in ECE or a related field.

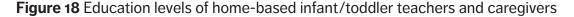
Figure 17 Center-based infant/toddler teachers' and caregivers' estimated hourly wages before taxes and deductions, by level of education

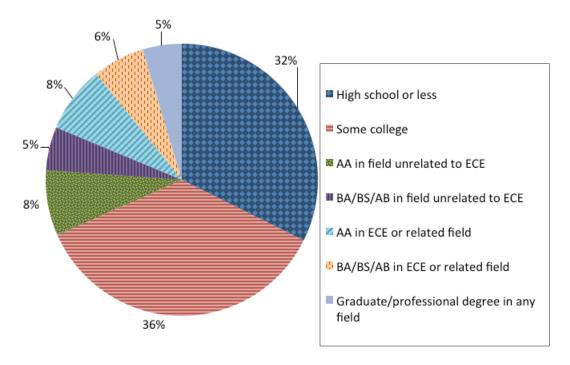


Estimated hourly wages before taxes and deductions, by level of education. The analysis sample included center-based providers who only worked with children under age 3. Respondents who responded "don't know" or refused to answer were excluded from the analysis sample. Education levels with the same letter have wages that are not significantly different at p < .05.

Home-based I/T teachers and caregivers³

While only about a third of home-based I/T teachers and caregivers had a college degree, most reported having had some experience pursuing college coursework. Figure 18 reveals the variation in the education of home-based I/T teachers and caregivers who are both paid and on national or state administrative lists. Just 32 percent of home-based I/T teachers and caregivers had a college degree (associate degree or higher). However, an additional 36 percent of teachers and caregivers working in home settings had attended some college.



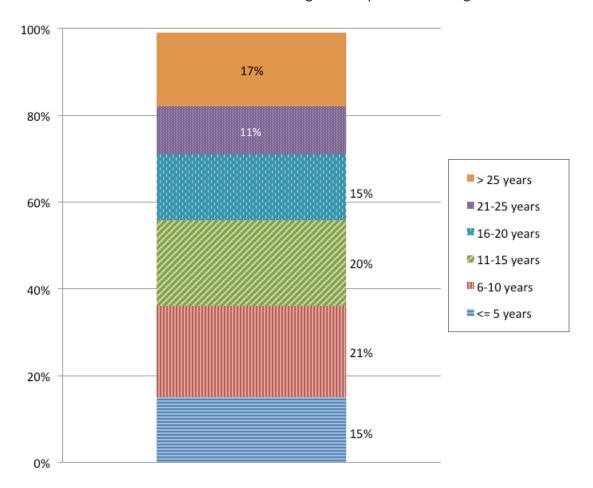


Education levels of home-based I/T teachers and caregivers in the NSECE. The analysis sample included home-based providers who cared for at least one child under age 3, appeared on state or national lists of providers, and were being paid to care for at least one child with whom they had no prior personal relationship. Respondents who responded "don't know" or refused to answer were excluded from the analysis sample.

³ Results include only home-based providers who appeared on state or national lists of providers and were being paid to care for at least one child with whom they had no prior personal relationship.

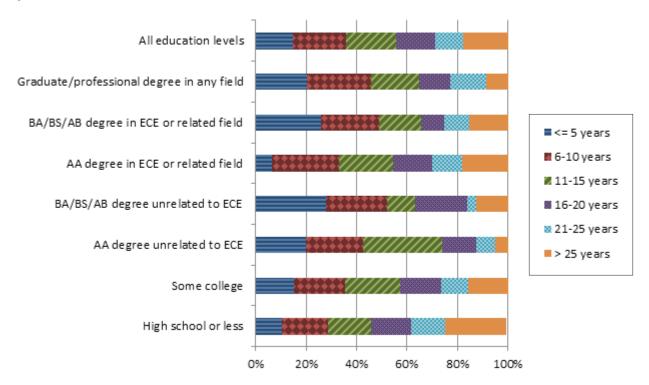
Home-based I/T teachers and caregivers ranged widely in their level of experience. As shown in Figure 19, there was a fairly even distribution across years of experience caring for children under the age of 13 among home-based I/T teachers and caregivers. As shown in Figure 20, caregivers in every education level had a range of years of experience.

Figure 19 Home-based infant/toddler teachers' and caregivers' experience caring for children under age 13



Years of experience caring for children under age 13 among home-based I/T teachers and caregivers in the NSECE. The analysis sample included home-based providers who cared for at least one child under age 3, appeared on state or national lists of providers, and were being paid to care for at least one child with whom they had no prior personal relationship. Respondents who responded "don't know" or refused to answer were excluded from the analysis sample.

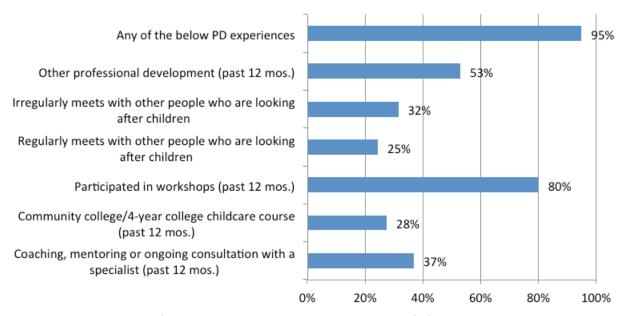
Figure 20 Home-based infant/toddler teachers' and caregivers' experience caring for children under age 13, by level of education



Years of experience caring for children under the age of 13 among home-based I/T teachers and caregivers (past 12 mos.), by level of education. The analysis sample included home-based providers from the NSECE who cared for at least one child under age 3, appeared on state or national lists of providers, and were being paid to care for at least one child with whom they had no prior personal relationship. Respondents who responded "don't know" or refused to answer were excluded from the analysis sample.

Most home-based I/T teachers and caregivers had attended workshops in the past year, but more intensive forms of professional development were uncommon. Home-based I/T teachers and caregivers participated in a variety of professional development activities (Figure 21). Although most teachers and caregivers in home-based settings had attended a workshop in the past year (80 percent), just 37 percent had received coaching, mentoring, or ongoing consultation in the past year. Of those who had attended a workshop, 67 percent of teachers and caregivers reported that their most-recent workshop was a standalone workshop, whereas 33 percent reported attending a workshop series.

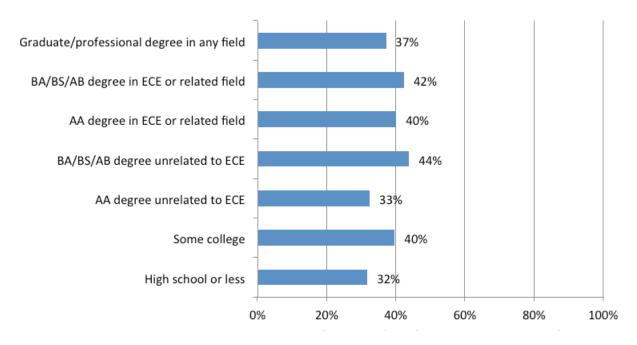
Figure 21 Home-based infant-toddler teachers' and caregivers' participation in professional development activities



Professional development experiences of home-based I/T teachers and caregivers in the NSECE. The analysis sample included home-based providers who cared for at least one child under age 3, appeared on state or national lists of providers, and were being paid to care for at least one child with whom they had no prior personal relationship. Respondents who responded "don't know" or refused to answer were excluded from the analysis sample.

In general, participation in professional development activities was especially common among home-based teachers and caregivers who had at least some college education. For instance, Figure 22 shows that 42 percent of home-based teachers and caregivers with a bachelor's degree in ECE received coaching, mentoring, or consultation in the past 12 months, as opposed to 32 percent of those with only a high school diploma. Figures 23 and 24 show other professional development activities split by education level of teachers and caregivers.

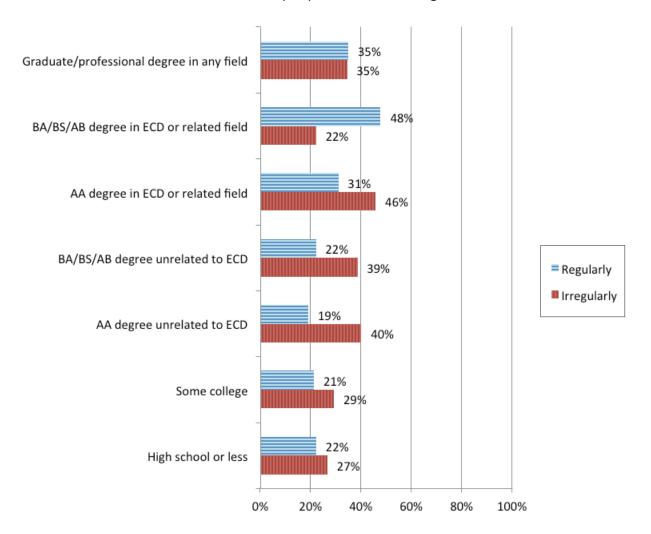
Figure 22 Home-based-infant/toddler teachers and caregivers who received coaching, mentoring, or consultation in the past 12 months, by education level



Coaching, mentoring, and professional consultation experiences of home-based I/T teachers and caregivers in the NSECE in the past 12 months. The analysis sample included home-based providers who cared for at least one child under age 3, appeared on state or national lists of providers, and were being paid to care for at least one child with whom they had no prior personal relationship. Respondents who responded "don't know" or refused to answer were excluded from the analysis sample.

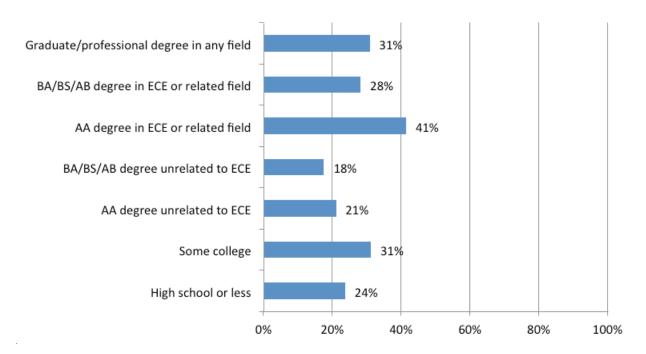
It is only at higher levels of education that a substantial proportion of home-based I/T teachers and caregivers met regularly with others who were looking after children (Figure 23).

Figure 23 Percentage of home-based infant/toddler teachers and caregivers at various education levels who meet with other people who are looking after children



Percentage of home-based I/T teachers and caregivers at various education levels who meet with other people who are looking after children. The analysis sample included home-based providers from the NSECE who cared for at least one child under age 3, appeared on state or national lists of providers, and were being paid to care for at least one child with whom they have no prior personal relationship. Respondents who responded "don't know" or refused to answer were excluded from the analysis sample.

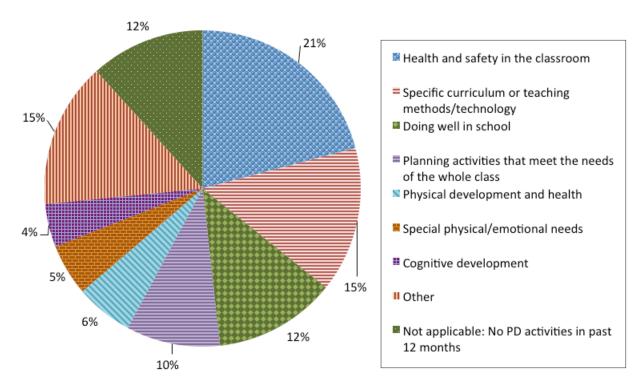
Figure 24 Home-based infant/toddler teachers and caregivers who took a course about caring for children at a college or university that was offered for credit, in the past 12 months, by education level



Percentage of home-based I/T teachers and caregivers who took a course about caring for children at a college or university that was offered for credit (past 12 mos.). The analysis sample included home-based providers from the NSECE who cared for at least one child under age 3, appeared on state or national lists of providers, and were being paid to care for at least one child with whom they had no prior personal relationship. Respondents who responded "don't know" or refused to answer were excluded from the analysis sample.

Professional development for home-based I/T teachers and caregivers tended to focus on health and safety and curriculum. As shown in Figure 25, these two topics were commonly reported when teachers and caregivers were asked about their most recent professional development activity. In contrast, a focus on cognitive development was reported by only 4 percent.

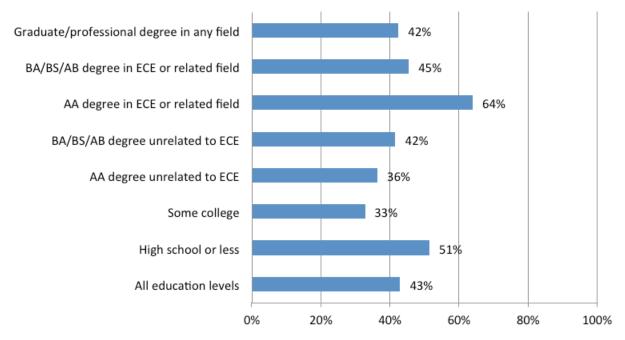
Figure 25 Main topic of most recent professional development activity among home-based infant/toddler teachers and caregivers in the past 12 months



Main topic of most recent professional development activity among non-relationship-based, listed, paid home-based I/T teachers and caregivers (past 12 mos.). The analysis sample included home-based providers from the NSECE who cared for at least one child under age 3, appeared on state or national lists of providers, and were being paid to care for at least one child with whom they had no prior personal relationship. Respondents who responded "don't know" or refused to answer were excluded from the analysis sample.

Across all education levels, 43 percent of home-based I/T teachers and caregivers had a CDA or a state certification to teach young children, special education, or elementary school. As shown in Figure 26, these endorsements were especially common among teachers and caregivers with an associate degree in ECE or a related field, with 64 percent of these teachers and caregivers reporting having a CDA or state certificate.

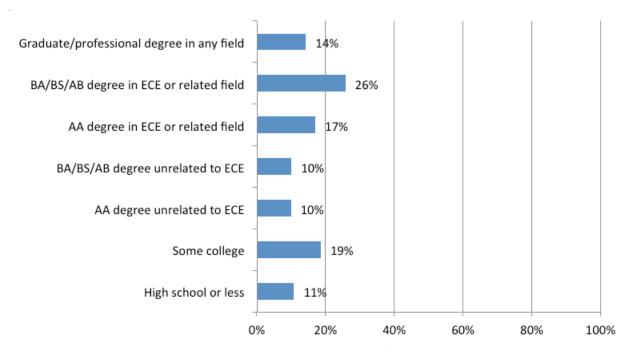
Figure 26 Home-based infant/toddler teachers and caregivers who had a CDA and/or state certification to teach young children, special education, or elementary school, by education level



CDA and state certificate receipt of home-based I/T teachers and caregivers in the NSECE. The analysis sample included home-based providers who cared for at least one child under age 3, appeared on state or national lists of providers, and were being paid to care for at least one child with whom they had no prior personal relationship. Respondents who responded "don't know" or refused to answer were excluded from the analysis sample.

Just 15 percent of home-based I/T teachers and caregivers reported receiving funding in support of professional development in the last 12 months. As shown in Figure 27, over a quarter (27 percent) of those with a bachelor's degree in ECE received funding for professional development.

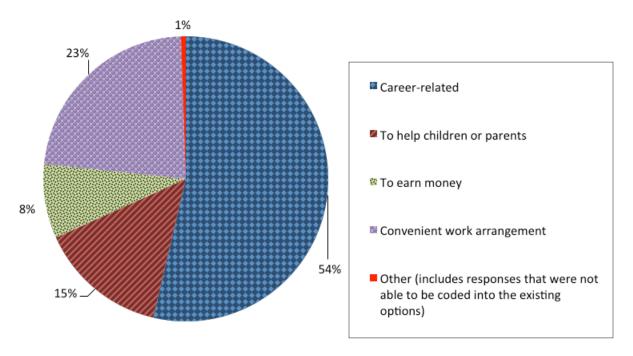
Figure 27 Home-based infant/toddler teachers and caregivers who received funding for professional development activities in the past 12 months, by education level



Receipt of funding for professional development activity among paid home-based I/T teachers and caregivers (past 12 mos.) with various levels of education. The analysis sample included home-based providers from the NSECE who cared for at least one child under age 3, appeared on state or national lists of providers, and were being paid to care for at least one child with whom they had no prior personal relationship. Respondents who responded "don't know" or refused to answer were excluded from the analysis sample.

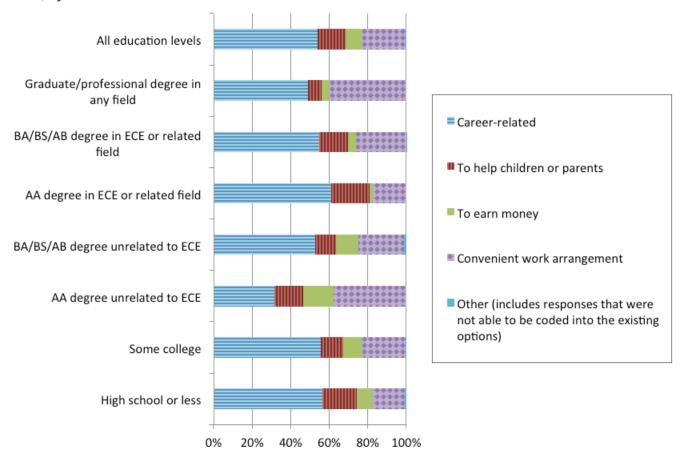
Many home-based I/T teachers and caregivers reported that their main reason for working with young children was career-related (e.g., "it is my personal calling" or "it is my career or profession"); see Figure 28. As shown in Figure 29, career-related reasons were common across all education levels.

Figure 28 Home-based infant/toddler teachers' and caregivers' main reason for working with young children



Main reasons for working with young children among home-based I/T teachers and caregivers. The analysis sample included home-based providers from the NSECE who cared for at least one child under age 3, appeared on state or national lists of providers, and were being paid to care for at least one child with whom they had no prior personal relationship. Respondents who responded "don't know" or refused to answer were excluded from the analysis sample.

Figure 29 Home-based infant/toddler teachers' and caregivers' main reason for working with young children, by education level

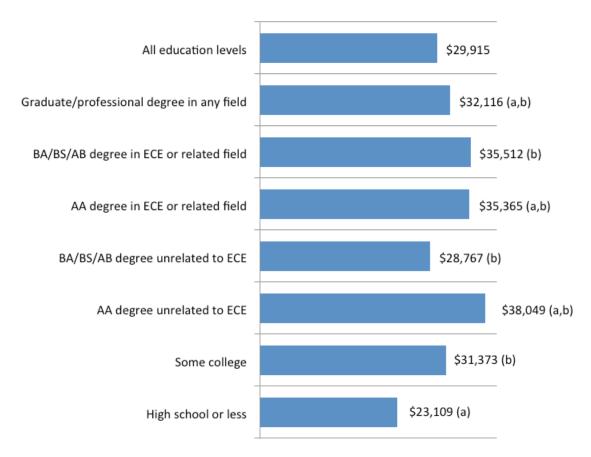


Main reason for working with young children, by level of education, among home-based I/T teachers and caregivers. The analysis sample included home-based providers from the NSECE who cared for at least one child under age 3, appeared on state or national lists of providers, and were being paid to care for at least one child with whom they had no prior personal relationship. Respondents who responded "don't know" or refused to answer were excluded from the analysis sample.

As shown in Figure 30, the average estimated yearly income (before taxes and deductions) for home-based infant/toddler teachers and caregivers was \$29,915, though it differed by level of education.

Those with a bachelor's degree in ECE or a related field had a significantly higher income compared to teachers/caregivers with a high school diploma or less.

Figure 30 Estimated yearly household income of home-based infant/toddler teachers and caregivers, before taxes and deductions, by level of education



Estimated yearly income before taxes and deductions, by level of education, for home-based infant/toddler teachers and caregivers. Income includes any wages and salaries earned by any adults in the household, income from looking after children. Income also includes government assistance and gifts. The analysis sample included home-based providers from the NSECE who cared for at least one child under age 3, appeared on state or national lists of providers, and were being paid to care for at least one child with whom they had no prior personal relationship. Respondents who responded "don't know" or refused to answer were excluded from the analysis sample. Education levels with the same letter had incomes that were not significantly different at p < .05.

Summary

The goal of this brief is to help the field better understand the strengths and needs of the I/T workforce in center-based and home-based early ECE programs. The most recent national survey data from the NSECE, which was analyzed for this project, indicate that I/T teachers and caregivers have low levels of education in terms of degree completed; furthermore, endorsements such as CDAs or state certifications are uncommon.

The survey data indicate that many in the I/T workforce have had exposure to college coursework and most have participated in some form of professional development activity over the past year. For home-based I/T teachers and caregivers, professional development activities tended to be one-time workshops as opposed to more intensive forms of professional development, such as a workshop series or coaching. In addition, participation in professional development activities varied by educational level of the I/T teacher or caregiver.

Generally speaking, participation in professional development activities was most common among those with higher levels of education. For example, only at higher levels of educational attainment did a substantial proportion of home-based I/T teachers and caregivers report meeting regularly with others who were looking after children. Among I/T teachers and caregivers in center-based programs, participation in professional development activities varied both by extent of previous education and by whether the degree was in ECE or a related field.

Professional development for home-based I/T teachers and caregivers tended to focus on health and safety and curriculum. Professional development for center-based I/T teachers and caregivers tended to focus on health and safety and supporting children's social-emotional development. Time release and other supports for professional development varied by education level for both center-based and home-based I/T teachers and caregivers; those with more education tended to receive more support. Just 32 percent of center-based I/T teachers and caregivers reported receiving time release to participate in PD activities, and just 39 percent reported receiving assistance with the direct costs of PD activities. In contrast, 80 percent reported receiving at least an annual performance review. Only 15 percent of home-based I/T workforce reported having received support for professional development in the past 12 months.

Limitations

The NSECE has limited information on child care quality and no data on child outcomes; such an approach would have been too expensive for a nationally representative study of this scale. Instead, the NSECE collected data on "predictors of quality" in ECE settings, or variables that research literature suggests might predict observed quality (such as teacher-child ratio and whether a curriculum was used). Future research could examine associations between teachers' and caregivers' preparation and these "predictors of quality," but even if significant associations were found, causal associations cannot be determined. Nevertheless, the NSECE is an excellent, current source of information to describe the I/T workforce and different types of training and education in which members of the workforce have participated.

Another limitation in the NSECE data is the lack of precision in information on credentials. Certificates in the NSECE data set could include a wide range of certificates, including early care and education, schoolage care, or special education. Furthermore, the survey of home-based teachers and caregivers within the NSECE collapsed CDA and state certificate into a single response option. It is unclear whether CDAs or state certificates are more common among home-based I/T teachers and caregivers.

Implications for future research

In future studies, researchers should seek out and use additional sources of data that would permit analysis of associations between I/T teacher and caregiver preparation (in terms of training, education, credentials, and demonstrated competencies) and quality and/or child outcomes. Possible sources include other national and state data sets (e.g., studies aiming to validate state quality rating and improvement systems). Another national data source, the Early Head Start Family and Child Experiences Study (Baby FACES), would allow for analyses of associations between workforce preparation and quality and child outcomes. However, this data source is only representative of Head Start programs, teachers, and families.

Implications for policy and practice

Results from these analyses of NSECE data suggest a need to strengthen professional development opportunities for I/T teachers and caregivers, especially those working in home-based settings. I/T teachers and caregivers could be encouraged to participate in professional development activities of substantial duration and intensity, as research indicates that one-time workshops are not likely to result in significant improvement in practice or quality (Donovan, Bransford, & Pellegrino, 1999; Raikes et al., 2006). Combining workshops or training with on-site visits to document demonstration of competencies may be useful (Zaslow, Tout, Halle, Whittaker, & Lavelle, 2010). Supports for participation in professional development activities, both pre-service and in-service, appear more plentiful for I/T teachers and caregivers who already possess more educational training; increasing access to professional development activities for those who currently possess less education is essential. Finally, more comprehensive tracking of data through professional development systems will make it possible for future analyses to distinguish credentials and certificates conferred by state and national entities, as well as for researchers, policymakers, and practitioners to document the diversity of topics covered and competencies addressed by workshops and coursework in I/T development.

Conclusion

In order to inform the development of high-quality ECE programs for infants and toddlers and efforts to improve quality in existing programs, it is important to be able to provide guidance on the professional qualifications of teachers and caregivers that support high-quality interactions with the youngest children. Our analyses of data from the NSECE data point to a clear need to strengthen the professional qualifications of many teachers and caregivers working with infants and toddlers in both center-based and home-based settings. Professional development opportunities for I/T teachers and caregivers should be strengthened both at the pre-service and in-service levels.

References

Burchinal, M. R., Cryer, D., Clifford, R. M., & Howes, C. (2002). Caregiver training and classroom quality in child care centers. *Applied Developmental Science*, 6, 2 – 11.

Donovan, M. D., Bransford, J. D., & Pellegrino, J. W. (Eds.). (1999). How people learn: Bridging research and practice. Washington, DC: National Academy Press.

Epstein, D., Halle, T., Moodie, S., Sosinsky, L., & Zaslow, M. (2016). *Examining the associations between infant/toddler workforce preparation, program quality and child outcomes: A review of the research evidence*. OPRE Research Brief#2016-15. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

Fernald, A., Marchman, V. A., & Weisleder, A. (2013). SES differences in language processing skill and vocabulary are evident at 18 months. *Developmental Science*, *16*, 234-248.

NICHD Early Child Care Research Network (1996). Characteristics of infant child care: Factors contributing to positive caregiving. *Early Childhood Research Quarterly, 11,* 269 – 306.

NICHD Early Child Care Research Network (2000). Child outcomes when child care center classes meet recommended standards for quality. *American Journal of Public Health*, 89, 1072-1077.

NSECE Project Team (National Opinion Research Center), 2012. *National Survey of Early Care and Education (NSECE)*. ICPSR35519-v2. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2015-04-06. http://doi.org/10.3886/ICPSR35519.v2

National Survey of Early Care and Education Project Team. (2013). *Number and Characteristics of Early Care and Education (ECE) Teachers and Caregivers: Initial Findings from the National Survey of Early Care and Education (NSECE)*. OPRE Report #2013-38, Washington DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

Raikes, H. H., Torquati, J. C., Hegland, S., Raikes, H. A., Scott, J., Messner, L., et al. (2006). Studying the culture of quality early education and care: A cumulative approach to measuring characteristics of the workforce and relations to quality in four midwestern state. In M. Zaslow & I. Martinez-Beck (Eds.), *Critical Issues in Early Childhood Professional Development* (pp. 111-136). Baltimore, MD: Brookes.

Zaslow, M., Tout, K., Halle, T.G., Whittaker, J. V., & Lavelle, B. (2010). Emerging research on early childhood professional development. In S. Neuman & M. Kamil (Ed.), *Preparing Teachers for the Early Childhood Classroom* (pp. 19-47). Baltimore, MD: Brookes.