Acknowledgements

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Summary of Key Points

The 2017 National Workforce Registry Alliance Dataset consists of data from 11 registries: Connecticut, Illinois, Miami-Dade County (FL), Maine, Missouri, Montana, Nevada, New York, Oklahoma, West Virginia, and Wisconsin. These registries followed the Partnership Eligibility Review (PER) guidelines for data submission. The dataset represents active registry participants as of January 1, 2015, through March 1, 2017, and includes individual records from 172,870 professionals (158,386 of whom were currently employed) working across 28,214 programs/facilities.

Featured Analysis: School-Age Participant Characteristics

- School-age only participants composed a small portion of registry participants (7%).
- School-age professionals worked fewer hours per week and fewer months per year than those serving other age groups.
- School-age center lead teachers tended to be younger and have less experience than those serving infant/toddlers, preschoolers, or multiple age groups.
- School-age center lead teachers were more likely to have a bachelor's degree (37%) than infant/toddler (25%) or multiple-age group center leads (33%)—but less likely than preschool center lead teachers (53%).
- School-age center lead teachers earned less than those who work with preschoolers only across all education categories.
- School-age participants reported fewer training hours than those working with other age groups.

Featured Analysis: Changes in Employment Status, Education, and Role between the 2015 and 2017 Datasets

- Records from eight registries—Connecticut, Miami-Dade (Florida), Illinois, Maine, Missouri, Montana, Oklahoma, and Wisconsin—were matched between the 2015 and 2017 datasets. The matched dataset contained 119,005 records.
- The overall retention rate between 2015 and 2017 was 64%.
- Most participants (85%) were employed across both datasets. However, 8% were employed in 2015 but unemployed in 2017, 3% were unemployed in 2015 but employed in 2017, 4% were unemployed in both datasets, and 1% were presumed retired.
- About 5% of center administrators and lead teachers reported a higher level of education in 2017 than 2015; the figure was 6% for center assistant teachers. Family child care owners were less likely to report increased levels of education (3%).
- One-third (33%) of center lead teachers moved from having a high school diploma to having an associate’s degree. Nearly one-quarter (22%) moved from having an associate’s degree to a bachelor’s degree. One in five (20%) moved from having a high school diploma to a bachelor’s degree as their highest level of education.
- The majority of participants reported the same role between the two datasets. Family child care providers were most likely to remain in the same role (95%), followed by center lead teachers (88%), and center administrators (86%).
- Between the 2015 and 2017 datasets, 5% of center lead teachers became center assistant teachers, whereas 5% became center administrators. For center assistant teachers, the most likely change was to center lead teacher (24%).

Program Characteristics

- Slightly more than half of the employing programs (51%) were centers, and 43% were family child care (FCC). Nearly all programs were regulated.
- Among registries that collect QRIS information, 84% of programs were rated. Licensed FCC were most likely to be rated (89%), followed by licensed centers (84%).

Participant Characteristics

Demographics

- More than two-thirds of center-based administrators and lead teachers were White, compared to 48% of family child care owners and 33% of FCC assistant teachers. FCC assistant teachers showed the most diversity, with 35% identifying as Black and 28% as Hispanic. The majority of participants in “other program” roles were White.
- Median years in the field differed significantly based on age group served. Those serving preschoolers had the highest median (5.00 years), followed by those serving multiple age groups (4.52 years), and those serving infant/toddlers and school-agers (3.00 years).

Education Level

- For center-based participants, educational attainment was linked to role, with center administrators more likely to have a bachelor’s degree (33%) compared to lead (28%) and assistant teachers (14%).
- Only 22% of FCC owners had a bachelor’s degree.
- For participants in other programs, most reported that their highest level of education was a high school diploma, except for other program lead teachers, who were most likely to have a master’s degree.
- “Some College” was the highest level of education for a surprisingly large number of professionals across roles: 19% of center-based administrators, 21% of center-based lead teachers, 19% of center-based assistant teachers, and 34% of FCC owners.
- Many professionals with “Some College” as their highest education level have accrued at least 30 college credits (69% of center administrators, 59% of center lead teachers, 64% of center assistant teachers, and 53% of FCC owners).
Early Childhood-Specific Education and Credentials

- Overall, relatively few professionals, regardless of role, had educational qualifications that were related specifically to early childhood education/development (ECE). Although over half of center-based administrators had at least a bachelor’s degree, only 16% had an ECE bachelor’s degree or higher. The situation for lead teachers was similar; over one third had at least a bachelor’s degree but only 10% reported an ECE bachelor’s or higher.
- The attainment of ECE degrees for assistant teachers and FCC professionals was even lower. Among center-based assistant teachers, 16% had a bachelor’s or higher, but only 1% obtained at least an ECE bachelor’s degree. For FCC providers, the statistics were similar: 22% had at least a bachelor’s degree but only 2% had at least an ECE bachelor’s degree or higher.
- About 4% of registry participants across roles have some type of Child Development Associate (CDA) credential.

Professional Development: Training Hours

- Center-based administrators had the highest median number of training hours in 2015 (11.75), followed by center-based lead teachers (9.50) and FCC owners (9.00).
- Staff who work only with infants/toddlers reported the highest median training hours in 2015 (10.0), followed by those working with multiple age groups (9.0), those working with preschoolers only (8.0), and staff who work with school-agers only (5.0).
- Community-based training accounted for 93% of training hours, whereas 7% were from college coursework converted to clock hours.
- The Alliance Core Knowledge Area that accounted for the most training hours was Health, Safety, and Nutrition, followed by Teaching and Learning. The Core Knowledge Area that was least addressed was Observing, Documenting, and Assessing.

Wages

- For center-based staff the median wages were $15.00 for center administrators, $11.56 for center lead teachers, and $10.00 for center assistant teachers.
- In general, wages followed educational attainment.
- The age group worked with tended to be related to wages; those working with preschoolers exclusively tended to make more than those working with infant/toddlers and school-agers exclusively as well as those working with multiple age groups.

How do the Alliance 2017 Educational Attainment Data Compare to the National Survey of Early Care and Education Data?

- The educational attainment findings from the 2017 Alliance dataset, as well as past datasets, compares favorably with the nationally representative findings from the National Survey of Early Care and Education (NSECE, 2013).
- Slightly more than half (53%) of center-based teachers had a formal degree in the NSECE study, whereas just less than half (47%) had a formal degree in the 2017 Alliance dataset.
- In the NSECE study, 19% of infant/toddler center teachers and 45% of preschool center teachers had a bachelor’s degree, compared to 22% and 41% in the 2017 Alliance dataset.

Registry Penetration and Directors as Gate-Keepers to Registry Participation

- Across all registries, the percent of licensed center directors in the registry was 44%. In other words, registries capture 44% of the total number of licensed center directors as reported by state licensing entities.
- Across all registries, the percent of licensed centers with director and staff in the registry was 69%. In other words, more than two-thirds of licensed centers have at least one director and one staff member participating in the registry.
- The hypothesis that director registry participation is linked to higher staff participation was supported only for those programs with larger capacities (over 100), where programs that have at least one director in the registry were more likely to have greater numbers of teaching staff participating in the registry compared to programs that do not have a participating director.

Recommendations for Registries

- Become a Partnership Eligibility Review (PER) registry so you can share your data to help inform policy at state and national levels.
- Get to know your registry data so you can inform state and local discussions about workforce initiatives and allocation of resources.
- Track participants’ education, qualifications, and wages over time.

Recommendations for the National Workforce Registry Alliance

- Continue to support registries in their ability to gather high quality workforce data and use such data for policy purposes.
- Modify PER protocols as necessary to enhance the quality of data for aggregation and policy purposes.
- Strengthen collaborations with national partners so that registries continue to be an important part of national discussions about early childhood and school-age workforce development.
Introduction

This report presents descriptive analyses about the early childhood and school-age workforce based on the 2017 National Workforce Registry Alliance Dataset. It also presents analyses examining the relationship of age with education level, descriptive statistics on training hours classified by the Alliance Core Knowledge areas, and the relationship between licensed center director registry participation and staff participation. This report features two new analyses: a focus on school-age participants and longitudinal analyses examining changes in employment status, education, and role between the 2015 and 2017 datasets.

The 2017 National Workforce Registry Alliance Dataset consists of data from 11 registries: Connecticut, Miami-Dade (Florida), Illinois, Maine, Missouri, Montana, Nevada, New York, Oklahoma, West Virginia, and Wisconsin. These registries followed the Partnership Eligibility Review (PER) guidelines for data submission. The dataset represents active registry participants as of January 1, 2015, through March 1, 2017, and includes individual records from 172,870 professionals (158,386 of whom were currently employed) working across 28,214 programs/facilities. Of the 11 registries, participation is mandatory for some portion of the workforce for Connecticut, Illinois, Montana, Nevada, Oklahoma, West Virginia, and Wisconsin.

Unless otherwise noted, all tables and figures include data from the 11 registries listed above.

Featured Analyses for the 2017 Dataset

For the 2017 Workforce Dataset Report, two analyses are featured. The first examines the characteristics of registry participants who serve the school-age population, with comparisons to participants who serve other age groups. The second examines longitudinal changes in participation rates over time, changes in employment status, increases in education level, and changes in role between the 2015 and 2017 datasets.

School-Age Participant Characteristics

Across all registry participants, 31% (34,645) reported having direct contact with the school-age population. As shown in Figure 1, only 7% (9,752) of all registry participants worked exclusively with school-agers. For most of the following analyses, those who reported working with school-agers along with other age groups will be categories as working with multiple age groups.

Figure 1. Age Group Served (n=139,471)

Partnership Eligibility Review (PER) assesses a registry’s level of “readiness” for participation in data-related projects at the national level. It not only looks at what data are collected and the consistency of format, but more importantly, how data are collected with a review of key policies and processes.
As shown in Figure 2, most school-age only participants worked in centers (84%), with 12% working in other programs, and 5% working in family child care (FCC). The most common roles were center lead teacher (41%), followed by center assistant teacher (23%), and center director (13%).

Figure 2. Percentage of School-Age Only Participants by Rate (n=9,564)

As shown in Figure 2, most school-age only participants worked in centers (84%), with 12% working in other programs, and 5% working in family child care (FCC). The most common roles were center lead teacher (41%), followed by center assistant teacher (23%), and center director (13%).

Figure 3 shows participants by age group served for major roles. School-age only participants worked in all major roles but were most likely to be found in the “other program” (not centers or family child care homes) roles.

Figure 3. Percentage of Registry Participants by Major Role and Age

As shown in Figure 2, most school-age only participants worked in centers (84%), with 12% working in other programs, and 5% working in family child care (FCC). The most common roles were center lead teacher (41%), followed by center assistant teacher (23%), and center director (13%).
As shown in Figure 4, school-age participants worked fewer hours per week on average (28.2) than those working with other age groups.

Figure 4. Average Hours Worked Per Week by Age Group Served (All Roles)

As shown in Figure 5, school-age participants worked fewer months per year on average (10.3) than those working with other age groups.

Figure 5. Average Months Worked Per Week by Age Group Served (All Roles)

Figure 6 compares years of experience for center lead teachers by age group served. School-age center lead teachers had less experience (median years = 3.0) than those working with other age groups. Preschool center lead teachers had twice the amount of experience (median years = 6.0) as school-age teachers.

Figure 6. Center Lead Teachers: Years in Field by Age Group Served

Since age is related to years of experience, it is not surprising that school-age center lead teachers also tended to be younger than those working with other age groups (see Figure 7). School-age participants had a median age of 30, compared to 33 for infant/toddler and 32 for multiple age group center lead teachers. Preschool center lead teachers were the oldest, with a median age of 37.

Figure 7. Center Lead Teachers: Median Age by Age Group Served

Note. Results are based on data from the Connecticut, Maine, Miami-Dade, Montana, New York, Oklahoma, West Virginia, and Wisconsin registries.
Figure 8 compares educational attainment by age group served for all roles. School-age participants were less likely than preschool participants to have a bachelor’s degree (39% vs. 44%). On the other hand, school-age participants were more likely than those working with infant/toddlers (23%) and multiple age groups (31%) to have a bachelor’s degree.

Figure 9 compares educational attainment by age group for center lead teachers. More than a third (37%) of school-age center lead teachers had a bachelor’s degree, which is higher than the figures for center lead teachers working with infant/toddlers (25%) and those working with multiple age groups (31%). However, center lead teachers working with preschoolers are more likely to have a bachelor’s degree (52%) than school-age center leads.
Figure 10 compares wages for school-age participants with those who work exclusively with other age groups across center-based roles as well as across all roles. Clearly, those who work with preschoolers earned more money than those working with other age groups. One of the reasons for this is that participants who work exclusively with preschoolers are more likely to have a bachelor's degree, which may drive higher wages.

**Figure 10. Median Wage by Age Group Served and Major Role**

![Bar chart showing median wages by age group and role.](chart10)

Note. Results are based on data from the Connecticut, Illinois, Miami-Dade, Missouri, Montana, Nevada, New York, Oklahoma, West Virginia, and Wisconsin registries.

Figure 11 compares median wages for center lead teachers by education level and age group served. The median wage for school-age center leads with less than an associate's degree ($9.60) was about the same as center leads working with multiple age groups ($9.65) but less than the wages for those working with infant/toddlers and preschoolers ($11.00). The same is true for school-age center lead teachers with an associate’s degree. However, when looking at center leads with a bachelor’s degree or more, a different trend emerged: school-age center lead teachers had a slightly higher median wage ($13.58) than those working with infant toddlers and multiple age groups ($13.00). This may be due to the school-day teachers who work in afterschool programs based in schools, who typically earn much more than other school-age professionals. Preschool center leads made nearly $2 more an hour than those working with school-agers only.

**Figure 11. Center Lead Teachers: Median Wage by Highest Level of Education and Age Group Served**

![Bar chart showing median wages by education level and age group.](chart11)

Note. Results are based on data from the Connecticut, Illinois, Miami-Dade, Missouri, Montana, Nevada, New York, Oklahoma, West Virginia, and Wisconsin registries.
Figure 12 shows number of school-age college credits for school-age participants by major roles. The median number of school-age credits was zero (0) for all roles. Center administrators, center lead teachers, and other program administrators were most likely to report having school-age credits.

**Figure 12. Number of School-Age College Credits for School-Age Participants by Major Role**

<table>
<thead>
<tr>
<th>Role</th>
<th>0 School-age Credits</th>
<th>1-9 School-age Credits</th>
<th>9 or more School-age Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center Administrator</td>
<td>66%</td>
<td>18%</td>
<td>16%</td>
</tr>
<tr>
<td>Center Lead Teacher</td>
<td>67%</td>
<td>17%</td>
<td>16%</td>
</tr>
<tr>
<td>Center Assistant Teacher</td>
<td>93%</td>
<td>5%</td>
<td>2%</td>
</tr>
<tr>
<td>FCC Owner</td>
<td>84%</td>
<td>13%</td>
<td>4%</td>
</tr>
<tr>
<td>Other Program Administrator</td>
<td>77%</td>
<td>11%</td>
<td>12%</td>
</tr>
<tr>
<td>Other Program Lead Teacher</td>
<td>82%</td>
<td>11%</td>
<td>7%</td>
</tr>
<tr>
<td>Other Program Asst. Teacher</td>
<td>97%</td>
<td>1%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Note. Results are based on data from the Connecticut, Illinois, Maine, Missouri, Montana, New York, Oklahoma, and Wisconsin registries.

Figure 13 shows the number of school-age college credits reported by age group served across all roles. As expected, school-age participants have statistically significantly fewer participants in the 0 school-age credit category and significantly more participants in the 1-9 and 9 or more school-age credit categories than those working with other age groups.

**Figure 13. Number of School-Age Credits by Age Group for All Roles**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>0 School-age Credits</th>
<th>1-9 School-age Credits</th>
<th>9 or more School-age Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>School-Age</td>
<td>12.0%</td>
<td>9.9%</td>
<td>8.4%</td>
</tr>
<tr>
<td>Infant/Toddler</td>
<td>13.3%</td>
<td>11.6%</td>
<td>9.5%</td>
</tr>
<tr>
<td>Preschool</td>
<td>74.7%</td>
<td>80.6%</td>
<td>82.2%</td>
</tr>
<tr>
<td>Multi-Age</td>
<td>81.7%</td>
<td>82.2%</td>
<td></td>
</tr>
</tbody>
</table>

Note. Results are based on data from the Connecticut, Illinois, Maine, Missouri, Montana, New York, Oklahoma, and Wisconsin registries.
Figure 14 shows ECE-specific degrees for center lead teachers by age group served. It is not surprising that school-age center lead teachers are much less likely to have an ECE-specific degree compared to their peers serving other age groups.

As shown in Figures 15 and 16, school-age participants reported fewer training hours than those serving other age groups, whether looking across all roles or at center lead teachers.

Note. Results are based on data from the Connecticut, Illinois, Maine, Miami-Dade, Montana, Nevada, New York, Oklahoma, West Virginia, and Wisconsin registries.
Changes in Employment, Education, and Role between the 2015 and 2017 Datasets

Starting with the 2015 dataset, all participating PER registries assigned participants a unique identifier to be used for Alliance dataset purposes. Using this registry-specific identifier, data from the registries that participated in both the 2015 and 2017 datasets were matched. Eight registries participated in the 2015 and 2017 dataset draws: Connecticut, Miami-Dade (Florida), Illinois, Maine, Missouri, Montana, Oklahoma, and Wisconsin. The following analyses are based on the matched records from these registries. It should be noted that because participant identifiers are registry-specific, it is not currently possible to track registry participation across registries. Thus, these analyses are not able to capture individuals who participated in different registries in 2015 and 2017.

As shown in Table 1, a total of 75,938 individual participant records were matched, yielding a retention rate between 2015 and 2017 for all eight registries of 64%, with individual registries ranging from 39% to 83%.

Table 1. Participant Retention Rate from 2015 to 2017 Dataset by Registry

<table>
<thead>
<tr>
<th>Registry</th>
<th>CT</th>
<th>Miami-Dade (FL)</th>
<th>IL</th>
<th>ME</th>
<th>MO</th>
<th>MT</th>
<th>OK</th>
<th>WI</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of 2015 participants that were also in 2017 dataset</td>
<td>6,574</td>
<td>2,325</td>
<td>30,924</td>
<td>1,924</td>
<td>13,768</td>
<td>1,441</td>
<td>7,734</td>
<td>13,573</td>
<td>75,938</td>
</tr>
<tr>
<td>Number in 2015 dataset</td>
<td>10,203</td>
<td>5,992</td>
<td>49,278</td>
<td>3,377</td>
<td>13,768</td>
<td>2,050</td>
<td>12,730</td>
<td>21,607</td>
<td>119,005</td>
</tr>
<tr>
<td>Retention rate from 2015 to 2017 dataset</td>
<td>64.4%</td>
<td>38.8%</td>
<td>62.8%</td>
<td>57.0%</td>
<td>82.8%</td>
<td>70.3%</td>
<td>60.8%</td>
<td>62.8%</td>
<td>63.8%</td>
</tr>
</tbody>
</table>

Figure 17 shows the percentage of participants who were in both datasets by role in the 2017 dataset. Center lead teachers had the highest percentage (39%), followed by center assistant teachers (25%), those with a missing role designation (9%), and center administrators (9%).

Figure 17. Participants in both 2015 and 2017 Datasets: Role of Participants in 2017 Dataset (n=75,898)

Participants’ real registry ID codes were not used in order to preserve their anonymity.
Figure 18 shows employment status over time. For this analysis, participants who were 65 years or older and were unemployed in either dataset were coded as “retired.” Overall, 85% of participants were employed in both datasets, 8% were employed in 2015 but unemployed in 2017, 3% were unemployed in 2015 but employed in 2017, 4% were unemployed in both datasets, and 1% were presumed retired in either 2015 or 2017.

**Figure 18. Participants in both 2015 and 2017 Datasets: Employment Status**

<table>
<thead>
<tr>
<th></th>
<th>CT</th>
<th>Miami-Dade (FL)</th>
<th>IL</th>
<th>ME</th>
<th>MO</th>
<th>MT</th>
<th>OK</th>
<th>WI</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presumed retired</td>
<td>0.2%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.2%</td>
<td>1.1%</td>
<td>0.3%</td>
<td>0.1%</td>
<td>0.0%</td>
<td>0.2%</td>
</tr>
<tr>
<td>in 2015 and 2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>1.1%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>1.4%</td>
<td>0.3%</td>
<td>0.3%</td>
<td>0.3%</td>
<td>0.1%</td>
<td>0.4%</td>
</tr>
<tr>
<td>in 2015, presumed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>retired in 2017 (65+</td>
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<tr>
<td>and unemployed</td>
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<td></td>
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<tr>
<td>Unemployed</td>
<td>6.7%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>5.4%</td>
<td>20.9%</td>
<td>0.1%</td>
<td>1.1%</td>
<td>0.7%</td>
<td>4.1%</td>
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<tr>
<td>in 2015 and 2017</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployed</td>
<td>11.4%</td>
<td>7.4%</td>
<td>0.0%</td>
<td>3.1%</td>
<td>3.6%</td>
<td>1.0%</td>
<td>1.7%</td>
<td>2.6%</td>
<td>2.5%</td>
</tr>
<tr>
<td>in 2015, employed in</td>
<td></td>
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<tr>
<td>2017</td>
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<td></td>
</tr>
<tr>
<td>Employed</td>
<td>21.2%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>13.5%</td>
<td>23.8%</td>
<td>4.8%</td>
<td>5.3%</td>
<td>6.3%</td>
<td>7.5%</td>
</tr>
<tr>
<td>in 2015, unemployed</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>in 2017</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>59.4%</td>
<td>92.6%</td>
<td>100.0%</td>
<td>77.5%</td>
<td>49.2%</td>
<td>93.8%</td>
<td>91.5%</td>
<td>90.3%</td>
<td>85.3%</td>
</tr>
<tr>
<td>in 2015 and 2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 19 shows the percentage of participants who increased their education attainment by major role in the 2017 dataset. About 5% of center administrators and lead teachers reported a higher level of education in the 2017 dataset than the 2015 one; the figure was 6% for center assistant teachers. Family child care owners were less likely to report increased levels of education (3%).

Figure 20 shows how highest level of education changed for participants who were center lead teachers in the 2017 dataset. One-third (33%) of center lead teachers moved from having a high school diploma/GED to having an associate’s degree. More than one-fifth (22%) moved from having an associate’s degree to a bachelor’s degree. One in five (20%) center lead teachers moved from having a high school diploma/GED to a bachelor’s degree as their highest level of education. Finally, 9% of center teachers obtained their master’s degree in 2017 from having a bachelor’s degree in 2015.
Table 2 shows the percentage of participants who maintained or changed roles between the two datasets. For center administrators in the 2015 dataset, most (86%) were also center administrators in the 2017 dataset. However, 10% of center administrators in 2015 reported their role as lead teacher in 2017. Participants who were center lead teachers in 2015 were most likely to remain center teachers in 2017 (88%), with 5% moving to center assistant teacher and 5% to center director in 2017. Nearly a quarter (24%) of center assistant teachers became center lead teachers between the two datasets. Almost all family child care owners (95%) kept the same role between the two datasets.

Table 2. Participants in both 2015 and 2017 Datasets: Change in Role

<table>
<thead>
<tr>
<th>Role in 2017</th>
<th>Center Administrator (n=7,711)</th>
<th>Center Lead Teacher (n=29,219)</th>
<th>Center Assistant Teacher (n=13,432)</th>
<th>FCC Owner (n=6,545)</th>
<th>Other Program Administrator (n=535)</th>
<th>Other Program Lead Teacher (n=479)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center Administrator</td>
<td>86%</td>
<td>5%</td>
<td>2%</td>
<td>1%</td>
<td>10%</td>
<td>2%</td>
</tr>
<tr>
<td>Center Lead Teacher</td>
<td>10%</td>
<td>88%</td>
<td>24%</td>
<td>2%</td>
<td>5%</td>
<td>19%</td>
</tr>
<tr>
<td>Center Assistant Teacher</td>
<td>2%</td>
<td>5%</td>
<td>70%</td>
<td>1%</td>
<td>2%</td>
<td>4%</td>
</tr>
<tr>
<td>FCC Owner</td>
<td>0.5%</td>
<td>0.6%</td>
<td>0.7%</td>
<td>95%</td>
<td>2%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Other Program Administrator</td>
<td>0.2%</td>
<td>0%</td>
<td>0%</td>
<td>0.2%</td>
<td>78%</td>
<td>3%</td>
</tr>
<tr>
<td>Other Program Lead Teacher</td>
<td>0.1%</td>
<td>0.3%</td>
<td>0.1%</td>
<td>0%</td>
<td>3%</td>
<td>69%</td>
</tr>
<tr>
<td>Other Role Not Listed</td>
<td>1%</td>
<td>1%</td>
<td>3%</td>
<td>1%</td>
<td>0%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Note: Cells with 5% or higher are highlighted.

Overview of Programs/Facilities

Table 3 shows the type and number of facilities, including regulation (licensing) status, for the full dataset (n = 28,214). Slightly more than half (51%) of programs were centers, and about two out of five programs (43%) were family child care (FCC). Nearly all programs were regulated. “Other programs” refers to programs that are not considered centers or homes by state licensing entities; these include school-based pre-kindergarten programs, school-based afterschool programs, day camps, and group child care homes.

Table 3. Facilities by License Type and Regulation Type

<table>
<thead>
<tr>
<th>License Type</th>
<th>n</th>
<th>% of all programs</th>
<th>% licensed</th>
<th>% regulated</th>
<th>% license-exempt but regulated</th>
<th>% missing data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center-based Program</td>
<td>14,315</td>
<td>50.7%</td>
<td>94.4%</td>
<td>0.6%</td>
<td>5.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Family Child Care Homes</td>
<td>12,024</td>
<td>42.6%</td>
<td>96.4%</td>
<td>1.9%</td>
<td>1.7%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Other Program Types</td>
<td>1,492</td>
<td>5.3%</td>
<td>46.2%</td>
<td>31.9%</td>
<td>21.9%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Missing Data</td>
<td>383</td>
<td>1.4%</td>
<td>0.0%</td>
<td>25.6%</td>
<td>0.0%</td>
<td>74.4%</td>
</tr>
</tbody>
</table>
Licensed Capacity

Figure 21 provides license capacity data by license type. About half of centers (49%) had a capacity of 60 or less. “Other programs” tended to have smaller capacities, but there were a few larger programs.

Quality Rating and Improvement Systems (QRIS)

Seven of the ten registries collect data about QRIS (Miami-Dade, Illinois, Maine, Montana, Nevada, Oklahoma, and Wisconsin). For these registries, information regarding QRIS rating status was not collected for 13% of the programs, and these programs are not represented in the subsequent descriptive information. Figure 22 shows the percent of programs rated by a QRIS by site type. Overall, 84% of programs have a QRIS rating. Most licensed centers and licensed FCC programs have been rated by a QRIS, as well as most exempt but regulated other programs. Slightly more than half (55%) of licensed other programs have QRIS ratings, and only 2% of exempt but regulated centers.

Note. Contributing registries include Miami-Dade, Illinois, Maine, Montana, Nevada, Oklahoma, and Wisconsin.
Overview of Participants

Based on their title and program type, registry participants were assigned a role. Table 4 shows characteristics of employed registry participants by role. Most of the data from these registries reflected participants who work in group settings with young children and youth.

Participants by Registry

In considering the findings from this dataset, it is important to keep in mind the differences in the number of participants from each registry. These differences are related to a number of factors, including the population of the relevant area, regulations and/or incentives regarding registry participation that are often linked to state-specific regulations for early childhood programs and workers, and registry resources.

Figure 23 presents the number of currently employed participants by registry, as well as the number of currently employed participants who are direct service professionals (administrators and those who work with children). Most employed registry participants are direct service professionals; across all registries, the percent was 92.5%.

Figure 23. Number of Total Employed Participants and Number of Employed Direct Service Professionals

Note. Illinois and Missouri registries have significant numbers of participants whose direct service cannot be determined, which explains the larger drop-off from all employed participants to employed direct service participants.
### Table 4. Characteristics of Employed Registry Participants by Major Role

<table>
<thead>
<tr>
<th></th>
<th>Center-based administrator</th>
<th>Center-based lead teacher</th>
<th>Center-based assistant teacher</th>
<th>Center-based other role***</th>
<th>Family child care owner</th>
<th>Family child care assistant teacher</th>
<th>Other program administrator</th>
<th>Other program lead teacher</th>
<th>Other program assistant teacher</th>
<th>Other program other role***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total n across registries</td>
<td>15,795</td>
<td>66,547</td>
<td>42,919</td>
<td>8,728</td>
<td>12,264</td>
<td>4,530</td>
<td>1,245</td>
<td>2,031</td>
<td>994</td>
<td>897</td>
</tr>
<tr>
<td>% female</td>
<td>95.6%</td>
<td>97.6%</td>
<td>97.0%</td>
<td>92.5%</td>
<td>96.4%</td>
<td>79.6%</td>
<td>90.5%</td>
<td>92.0%</td>
<td>93.8%</td>
<td>93.4%</td>
</tr>
<tr>
<td>Race/ethnicity*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70% White</td>
<td>67% White</td>
<td>59% White</td>
<td>60% White</td>
<td>48% White</td>
<td>75% White</td>
<td>65% White</td>
<td>54% White</td>
<td>60% White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18% Black</td>
<td>16% Black</td>
<td>17% Black</td>
<td>19% Black</td>
<td>35% Black</td>
<td>13% Black</td>
<td>18% Black</td>
<td>19% Hispanic</td>
<td>18% Hispanic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6% Hispanic</td>
<td>9% Hispanic</td>
<td>15% Hispanic</td>
<td>15% Hispanic</td>
<td>28% Hispanic</td>
<td>9% Hispanic</td>
<td>16% Black</td>
<td>12% Black</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median age</td>
<td>43.0 (n = 15,658)</td>
<td>34.0 (n = 65,850)</td>
<td>29.0 (n = 41,514)</td>
<td>39.0 (n = 8,606)</td>
<td>47.0 (n = 12,199)</td>
<td>37.0 (n = 4,253)</td>
<td>40.0 (n = 1,243)</td>
<td>36.0 (n = 2,029)</td>
<td>36.0 (n = 991)</td>
<td>31.0 (n = 895)</td>
</tr>
<tr>
<td>Median years in field</td>
<td>9.8 (n = 7,525)</td>
<td>4.2 (n = 37,343)</td>
<td>2.0 (n = 20,772)</td>
<td>4.0 (n = 2,394)</td>
<td>8.1 (n = 3,641)</td>
<td>3.6 (n = 653)</td>
<td>5.0 (n = 749)</td>
<td>3.4 (n = 1,429)</td>
<td>2.7 (n = 556)</td>
<td>7.9 (n = 42)</td>
</tr>
<tr>
<td>Median hourly wage</td>
<td>$15.00 (n = 6,922)</td>
<td>$11.56 (n = 37,343)</td>
<td>$10.00 (n = 20,772)</td>
<td>$11.50 (n = 5,192)</td>
<td></td>
<td>**</td>
<td>**</td>
<td>$10.50 (n = 561)</td>
<td>$12.01 (n = 784)</td>
<td>$10.31 (n = 582)</td>
</tr>
<tr>
<td>Highest level of/education*</td>
<td>33% Bachelor’s</td>
<td>41% HS diploma</td>
<td>65% HS diploma</td>
<td>38% HS diploma</td>
<td>49% HS diploma</td>
<td>59% HS diploma</td>
<td>52% HS diploma</td>
<td>34% Master’s</td>
<td>63% HS diploma</td>
<td>35% HS diploma</td>
</tr>
<tr>
<td>29% HS diploma</td>
<td>28% Bachelor’s</td>
<td>14% Bachelor’s</td>
<td>9% Bachelor’s</td>
<td>24% Associate’s</td>
<td>14% Associate’s</td>
<td>20% Bachelor’s</td>
<td>16% Bachelor’s</td>
<td>31% HS diploma</td>
<td>16% Bachelor’s</td>
<td>34% Bachelor’s</td>
</tr>
<tr>
<td>Median training hours in 2015</td>
<td>11.75 (n = 9,242)</td>
<td>9.50 (n = 30,974)</td>
<td>8.00 (n = 13,269)</td>
<td>7.50 (n = 2,931)</td>
<td>9.00 (n = 7,087)</td>
<td>7.50 (n = 1,259)</td>
<td>8.00 (n = 811)</td>
<td>0.00 (n = 1176)</td>
<td>0.00 (n = 465)</td>
<td>0.00 (n = 481)</td>
</tr>
</tbody>
</table>

*Only top categories provided.

** Median hourly wages for family child care providers are not included in this report.

*** “Other roles” include such titles as bookkeeper, receptionist, custodian, and bus driver.

Note. N’s differ across variables due to missing data (not all registries gather data on all variables).
Gender, Race/Ethnicity, and Age

The majority of participants across all roles were female and White. However, the proportion of nonminority participants varied among roles. More than two-thirds of center-based administrators and lead teachers were White, compared to 48% of family child care owners and 33% of FCC assistant teachers. FCC assistant teachers showed the most diversity, with 35% identifying as Black and 28% as Hispanic. The majority of participants in “other program” roles were White.

With respect to median age, center-based administrators tended to be older than center-based lead and assistant teachers and were closer in age to FCC owners. The median age for participants in other program roles followed the trend of center-based and family child care programs: administrators were older than lead and assistant teachers.

Median Years in the Field

Eight of the 11 registries collect participants’ time in the field (Connecticut, Miami-Dade, Maine, Montana, New York, Oklahoma, Wisconsin, and West Virginia). As a time-related variable, this attribute was highly correlated with age. Accordingly, those roles characterized by older median ages also reflected higher median years of experience. Center-based administrators reported being in the field more than twice as long (9.8 years) as center-based lead teachers (4.2 years), and nearly five times as long as center-based assistant teachers (2.0 years). Similarly, FCC owners had more than twice the median years of experience (8.1 years) as FCC assistant teachers (3.6 years).

Median years in the field differed significantly based on age group served (see Figure 24). Each median was statistically significantly different from the other at p < .001, except for the medians for infant/toddler and school-age only. Participants serving preschoolers only had the highest median (5.00), followed by those serving multiple age groups (4.52). For these registries, the most experienced professionals are serving preschoolers and multiple age groups, which has implications for professional development and quality improvement endeavors.

Median Hourly Wage

Within center-based staff, administrators earned more than lead teachers, who in turn earned more than assistant teachers. For other program participants, lead teachers outearned administrators ($12.01 vs. $10.50 an hour). Other program administrators made about the same as assistant teachers. Wage differences by education and role will be discussed more completely in a later section.

Highest Level of Education

For center-based participants, educational attainment was linked to role, with administrators most likely to have a bachelor’s degree (51%) compared to lead (37%) and assistant teachers (16%). A high school diploma was the most likely highest level of education for all family child care roles; 13% of family child care assistant teachers had less than a high school diploma. For participants in other programs, most reported their highest level of education has a high school diploma, except for other program lead teachers, who were most likely to have a master’s degree.

Median Number of 2015 Training Hours

The following registries reported participant professional development (training clock hours) for 2015: Miami-Dade, Illinois, Maine, Missouri, Montana, Nevada, New York, Oklahoma, and Wisconsin. These registries provided all of the training documentation that they received on an individual; however, it should be noted that individuals might receive additional training that is not documented by the registry. Only participants who had an employment start date of January 1, 2015, or earlier were included in these analyses.

As shown in Table 4, the difference between medians by role is slight. Center-based administrators had the highest median number of training hours (11.75), followed by center-based lead teachers (9.50), FCC owners (9.00), center-based assistant teachers (8.00), and other program administrators (8.00).
Where Professionals Work

Another important demographic factor to consider, within and across registries, is the extent to which programs are located in both urban and rural areas. The 2013 Rural-Urban Continuum Codes (also known as Beale Codes) were used to classify where programs are located. Table 5 gives a breakdown of Beale Codes and their relation to the metro and non-metro categories. As shown in Figure 25, 85% of participants in this dataset worked in programs in metropolitan areas, with the largest proportion, not surprisingly, coming from the counties that compose the most populous metropolitan areas.

<table>
<thead>
<tr>
<th>Beale Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Metro Counties</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Counties in metro areas of 1 million population or more</td>
</tr>
<tr>
<td>2</td>
<td>Counties in metro areas of 250,000 to 1 million population</td>
</tr>
<tr>
<td>3</td>
<td>Counties in metro areas of fewer than 250,000 population</td>
</tr>
<tr>
<td><strong>Non-metro Counties</strong></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Urban population of 20,000 or more, adjacent to a metro area</td>
</tr>
<tr>
<td>5</td>
<td>Urban population of 20,000 or more, not adjacent to a metro area</td>
</tr>
<tr>
<td>6</td>
<td>Urban population of 2,500 to 19,999, adjacent to a metro area</td>
</tr>
<tr>
<td>7</td>
<td>Urban population of 2,500 to 19,999, not adjacent to a metro area</td>
</tr>
<tr>
<td>8</td>
<td>Completely rural or less than 2,500 urban population, adjacent to a metro area</td>
</tr>
<tr>
<td>9</td>
<td>Completely rural or less than 2,500 urban population, not adjacent to a metro area</td>
</tr>
</tbody>
</table>

Figure 25. Registry Participant Program by Beale Code
Participant Primary Language

Registries reported on the primary language spoken by employed participants. Of the 150,074 participants who provided data for this field, 91.5% of them indicated English as their primary language. The second most reported primary language was Spanish (6.5%). The proportions for other languages were as follows: other language not listed, 0.5%; Polish, 0.3%; Chinese, 0.2%; Russian, 0.2%; Urdu, 0.2%; Arabic, 0.1%; French, 0.1%; Hindi, 0.1%; and Tagalog, 0.1%.

Highest Level of Education by Role

Figure 26 shows the highest level of formal education attained by registry participants by role. All registries contributed data for education level of participants. For all registries, the full education of participants is requested and all data they receive are entered, but it should be noted that some education records may not be complete—i.e., they only reflect the education level as reported by the participant, with the possibility that the highest level and early childhood-specific qualifications have not been reported.

As expected, center-based administrators tended to have more education than center-based lead teachers; over half (51%) of administrators had at least a bachelor's degree, whereas only 37% of lead teachers had the same level of education. For center-based assistant teachers, more than two-thirds (69%) had a high school diploma or less, and only 16% had a bachelor's degree or more.

Figure 26. Highest Level of Education Attained (All Categories) by Role

Note: “High school diploma or less” includes participants who have “Some College.” In addition, one-year certificates have differing requirements depending on awarding institution.
However, it should be noted that educational attainment was missing for nearly half (46%) of the professionals in these registries. An even greater concern is the likelihood that the missing education data were not random, which would limit the generalizability of the results of these analyses. As shown in Figure 27, center-based administrators and lead teachers had relatively less missing data compared to center-based assistant teachers and family child care professionals.

**Figure 27. Missing Data for Highest Level of Education by Role**

```
<table>
<thead>
<tr>
<th>Role</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center-based Administrator</td>
<td>29.1%</td>
</tr>
<tr>
<td>Center-based Lead Teacher</td>
<td>35.7%</td>
</tr>
<tr>
<td>Center-based Asst. Teacher</td>
<td>34.4%</td>
</tr>
<tr>
<td>Family Child Care Owner</td>
<td>63.0%</td>
</tr>
<tr>
<td>Family Child Care Asst. Teacher</td>
<td>87.2%</td>
</tr>
<tr>
<td>Other Program Administrator</td>
<td>34.2%</td>
</tr>
<tr>
<td>Other Program Asst. Teacher</td>
<td>45.3%</td>
</tr>
</tbody>
</table>
```

**“Some College” as an Education Category**

Another educational trend that the Alliance has been monitoring over the years is the frequency of professionals whose highest education level is “Some College”—that is, those who have earned college credits but have not earned a post-secondary degree. The results reported here are based on data from fewer registries since not all track “Some College” and the number of college credits professionals have completed. In registries that do not track “Some College,” those with college credits fall into the high school diploma or less category with respect to highest level of education.

Figure 28 displays the percentage of professionals, by role, who indicated their highest level of education was “Some College.” About 20% of center-based professionals, as well as FCC owners and other program administrators, reported “Some College” as their highest educational attainment.

**Figure 28. Professionals with “Some College” as Highest Education Level by Role**

```
<table>
<thead>
<tr>
<th>Role</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center-based Administrator</td>
<td>19.0%</td>
</tr>
<tr>
<td>Center-based Lead Teacher</td>
<td>26.6%</td>
</tr>
<tr>
<td>Center-based Asst. Teacher</td>
<td>19.0%</td>
</tr>
<tr>
<td>Family Child Care Owner</td>
<td>23.7%</td>
</tr>
<tr>
<td>Family Child Care Asst. Teacher</td>
<td>11.4%</td>
</tr>
<tr>
<td>Other Program Administrator</td>
<td>19.9%</td>
</tr>
<tr>
<td>Other Program Asst. Teacher</td>
<td>18.6%</td>
</tr>
</tbody>
</table>
```

Note. Results are based on data from the Illinois, Maine, Missouri, Montana, Oklahoma, West Virginia, and Wisconsin registries
Figure 29 shows education level by major role for those registries that track “Some College.” For center administrators, center assistant teachers, and FCC owners, “Some College” was the second most likely highest level of education. For center lead teachers, it was third, behind bachelor’s degree and high school diploma or less.

In addition, as shown in Figure 30, the majority of center-based staff with “Some College” as their highest educational attainment had at least 30 college credits, with center administrators at 69%. For FCC owners/administrators, the percentage was 53% with 30 credits or more. Many of these professionals are in the process of earning a formal degree. Because so many professionals across roles have significant numbers of college credits, the ability of registries to track college credits and not just highest educational attainment is an important role that registries can play in highlighting the ever-changing education status of the workforce.

Figure 29. Highest Level of Education Attained by Major Role for Registries that Gather College Credits

![Figure 29](image_url)

Note. Results are based on data from the Illinois, Maine, Missouri, Montana, Oklahoma, West Virginia, and Wisconsin registries.

Figure 30. Number of College Credits Earned by Professionals with “Some College”

![Figure 30](image_url)

Note. Results are based on data from the Illinois, Maine, Missouri, Montana, Oklahoma, West Virginia, and Wisconsin registries.
Education Specific to Early Childhood Education

The National Workforce Registry Alliance encourages registries to gather educational data regarding degrees specific to early childhood education (ECE). Because many registries only code these degrees when submitted by participants, they do not have definitive information on whether the participant has an ECE-specific degree; such cases were treated as missing for these analyses. Due to these issues, the true prevalence of ECE-specific degrees in these registries is not known.

Early childhood professionals differed in the amount of ECE-specific degrees they obtained, as shown in Figure 31. Overall, relatively few professionals, regardless of role, reported having educational qualifications that were related specifically to early childhood education/development. Although over half (51%) of center-based administrators had at least a bachelor’s degree, only 16% had an ECE bachelor’s degree or higher. The situation for lead teachers was similar; over one-third (37%) had at least a bachelor’s degree but only 10% reported an ECE bachelor’s or higher. The attainment of ECE degrees for assistant teachers and FCC professionals was even lower. Among center-based assistant teachers, 16% had a bachelor’s or higher, but only 1% obtained at least an ECE bachelor’s degree. For FCC providers, the statistics were similar: 22% had at least a bachelor’s degree but only 2% had at least an ECE bachelor’s degree or higher.

As pointed out by Institute of Medicine and the National Research Council (2012), specific early childhood professional development, including higher education, that focuses on implementing defined evidence-based curricula, developing supportive teacher-child relationships, and providing appropriate child development knowledge, is the key to raising program quality and ensuring positive child outcomes. The report Transforming the Workforce for Children Birth Through Age 8 (Institute of Medicine and National Research Council, 2015) goes even further by recommending that there be a multiyear transition toward all lead educators having a bachelor’s degree with specialized knowledge and competencies in ECE. Registries can play a key role by helping inform state and local conversations around this recommendation, especially with data regarding the educational qualifications and ECE-specific coursework of the current workforce of lead teachers.

Figure 31. ECE-Specific Degrees by Role

<table>
<thead>
<tr>
<th>Role</th>
<th>Center-based Administrator</th>
<th>Center-based Lead Teacher</th>
<th>Center-based Asst. Teacher</th>
<th>Family Child Care Owner</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE Associate’s degree or equivalent</td>
<td>15.8%</td>
<td>9.5%</td>
<td>2.9%</td>
<td>1.4%</td>
</tr>
<tr>
<td>ECE Bachelor’s degree or equivalent</td>
<td>11.7%</td>
<td>6.7%</td>
<td>3.9%</td>
<td>6.9%</td>
</tr>
<tr>
<td>ECE Master’s degree or equivalent</td>
<td>6.5%</td>
<td>6.5%</td>
<td>10.0%</td>
<td>0.4%</td>
</tr>
</tbody>
</table>

(n=9,876, 11,593, 9,590)

(n=50,785, 56,712, 47,615)

(n=38,444, 39,729, 37,509)

(n=10,537, 11,180, 9,966)
Child Development Associate Credential

The Child Development Associate (CDA) credential is the most widely recognized certification in early childhood education. It is based on a set of core competency standards designed to provide guidance to professionals in their work in the early care field. The original credential is valid for three years, after which it may be renewed every five years.

As shown in Figure 32, very few registry participants—only 4%—indicated that they held a current CDA. Center lead teachers and FCC owners were most likely to have a current CDA.

Figure 33 shows type of CDA held by registry participants across all roles. The preschool CDA was the most widely held (46%), followed by the infant/toddler (35%), and the FCC home (11%).
CPR and First Aid Certifications

As shown in Figure 34, only about one in seven professionals (15%) across all roles reported having both a current First Aid and CPR certification. Across all roles, participants were more likely to report having CPR training than First Aid training. Center-based staff were more likely to have these certifications compared to FCC providers.

Figure 34. Current CPR and First Aid Certification by Role

Center-Based Staff: Median Hourly Wage and its Relationship to Demographic Characteristics

The low compensation of professionals in the early childhood field has long been noted as one of the factors that has interfered with the recruitment and retention of talented professionals.

Figure 35 shows median hourly wages by role for center-based participants. As expected, center-based administrators had the highest median hourly wage at $15, with lead teachers earning $11.56 an hour and assistant teachers $10 an hour.

Based on the most recent data from the Bureau of Labor Statistics (BLS; May 2016), education administrators of preschools and child care centers had a median hourly wage of $22.01, which is higher than the $15.00 found for center-based administrators in this dataset. For the BLS category preschool teacher (not special education), the median wage was $13.84, which is also higher than the $11.75 found in this dataset for center lead teachers, which is the role that most closely corresponds to the BLS category. Finally, the BLS category child care provider, the median wage was $10.19, which is close to the median wage of center assistant teachers ($10.00), the role that is most similar in this dataset.

In comparison to kindergarten teachers, early childhood professionals who held at least a bachelor’s degree earned significantly less. The median wage for kindergarten teachers was $25.30 (calculated by taking median annual salary and dividing by 2,080 using May 2016 BLS figures). In this dataset, center-based lead teachers with a bachelor’s degree earned $13.82 an hour (see below), about half the national median wage for kindergarten teachers.

It should be noted that 46% of participants across all roles had missing wage data. For center-based staff, 43% were missing wage data.
Center-Based Staff: Median Hourly Wage and Education

In general, having more education was associated with higher earnings, especially for center-based administrators and lead teachers (see Figure 36). However, for assistant teachers, the important threshold was the associate’s degree; there was little difference in the median wage for those with associate’s through advanced degrees.

Figure 36. Median Hourly Wage for Center-Based Professionals by Education Attainment

![Chart showing median hourly wages for center-based administrators, lead teachers, and assistant teachers by education level.]

Note. Results are based on data from the Connecticut, Miami-Dade, Illinois, Missouri, Montana, Nevada, New York, Oklahoma, West Virginia, and Wisconsin registries.

Center-Based Staff: Median Hourly Wage, Education Level, and Age Group Taught

Figure 37 shows median hourly wages by age group taught for center lead and assistant teachers. For lead teachers, age group taught was related to hourly wages. Those who work with preschoolers earned $2 more than their peers who work with infants/toddlers and school-agers, and $3 more than those who work with multiple age groups. The same pattern is evident with assistant teachers but was less pronounced.

Figure 37. Center-Based Teachers: Median Hourly Wage by Age Group Served

![Chart showing median hourly wages for center-based lead and assistant teachers by age group served.]

Note. Results are based on data from the Connecticut, Miami-Dade, Illinois, Missouri, Montana, Nevada, New York, Oklahoma, West Virginia, and Wisconsin registries.
Figures 38 and 39 show median hourly wages by age group served and bachelor degree attainment for center lead and assistant teachers. Center lead teachers with bachelor’s degrees on average earned more than center leads without bachelor’s degrees across age groups. The amount ranged from $2.50 for those working with infant/toddlers and multiple age groups to $3.74 for those working with preschoolers. Center assistant teachers with bachelor’s degrees also earned more than those without the degree, but the differences were smaller than those found for lead teachers.

**Figure 38. Center-Based Lead Teachers: Median Hourly Wage by Bachelor Degree Attainment and Age Group Served**

![Bar chart showing median hourly wages for lead teachers.](chart)

*Note. Results are based on data from the Connecticut, Miami-Dade, Illinois, Missouri, Montana, Nevada, New York, Oklahoma, West Virginia, and Wisconsin registries.*

**Figure 39. Center-Based Assistant Teachers: Median Hourly Wage by Bachelor Degree Attainment and Age Group Served**

![Bar chart showing median hourly wages for assistant teachers.](chart)

*Note. Results are based on data from the Connecticut, Miami-Dade, Illinois, Missouri, Montana, Nevada, New York, Oklahoma, West Virginia, and Wisconsin registries.*
Center-Based Staff: Median Hourly Wage and Years in the Field

Figure 40 shows that experience in the field tended to be related to median hourly wage for center staff. Across all roles, the median hourly wage increased with greater field-related experience. Although wages were generally low, this trend highlights the fact that remaining in the field, with the potential of earning additional credentials, can result in higher wages.

### Figure 40. Median Hourly Wage by Role and Years in Field for Center Staff

Note. Results are based on data from the Connecticut, Miami-Dade, Montana, New York, Oklahoma, West Virginia, and Wisconsin registries.

Relationship of Age and Education Level

A long-standing concern in the early childhood field is the potential decline of workforce qualifications over time. Herzenberg, Price, and Bradley (2005) examined the relationship between age and educational attainment of early childhood professionals from 1979 to 2004. They found that the education levels of early childhood workers had declined since the early 1980s. In their most recent data, the younger a teacher or administrator was, the less likely she or he was to have a bachelor’s degree. In fact, 25% of teachers/administrators ages 24-36 had a bachelor’s degree, compared to 36% of those ages 40-50 and 43% of those over 50. While older workers have more time in which to attain a degree, Herzenberg et al. showed that workers who had been in the field since the 1970s tended to enter the field with more qualifications. This has brought up a potential concern: will the field lose a great deal of expertise rather quickly due to retirement, if in fact education is more concentrated among older workers?

This dataset can be used to address this issue in a preliminary fashion. Specifically, the educational attainment of professionals by role was examined using ten-year age categories. Figures 41-44 show the percentage of professionals whose highest level of education was at least an associate’s degree and those who held at least a bachelor’s degree. For each role, the different percentages (proportions) were compared across age categories for a specific degree using chi-square analyses, employing z-tests to compare column proportions, with Bonferroni adjustments for multiple tests (p was set at .05). Table 6 summarizes the statistically significant results.

### Figure 41. Center-based Administrators: Associate’s and Bachelor’s Degree Attainment by Age
Figure 42. Center-based Lead Teachers: Associate’s and Bachelor’s Degree Attainment by Age

Figure 43. Center-based Assistant Teachers: Associate’s and Bachelor’s Degree Attainment by Age

Figure 44. Family Child Care Owners: Associate’s and Bachelor’s Degree Attainment by Age
Table 6. Statistically Significant Results of Educational Attainment by Age Category Analyses

<table>
<thead>
<tr>
<th>Degree Attainment</th>
<th>Center-based Administrators</th>
<th>Center-based Lead Teachers</th>
<th>Center-based Assistant Teachers</th>
<th>Family Child Care Owners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate's Degree or Higher</td>
<td>• &lt; 25 are less likely to have degree compared to all categories.</td>
<td>• &lt; 25 are less likely to have degree compared to all categories.</td>
<td>• &lt; 25 are less likely to have degree compared to all categories.</td>
<td>• &lt; 25 are less likely to have degree compared to all categories.</td>
</tr>
<tr>
<td>Bachelor's Degree or Higher</td>
<td>• &lt; 25 are less likely to have degree compared to all categories.</td>
<td>• &lt; 25 are less likely to have degree compared to all categories.</td>
<td>• &lt; 25 are less likely to have degree compared to all categories.</td>
<td>• &lt; 25 and 45-54 are less likely to have degree compared to 25-34, 35-44, and 65+.</td>
</tr>
<tr>
<td></td>
<td>• 65+ are more likely to have degree compared to all 25-34, 35-44, and 45-54.</td>
<td>• 25-34 are less likely to have degree compared to all categories.</td>
<td>• 25-34 are more likely to have degree compared to 45-54.</td>
<td></td>
</tr>
</tbody>
</table>

Not surprisingly, for every role, the very youngest professionals—those younger than 25—had the lowest educational attainment. For center administrators, all age groups, besides those younger than 25, were equally likely to have an associate’s degree. However, older administrators (65+) were more likely to have a bachelor’s degree compared to all other age groups except 55-64, which supports the idea that older administrators have more education than younger ones.

The data for center lead teachers do not support Herzenberg et al.’s findings. Center lead teachers who are relatively young (25-34) were more likely to have an associate’s degree than those ages 35-44. However, besides those younger than 25, all center lead teacher age groups were equally likely to have a bachelor’s degree.

The data for assistant lead teachers also do not support Herzenberg et al.’s findings. Besides those younger than 25, all center assistant teacher age groups were equally likely to have an associate’s degree. In addition, center assistant teachers who were relatively young (25-34) were more likely to have a bachelor’s degree than those 45-54 and were equally likely to have a bachelor’s degree as those ages 55-64 and 65+.

Finally, the data for FCC owners does not support Herzenberg et al.’s hypothesis. FCC owners in the 45-54 cohort were less likely to have a bachelor’s degree compared to younger peers (25-34, 35-44) and the oldest group (65+). Although the 65+ group had the highest proportion with at least a bachelor’s degree, this group was not significantly higher than the 25-34, 35-44, and 55-64 groups due to the relatively large confidence interval, which is based on the size of the sample (219 in this case, which is relatively small).

Overall, the hypothesis that older professionals have substantially more education is not supported by most of these results. The only exception is the finding that the oldest center administrators are more likely to have a bachelor’s degree than younger age groups. The results in this report reflect those found in previous Alliance analyses of age and educational attainment (Mayfield, 2013; Mayfield, 2015).

It should be noted that there are several limitations to these analyses. First, they represent only one point in time. Multi-point, longitudinal analyses can take into account degree attainment over time as well as examine changes in trends over time. In addition, these data may not be representative of all early childhood professionals across the nation. There is also a concern about the extent to which early childhood professionals attain degrees and then leave the field due to low wages. One way registries can address this issue is to collect information about when degrees were obtained.
Professional Development: Training Hours

Figure 45 shows reported 2015 training hours by category for those participants who were employed for all of 2015. Center administrators were most likely to have more than 10 hours (54%), followed by center lead teachers (50%), FCC owners (48%), and other program administrators (47%).

**Figure 45. Total Training Hour Categories by Major Roles**

<table>
<thead>
<tr>
<th>Role</th>
<th>0 hours</th>
<th>0.4 - 9.99 hours</th>
<th>10 - 19.99 hours</th>
<th>20 - 49.99 hours</th>
<th>50+ hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center-based Administrator</td>
<td>11%</td>
<td>23%</td>
<td>19%</td>
<td>20%</td>
<td>5%</td>
</tr>
<tr>
<td>(n=9,242)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Center-based Lead Teacher</td>
<td>10%</td>
<td>21%</td>
<td>20%</td>
<td>20%</td>
<td>11%</td>
</tr>
<tr>
<td>(n=30,974)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Center-based Asst. Teacher</td>
<td>8%</td>
<td>18%</td>
<td>20%</td>
<td>23%</td>
<td>13%</td>
</tr>
<tr>
<td>(n=13,269)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Child Care Owner</td>
<td>9%</td>
<td>16%</td>
<td>23%</td>
<td>18%</td>
<td>15%</td>
</tr>
<tr>
<td>(n=7,087)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Child Care Asst.</td>
<td>4%</td>
<td>21%</td>
<td>18%</td>
<td>21%</td>
<td>11%</td>
</tr>
<tr>
<td>Teacher (n=1,259)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Program Administrator</td>
<td>9%</td>
<td>17%</td>
<td>19%</td>
<td>19%</td>
<td>13%</td>
</tr>
<tr>
<td>(n=811)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Program Lead Teacher</td>
<td>5%</td>
<td>15%</td>
<td>13%</td>
<td>56%</td>
<td></td>
</tr>
<tr>
<td>(n=1,176)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 46 shows total clock hour category by educational attainment. Participants with lower educational attainment were somewhat more likely to report at least 20 training hours. Of those participants in the lowest educational category (high school diploma or less), 39% completed at least 20 clock hours. Those participants with formal degrees—associate’s, bachelor’s, and master’s/doctoral—were slightly less likely to complete at least 20 clock hours: 36%, 32%, and 30%, respectively. These differences in training hour completion may reflect a number of factors, including a desire for those without formal degrees to enhance their professional standing via professional development/certification and/or to gain college credit as they work toward a formal degree.

**Figure 46. Total Training Hour Categories by Highest Level of Education**
Figure 47 shows training hour categories by age group served. Staff who work with infants and/or toddlers reported the highest median training hours in 2015 (10.0), followed by those working with multiple age groups (9.0), those working with preschoolers (8.0), and staff who work with school-agers (5.0). The training hour data by category follow the same pattern as median training hours.

Source of Training Hours: Community–Based Training and College Credit Courses

This dataset is the first time that many registries—Illinois, Missouri, Montana, New York, Oklahoma, and Wisconsin—coded participant training hours by source: whether they came from community-based opportunities or from completing college courses for credit. As shown in Table 7, for all participants with more than 0 training hours, the mean and median number of training hours from community-based training was larger than the mean and median for college coursework. For these participants, 98.4% received training from community-based opportunities and 8.3% from converted college credits, and 6.7% from both sources.

Table 7. Descriptive Statistics for 2015 Training Hours by Source for All Participants with Some Training (n=47,855)

<table>
<thead>
<tr>
<th></th>
<th>Community-based Training Hours</th>
<th>Converted College Credits in Hours</th>
<th>Total Training Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean</strong></td>
<td>16.6</td>
<td>11.6</td>
<td>28.5</td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td>12.0</td>
<td>0</td>
<td>14.0</td>
</tr>
<tr>
<td><strong>Minimum</strong></td>
<td>0</td>
<td>0</td>
<td>0.2</td>
</tr>
<tr>
<td><strong>Maximum</strong></td>
<td>380.0</td>
<td>763.8</td>
<td>780.9</td>
</tr>
</tbody>
</table>

Note. Results are based on data from the Illinois, Missouri, Montana, New York, Oklahoma, and Wisconsin registries.
For all participants with valid training hour data, 92.6% of training hours came from community-based training and 7.4% from college coursework converted to clock hour data. Table 8 shows the percentage of training hours by source for all roles.

<table>
<thead>
<tr>
<th>Role</th>
<th>Community-based Training Hours</th>
<th>Converted College Credits in Hours</th>
<th>Total Training Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center Administrator/Owner</td>
<td>92.3%</td>
<td>7.8%</td>
<td>6,947</td>
</tr>
<tr>
<td>Center Lead Teacher</td>
<td>91.2%</td>
<td>8.8%</td>
<td>22,057</td>
</tr>
<tr>
<td>Center Assistant Teacher</td>
<td>94.5%</td>
<td>5.5%</td>
<td>8,673</td>
</tr>
<tr>
<td>Center Other Role</td>
<td>97.4%</td>
<td>2.6%</td>
<td>1,802</td>
</tr>
<tr>
<td>FCC Owner</td>
<td>93.1%</td>
<td>7.0%</td>
<td>5,375</td>
</tr>
<tr>
<td>FCC Lead Teacher</td>
<td>94.8%</td>
<td>5.2%</td>
<td>65</td>
</tr>
<tr>
<td>FCC Assistant Teacher</td>
<td>97.0%</td>
<td>3.1%</td>
<td>966</td>
</tr>
<tr>
<td>FCC Other Role</td>
<td>99.2%</td>
<td>0.8%</td>
<td>119</td>
</tr>
<tr>
<td>Other Program Admin/Owner</td>
<td>96.0%</td>
<td>4.0%</td>
<td>499</td>
</tr>
<tr>
<td>Other Program Lead Teacher</td>
<td>91.1%</td>
<td>9.0%</td>
<td>510</td>
</tr>
<tr>
<td>Other Program Asst. Teacher</td>
<td>97.1%</td>
<td>2.9%</td>
<td>172</td>
</tr>
<tr>
<td>Other Program - Other Role</td>
<td>100.0%</td>
<td>0.0%</td>
<td>85</td>
</tr>
<tr>
<td>Total</td>
<td>92.6%</td>
<td>7.4%</td>
<td>47,270</td>
</tr>
</tbody>
</table>

Table 8. 2015 Training Hours by Source for All Roles

Other program lead teachers had the highest percentage of training hours coming from college courses (9%), followed by center lead teachers (8.8%), center directors (7.8%), and FCC owners (7.0%).

As shown in Figure 48, participants with less than a bachelor’s degree had higher percentages of their training hours coming from college coursework than those with a bachelor’s degree.

Figure 48. Percentage of Training Hours from College Courses by Educational Attainment

Note. Results are based on data from the Illinois, Missouri, Montana, New York, Oklahoma, and Wisconsin registries.
Table 9. National Workforce Registry Alliance Core Knowledge Areas

<table>
<thead>
<tr>
<th></th>
<th>Child Growth and Development</th>
<th>Health, Safety, and Nutrition</th>
<th>Teaching and Learning</th>
<th>Observing, Documenting, and Assessing</th>
<th>Family and Community Relationships</th>
<th>Administration and Management</th>
<th>Early Childhood Education Profession and Policy</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Median</th>
<th>Minimum</th>
<th>Maximum</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Growth and Development</td>
<td>3.64</td>
<td>0.0</td>
<td>0.0</td>
<td>244.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health, Safety, and Nutrition</td>
<td>3.86</td>
<td>2.0</td>
<td>0.0</td>
<td>350.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching and Learning</td>
<td>8.24</td>
<td>3.0</td>
<td>0.0</td>
<td>442.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observing, Documenting, and Assessing</td>
<td>1.14</td>
<td>0.0</td>
<td>0.0</td>
<td>154.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family and Community Relationships</td>
<td>1.62</td>
<td>0.0</td>
<td>0.0</td>
<td>135.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration and Management</td>
<td>2.58</td>
<td>0.0</td>
<td>0.0</td>
<td>270.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early Childhood Education Profession and Policy</td>
<td>3.17</td>
<td>0.0</td>
<td>0.0</td>
<td>182.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Results are based on data from the Illinois (except for Administration and Management) Maine, Missouri, Montana, Nevada, New York, Oklahoma, and Wisconsin registries. n = 30,433 for all areas except Administration and Management (n = 20,518).
Figure 49 shows the mean percentage of training hours by Core Knowledge Area for participants with more than zero training hours in 2015; note that percentages add to more than 100% since professional development may cover more than one area. Across all roles, Health, Safety, and Nutrition accounted for the highest percentage (34%), followed by Teaching and Learning (31%). Teaching and Learning accounted for the most training in the last Alliance dataset. However, the new training requirement in the federal Child Care Block Grant, which stipulates that all programs receiving funds ensure that staff get professional development in the area of health and safety, likely explains the increase in Health, Safety, and Nutrition training hours reported to registries. The Core Knowledge Area of Observing, Documenting, and Assessing accounted for the least amount of training hours across all roles (5%).

**Figure 49. Mean Percentage of Training Hours by Core Knowledge Area for Participants with Some Training by Major Role**

- **Center-based Administrator** (n=4,136)
  - Child Growth and Development: 12%
  - Teaching and Learning: 34%
  - Early Childhood Education Profession and Policy: 5%
  - Family and Community Relationships: 13%
  - Health, Safety, and Nutrition: 29%
  - Observing, Documenting, and Assessing: 17%
  - Administration and Management: 5%

- **Center-based Lead Teacher** (n=13,860)
  - Child Growth and Development: 11%
  - Teaching and Learning: 33%
  - Early Childhood Education Profession and Policy: 6%
  - Family and Community Relationships: 12%
  - Health, Safety, and Nutrition: 7%
  - Observing, Documenting, and Assessing: 6%
  - Administration and Management: 5%

- **Center-based Assistant Teacher** (n=6,050)
  - Child Growth and Development: 12%
  - Teaching and Learning: 29%
  - Early Childhood Education Profession and Policy: 6%
  - Family and Community Relationships: 5%
  - Health, Safety, and Nutrition: 11%
  - Observing, Documenting, and Assessing: 5%
  - Administration and Management: 5%

- **Family Child Care Owner** (n=3,077)
  - Child Growth and Development: 17%
  - Teaching and Learning: 33%
  - Early Childhood Education Profession and Policy: 4%
  - Family and Community Relationships: 13%
  - Health, Safety, and Nutrition: 6%
  - Observing, Documenting, and Assessing: 6%
  - Administration and Management: 8%

- **All Roles** (n=30,068)
  - Child Growth and Development: 12%
  - Teaching and Learning: 33%
  - Early Childhood Education Profession and Policy: 5%
  - Family and Community Relationships: 12%
  - Health, Safety, and Nutrition: 29%
  - Observing, Documenting, and Assessing: 17%
  - Administration and Management: 6%

*Note. Results are based on data from the Illinois (except for Administration and Management) Maine, Missouri, Montana, Nevada, New York, Oklahoma, and Wisconsin registries.*
How do the Alliance 2017 educational attainment data compare to the National Survey of Early Care and Education data?

Due to the nature of the Alliance data, one cannot infer that it is a representative sample of the early childhood and school-age workforce in the United States. However, we can compare findings from this year’s dataset, as well as the 2015 and 2012 datasets, to the most recent national survey of the early childhood workforce, the National Survey of Early Care and Education (NSECE; 2013). Because the NSECE survey randomly sampled early education workers across the United States, its findings can be considered representative of the U.S. workforce. The major weakness of the NSECE survey is its emphasis on self-report. The Registry Alliance datasets, on the other hand, consist of mostly verified data on all registry participants that meet certain criteria, but the data are not representative of the United States in general and may not capture all education and qualifications attained. Despite differences in data collection methods, the educational attainment for center-based teachers is very similar across datasets, as shown in Table 11. Slightly more than half (53%) of center-based teachers had a formal degree in the NSECE study, whereas just less than half (47%) had a formal degree in the 2017 Alliance dataset. The distribution of two- and four-year degrees, as well as advanced degrees, was nearly the same across the NSECE and 2017 Alliance datasets.

Table 11. Comparison of Center-Based Teacher Degree Attainment among NSECE and Alliance Datasets

<table>
<thead>
<tr>
<th>Degree Type</th>
<th>NSECE Study (n=4,800)</th>
<th>2017 Alliance Dataset (n=62,359)</th>
<th>2017 Alliance Dataset (n=62,359)</th>
<th>2017 Alliance Dataset (n=62,359)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any Degree</td>
<td>53%</td>
<td>47%</td>
<td>47%</td>
<td>42%</td>
</tr>
<tr>
<td>2-year Degree</td>
<td>18%</td>
<td>17%</td>
<td>17%</td>
<td>14%</td>
</tr>
<tr>
<td>4-year Degree</td>
<td>26%</td>
<td>24%</td>
<td>26%</td>
<td>25%</td>
</tr>
<tr>
<td>Graduate/Professional Degree</td>
<td>9%</td>
<td>7%</td>
<td>4%</td>
<td>3%</td>
</tr>
</tbody>
</table>

When looking at age group served, the findings continue to be similar. As shown in Figure 50, 19% of the NSECE sample that worked with infants/toddlers had a bachelor’s degree, compared to the 22% found in all Alliance datasets. For center-based teachers working with preschoolers, 45% had a bachelor’s degree in the NSECE study compared to 41% in the 2017 Alliance dataset (see Figure 51). Overall, with respect to highest level of education among center-based teachers, the 2017 Alliance dataset compares quite well with the nationally representative NSECE study.

Figure 50. Comparison of Educational Attainment of Center Teachers Serving Infant/Toddlers
Figure 51. Comparison of Educational Attainment of Center Teachers Serving Preschoolers

- NSECE: 37% Less than Associate’s Degree, 17% Associate’s Degree, 45% Bachelor’s Degree or Higher
- 2017 Alliance: 41% Less than Associate’s Degree, 18% Associate’s Degree, 41% Bachelor’s Degree or Higher
- 2015 Alliance: 41% Less than Associate’s Degree, 18% Associate’s Degree, 41% Bachelor’s Degree or Higher
- 2012 Alliance: 35% Less than Associate’s Degree, 18% Associate’s Degree, 48% Bachelor’s Degree or Higher
Director Analyses

Registry Reach

One way to examine the extent to which registries capture all the early childhood and school-age workforce (registry reach or penetration) is to study center-based programs and some facets of director participation. Two different methods were used to examine registry reach. The first method focuses on the extent to which registries have captured all licensed center-based directors in their geography. For this calculation, the unduplicated count of licensed center administrators from the registries was divided by the number of licensed centers in the geographies (based on state licensing agencies). In Figure 52, this rate is labeled the Percent of licensed center directors in registry. Across all registries, the percent was 44%, about the same as the 43% figure in the 2015 dataset.

The second method, also shown in Figure 52, is the Percent of licensed centers with director and staff in the registry. This is calculated by taking the unduplicated number of licensed center administrators in the registries divided by the total number of licensed centers with at least one employee participating in the registries. Across all registries, this figure was 69%, about the same as the 68% figure in the 2015 dataset.

Figure 52. Registry Reach by Registry
Director as Gate-Keepers to Registry Participation: Licensed Centers

Center administrators can be viewed as the “gate-keepers” to center-based programs. They are the primary liaisons between the centers they run and the outside agencies and individuals that regulate, support, and contribute to the programs. Besides their own staff, directors interact with licensing representatives, QRIS assessors, and accreditation team members. Quality initiatives that seek to improve the early care and education landscape, including workforce registries, need director buy-in to be successful. Based on the idea of directors as gate-keepers, it was hypothesized that programs with at least one director in the registry would have higher staff registry participation than programs without a director in the registry.

In order to test this hypothesis, the median number of teaching staff participating in the registry for programs with and without director participation were compared based on licensed capacity (see Figure 53). Only registries that do not mandate some form of participation were used in these analyses, which are based on data from the Miami-Dade, Maine, Missouri, and New York registries. The hypothesis that director registry participation is linked to higher staff participation was supported only for those programs with larger capacities (over 100), where programs that have at least one director in the registry were more likely to have greater numbers of teaching staff participating in the registry compared to programs that do not have a participating director. For smaller programs, there were no substantive differences in staff registry participation based on administrator participation. These results suggest that, especially for large programs, collaborating with directors may increase the rate of registry participation by teaching staff.

Figure 53. Licensed Centers: Median Number of Teaching Staff by Licensed Capacity and Administrator Participation

![Figure 53. Licensed Centers: Median Number of Teaching Staff by Licensed Capacity and Administrator Participation](image-url)
Recommendations for Registries

Based on the findings from this report, the following recommendations are suggested for early childhood and school-age workforce registries.

Become a PER registry so you can share your data to help inform policy at state and national levels.

Thanks to the Partnership Eligibility Review (PER) guidelines established by the Alliance, workforce registries now have solid, proven methods for aggregating data. Increasing registries’ capacities to share data will continue to enhance their ability to act as important contributors to other data-driven policy initiatives.

Get to know your registry data so you can inform state and local discussions about workforce initiatives and allocation of resources.

In this dataset, professionals who work with preschoolers had more education and experience, as well as earned more, than those working with other age groups. Registries that have such knowledge about workforce trends in their state/region will ensure that they are invaluable collaborators in data-driven policy initiatives and discussions about resource allocation for workforce development.

Track participants’ education, qualifications, and wages over time.

The ability to show verified longitudinal changes in professionals’ education, training hours, ECE-specific credentials, and wages strengthens registries’ relevance to stakeholders and funders.

Recommendations for the National Workforce Registry Alliance

Based on the findings from this report, the following recommendations are suggested for the Alliance.

Continue to support registries in their ability to gather high quality workforce data and use such data for policy purposes.

The Alliance has long been the national organization that provides an interactive forum for registries to exchange ideas and strategies. Through the Partnership Eligibility Review (PER) process, registries enhance their capabilities to participate in data-related projects to influence national policy and initiatives.

Modify PER protocols as necessary to enhance the quality of data for aggregation and policy purposes.

Key considerations for the Alliance for future datasets include the following recommendations for PER registries: (1) decreasing the amount of “missing data” for education and training hours; (2) adding information regarding the date when degrees and credentials are earned, thereby enhancing analyses related to workforce qualifications; (3) implementing “transaction flags” within registries so that changes in participant and program status can be captured over time; (4) modifying the process for pulling training hour data to maximize the number of valid records; and (5) modifying the data transfer protocol to enhance the ability of registries to determine definitively whether participants have ECE-related degrees, CPR, First Aid, and CDA credentials.

Strengthen collaborations with national partners so that registries continue to be an important part of national discussions about early childhood and school-age workforce development.

The Alliance already collaborates with a broad array of national groups, including the National Association for the Education of Young Children (NAEYC), the National Center on Afterschool and Summer Enrichment (NCASE), Child Care Aware of America, and Child Trends. Increasing its scope of partnerships will ensure that the Alliance remains a leader in the workforce field.
References


