

Illinois' Early Childhood Education Workforce



2017 report

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The Illinois Network of Child Care Resource and Referral Agencies (INCCRRA) is a statewide organization which—in partnership with 16 local Child Care Resource and Referral (CCR&R) agencies—is a recognized leader, catalyst, and resource for making high quality, affordable early care and education and school-age care options available for children and families in Illinois. INCCRRA administers Gateways to Opportunity—a statewide professional development support system designed to provide guidance, encouragement, and recognition to individuals and programs serving children, youth, and families.

Illinois' Early Childhood Education Workforce

2017 REPORT

JOELLYN WHITEHEAD
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Executive Summary

The Gateways to Opportunity Registry was established in 2009 to be the statewide data system for collecting and reporting on the characteristics of the early childhood education workforce in Illinois. Development of the Gateways Registry was informed by a cross-sector committee of the Professional Development Advisory Council (PDAC), and included members representing the Department of Children and Family Services (DCFS), Illinois Department of Human Services (IDHS), Illinois Head Start Association (IHSA), and Illinois State Board of Education (ISBE). In addition to those state agency partners, professional development agencies including Child Care Resource and Referral (CCR&R) agencies, STARNET, and both public and private early childhood education programs have been engaged in the work. This report – Illinois’ Early Childhood Education Workforce 2017 Report – is a result of the commitment to establishing a comprehensive workforce data repository through the Gateways Registry.

There has been tremendous growth in the Registry from 2009 to 2017 as it evolved from a voluntary system to being mandatory for several sectors within early childhood education. In 2012, the Department of Children and Family Services (DCFS) implemented rule changes that required those working in licensed settings (center-based and home-based) to join and maintain membership in the Gateways Registry. In addition to DCFS, the Illinois Department of Human Services (IDHS), Illinois State Board of Education (ISBE) and Governor’s Office of Early Childhood Development (GOECD) have also required Gateways Registry membership for specific groups of professionals under their purview, bringing the total number of active individual records close to 100,000.

The purpose of this report is to provide rich, descriptive data about Illinois’ early childhood education workforce, as shown by analysis of the data within the Gateways Registry. Several of the research questions from the Illinois Early Learning Council’s Research Agenda¹ are addressed within this report, including:

- What are the demographics of program staff, directors, and family child care providers?
- What languages do program staff and directors speak?
- What education, preparation, and training have program staff, directors, and family child care providers received?
- What credentials do program staff, directors, and family child care providers currently have?
- What are the salaries provided?
- How long have staff been in their current program?

KEY FINDINGS

- 1. Staff working in licensed child care settings are diverse, especially assistant teachers, family child care providers, and family child care assistants.**
 - Overall, 41.7% of licensed center assistant teachers, 54.6% of licensed family child care providers, and 64.5% of licensed family child care assistants reported being Black or Hispanic/Latino.
 - At a regional level, the diversity of teaching staff generally mirror the diversity of the population of Illinois as a whole, with staff in northern counties reflecting greater diversity than those in southern counties.

- 2. There is a strong bilingual population within the workforce.**
 - More than 10% of assistant teachers, family child care providers, and assistants reported speaking Spanish or another language as their primary language, and English as a second language.
 - In licensed child care centers, over half of the bilingual teaching staff were under the age of 35.

- 3. Directors and teachers in licensed center-based programs have high levels of education.**
 - Just over 71% of teachers and 84% of directors in licensed centers have completed an associate degree or higher.
 - Levels of education are relatively consistent across the studied geographic regions of Illinois. The exception was that teaching staff in the city of Chicago had higher levels of education. This is in part due to the greater proportion of programs in the city that receive multiple funding streams, which require additional educational qualifications for teachers and assistant teachers.

- 4. There has been a dramatic increase over the last two years in the percentage of the workforce that holds Gateways to Opportunity Credentials.**
 - The percent of licensed center directors holding a Gateways ECE Credential increased from 5% in 2015 to 26% in 2017. Teachers holding an ECE Credential increased from 4% to 23% during that same time period.
 - Nearly 20% of center directors now hold a Gateways Illinois Director Credential (IDC), compared to just 5% two years ago.

- 5. Quality professional development, in the form of Gateways Registry-approved training, is readily available and is a frequently utilized source of professional development for the workforce.**
 - More than 120 professional organizations and agencies now offer training that has been quality-assured through the Gateways Registry.

- Over 90% of staff working in licensed centers and family child care homes attended Registry-approved training in 2016.
- In 2016, more than half of the annual training hours required to work in a licensed setting were earned by attending Registry-approved training.

6. Wages are low compared to other occupations and vary based on education, attainment of Gateways Credentials, and ages of children served.

- The median hourly wage for teachers in licensed centers was \$12.50, but increased to \$13.64 for those with a bachelor's degree.
- Teachers who had earned an ECE Credential in addition to a bachelor's degree earn nearly \$1700 more per year than those with the degree alone.
- Licensed center teachers with an associate degree who work with infants and toddlers made \$12.00 per hour, while those working with preschoolers made \$12.46.

CONCLUSION

The challenges faced by the early childhood education workforce are varied and complex. Research clearly demonstrates how important qualified educators and caregivers are to a child's growth and development in their early years, as well as to their future success in school. Without a well-qualified and well-compensated workforce, the children of Illinois will not experience the full range of benefits that can be realized through high-quality early childhood education. It is our hope that this report will be a valuable resource for leaders and policy-makers to inform conversations that will further support and advance the early childhood education workforce in Illinois.

Introduction

Early childhood education is an industry vital to the success of Illinois. It is an economic engine, generating \$2.6 billion in revenues annually with the potential to generate \$2.13 in new output across Illinois for every \$1.00 in new spending.² It includes a workforce of over 80,000 individuals who support children’s development and learning to ensure they enter kindergarten ready to succeed. There are several sectors and settings within the field of early childhood education in Illinois, including licensed child care centers, state-funded preschool (Preschool for All), Head Start/Early Head Start, and licensed family child care. In addition, there are a substantial number of children being cared for in license-exempt and “family, friend, and neighbor” settings. Finally, there are many supporting services that complement and intersect with the early childhood education system including home visiting, health, mental health, and other social services.

Illinois’ early childhood education workforce plays a major role in supporting the state’s economy. Based on data from the U.S. Census Bureau’s 2016 American Community Survey, there are nearly 626,700 children in Illinois under the age of six where all parents in the household work.³ Without early childhood education options available, many of these parents would be unable to participate in the labor force. In addition to their direct value to the present economy, early childhood educators play a crucial role in the future economic success of our state. The seminal 2015 report from the National Academies of Sciences, Engineering, and Medicine entitled *Transforming the Workforce for Children Birth Through Age 8: A Unifying Foundation* reinforced what we know about the science of how children learn and the impact early childhood educators have on children’s health, development, and learning. Professor James Heckman, a Nobel Prize-winning expert on the economics of human development, has published a vast array of research demonstrating the positive economic benefit of investments in high quality early childhood education, one of which is a 7-13% return on investment for children enrolled in high-quality early childhood programs.⁴

Given the importance of a qualified early childhood education workforce, it is essential for states to be able to track the size and characteristics of that workforce. The Gateways to Opportunity® Registry is the workforce data system established in 2009 to collect and report on the characteristics of Illinois’ early childhood education workforce. While initially voluntary, the Illinois Department of Children and Family Services (DCFS) mandated in 2012 that all individuals working in a licensed child care center or licensed family child care home join and maintain current membership in the Gateways Registry. While the Gateways Registry is open to all individuals working with or on behalf of children and families in Illinois, the DCFS rule has given us a full universe of data about the workforce in licensed child care centers and licensed family child care homes.⁵ This also includes most of the Head Start/Early Head Start programs in

Illinois, as they are predominantly in licensed settings. As such, the focus of this report is on the workforce in those licensed center-based and home-based settings.⁶

METHODOLOGY

Data for this report were pulled on March 1, 2017 and prepared for analysis. Only individuals with active Gateways Registry memberships and valid direct service employment records were included.⁷ The data file was further cleaned to remove inconsistent records (e.g., records where job title and setting were not clear), resulting in a total of 61,551 individual records.

In order to further analyze some of the variables within this report, we created a variable to define the geographic region for the individual's employment record. For the purpose of this report, regions were defined as follows:

Northern Counties: Boone, Bureau, Carroll, DeKalb, DuPage, Grundy, Henry, Jo Daviess, Kane, Kankakee, Kendall, Lake, LaSalle, Lee, McHenry, Mercer, Ogle, Putnam, Rock Island, Stephenson, Whiteside, Will, Winnebago

City of Chicago

Suburban Cook County: Suburban Cook County, not including the City of Chicago

Central Counties: Adams, Brown, Calhoun, Cass, Champaign, Christian, Clark, Coles, Cumberland, DeWitt, Douglas, Edgar, Ford, Fulton, Greene, Hancock, Henderson, Iroquois, Jersey, Knox, Livingston, Logan, Macon, Macoupin, Marshall, Mason, McDonough, McLean, Menard, Montgomery, Morgan, Moultrie, Peoria, Piatt, Pike, Sangamon, Schuyler, Scott, Shelby, Stark, Tazewell, Vermilion, Warren, Woodford

Southern Counties: Alexander, Bond, Clay, Clinton, Crawford, Edwards, Effingham, Fayette, Franklin, Gallatin, Hamilton, Hardin, Jackson, Jasper, Jefferson, Johnson, Lawrence, Madison, Marion, Massac, Monroe, Perry, Pope, Pulaski, Randolph, Richland, Saint Clair, Saline, Union, Wabash, Washington, Wayne, White, Williamson

Throughout the report, references are made to two sources of national data on the early childhood education workforce: the National Workforce Registry Alliance (“the Alliance”) and the National Survey of Early Childhood Education (NSECE). These sources are used for comparative purposes to explore how Illinois' workforce equates to what data are available about the workforce nationally.

OVERVIEW OF THE DATASET

Records within the dataset represented 49,281 licensed child care center staff and 11,067 licensed family child care providers/assistants, as shown in Table 1. In addition, there were 985 individuals that worked in license-exempt centers or school-based programs and 218 license-exempt family child care providers in the dataset. Due to the relatively small population, license-exempt staff were not included in further analyses for purposes of this report.

TABLE 1 | POPULATION WITHIN THE 2017 DATASET

Employment Setting and Role	Number of Records	Percentage of Dataset
Licensed Center Administrator	5,576	9.1%
Licensed Center Teacher	21,775	35.4%
Licensed Center Assistant Teacher	14,216	23.1%
Licensed Center Teacher Aide	1,840	3.0%
Licensed Center School-Age Worker	720	1.2%
Licensed Center School-Age Assistant	468	0.8%
Licensed Center Substitute/Floater	1,746	2.8%
Licensed Center Other	2,940	4.8%
Licensed FCC Owner/Provider	6,984	11.3%
Licensed FCC Assistant	3,736	6.1%
Licensed FCC Other	347	0.6%
License-Exempt Center/School Administrator	138	0.2%
License-Exempt Center/School Teacher	269	0.4%
License-Exempt Center/School Assistant Teacher/Aide	224	0.4%
License-Exempt Center Other	354	0.6%
License-Exempt FCC Owner/Provider	155	0.3%
License-Exempt FCC Other	63	0.1%
Total in Dataset	61,551	100.0%

Demographics

GENDER AND AGE

Several national reports, including *The Early Childhood Care and Education Workforce: Challenges and Opportunities: A Workshop Report* and the *National Workforce Registry Alliance 2015 Dataset Report*, show that the field of early childhood education is predominantly female.⁸ Illinois is no different; in the 2017 dataset, women comprised nearly 96% of those in licensed child care settings. One remarkable contrast was that 21% of assistants working in licensed family child care settings in Illinois were men. This may have been due to the high number of family child care homes where both the husband and wife are included on the license, with the wife meeting the qualifications for the primary provider and the husband meeting qualifications to be an assistant.

The age of professionals in center-based settings also followed a predictable pattern, with those in administrative positions being older than teachers and assistant teachers. This was in relative agreement with Maroto and Brandon’s 2012 analysis of data from two Census sources that found the median age for child care workers was 35-39 years (compare to 37 years in this report) and the median age of family child care providers was 43 (compare to 48 in this report).⁹ Table 2 presents additional data related to the gender and age of professionals working in licensed settings.

TABLE 2 | GENDER AND AGE BY ROLE IN LICENSED SETTINGS

	Licensed Center			Licensed Family Child Care	
	Director	Teacher	Assistant Teacher	Owner / Provider	Assistant
GENDER	N=5517	N=21,446	N=13,823	N=6932	N=3678
Female	96.4%	98.1%	97.5%	96.4%	78.7%
Male	3.6%	1.9%	2.5%	3.6%	21.3%
AGE	N=5576	N=21,775	N=14,216	N=6984	N=3736
Mean	43	37	33	48	40
Under 25	4.3%	17.0%	40.0%	1.8%	27.1%
25-34	26.2%	32.6%	25.1%	10.8%	20.7%
35-44	25.9%	19.5%	12.7%	25.9%	16.2%
45-54	23.2%	18.2%	13.3%	31.7%	17.3%
55-64	15.8%	10.3%	7.1%	21.6%	11.3%
65 and Older	4.7%	2.3%	1.8%	8.1%	7.5%

RACE/ETHNICITY

Early childhood educators that worked in licensed child care settings were diverse, with 56% of teaching staff being White, non-Hispanic compared to 83% of teachers in public schools.¹⁰ The race/ethnicity reported by individuals in the Gateways Registry is summarized by role in Table 3. Analysis showed there was the least diversity in center-based administrator and teacher positions and the greatest diversity in family child care settings.

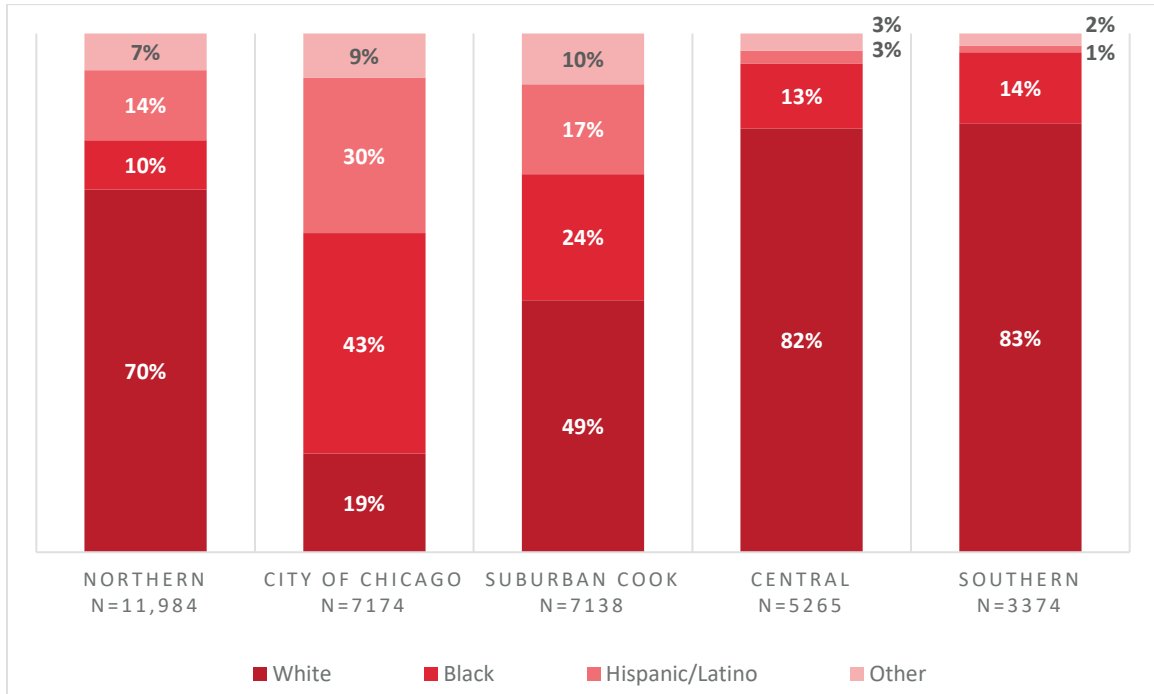
TABLE 3 | RACE/ETHNICITY BY ROLE IN LICENSED CENTERS AND FAMILY CHILD CARE

Race/Ethnicity	Licensed Center			Licensed Family Child Care	
	Administrator (N=5456)	Teacher (N=21,231)	Assistant Teacher (N=13,704)	Owner / Provider (N=6883)	Assistant (N=3644)
White	64.1%	62.6%	51.1%	42.5%	32.0%
Black	22.3%	19.3%	21.5%	37.9%	34.1%
Hispanic/Latino	8.2%	11.3%	20.2%	16.7%	30.4%
Asian	3.3%	3.6%	3.4%	1.1%	1.3%
Multi-Racial	0.8%	1.4%	1.8%	0.6%	1.3%
Other	1.3%	1.8%	2.0%	1.2%	0.9%

What are the regional differences in race/ethnicity?

There were notable regional differences in the race/ethnicity of teaching staff within licensed child care centers as shown in Figure 1. The City of Chicago had the greatest diversity: 43% of their teaching staff were Black, 30% Hispanic/Latino, and 19% Caucasian. In suburban Cook County, 41% of teachers reported they were Black or Hispanic/Latino. Central and Southern Illinois had the least diversity, as over 80% of the teaching staff reported they were White. This distribution generally reflected the population of Illinois as a whole. Data from the U.S. Census show that 43% of adults in Cook County and 70% in Northern Illinois identify as White, Non-Hispanic. In Central and Southern Illinois, the percentage of White, Non-Hispanic adults is 84% and 83%, respectively.¹¹

FIGURE 1 | REGIONAL DIFFERENCES IN RACE/ETHNICITY OF LICENSED CENTER TEACHING STAFF



LANGUAGE

Practitioners in licensed center-based and family child care settings reported speaking over 20 different languages, with English (90%) and Spanish (7%) being the most common. Some of the other languages spoken included Polish, Chinese, Russian, Urdu, Arabic, and Hindi.

As with the race/ethnicity data, family child care providers had the greatest linguistic diversity with center-based administrators having the least, as shown in Table 4. Regional differences in the percentage of practitioners that reported speaking a primary language other than English are displayed in Table 5.

TABLE 4 | PRIMARY LANGUAGE SPOKEN BY ROLE AND SETTING

Primary Language	Licensed Center			Licensed Family Child Care	
	Administrator (N=5575)	Teacher (N=21,766)	Assistant Teacher (N=14,208)	Owner / Provider (N=6980)	Assistant (N=3734)
English	94.7%	91.6%	88.3%	85.9%	76.9%
Spanish	2.8%	4.5%	7.6%	12.7%	21.5%
Other	2.5%	3.9%	4.1%	1.4%	1.6%

TABLE 5 | PERCENT OF PRACTITIONERS REPORTING PRIMARY LANGUAGE OTHER THAN ENGLISH

Position	Northern	City of Chicago	Suburban Cook	Central	Southern
Licensed Center Administrator (N=1898, 1272, 1217, 658, 530)	3.8%	10.5%	6.8%	0.5%	0.4%
Licensed Center Teacher (N=8026, 3989, 4620, 3119, 2012)	6.7%	15.9%	12.9%	1.5%	0.4%
Licensed Center Assistant Teacher (N=4347, 3387, 2755, 2281, 1438)	10.1%	19.4%	17.6%	2.9%	1.0%
Licensed Family Child Care Owner/Provider (N=2150, 1906, 977, 1293, 654)	16.2%	22.0%	21.6%	0.3%	0.3%
Licensed Family Child Care Assistant (N=1129, 1264, 614, 412, 316)	22.0%	33.6%	29.2%	1.7%	0.6%

BILINGUALISM IN CENTER-BASED AND HOME-BASED SETTINGS

There are a significant number of English language learner (ELL) children in Illinois. According to data from the Illinois State Board of Education, there has been a 32% increase in the number of ELL students served in bilingual education programs from the 2003-2004 school year to 2013-2014.¹² While the City of Chicago remained fairly constant in the number of ELL students served during those two time points, the number of students served in the Chicago Suburbs increased by 53% and the rest of Illinois increased by 109%.

As early childhood programs include higher proportions of English language learners, it is critical that educators in those programs can meet their needs. Illinois was the first state to require that public school-funded preschool programs provide a bilingual education for identified English language learners. With this mandate came a rule that teachers in these programs have an endorsement in bilingual education or English as a second language, but the number of teachers with these endorsements has been limited. It is important to understand how bilingual early childhood education professionals can be part of the pipeline and further supported to earn these endorsements and best serve English language learners.

For purposes of this report, records in the dataset were coded as bilingual if the individual reported speaking English and another language. Many of these professionals reported that English was their primary language, but they also spoke a secondary language, as shown in Figure 2. For example, while one quarter of licensed center assistant teachers reported being bilingual, 52% of those reported that English was their primary language. Regional analysis of bilingual professionals followed an expected pattern based on the overall population of Illinois;

most individuals who spoke English and another were language located in the northern part of the state.

FIGURE 2 | PERCENT OF BILINGUAL PROFESSIONALS BY PRIMARY LANGUAGE SPOKEN

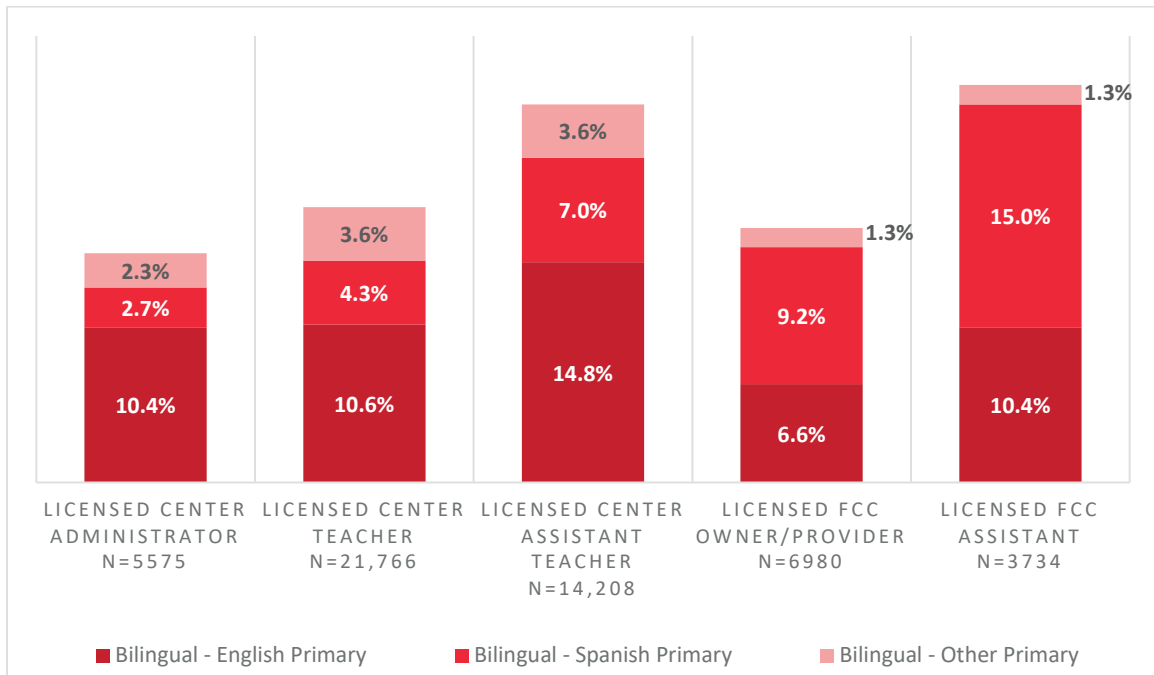
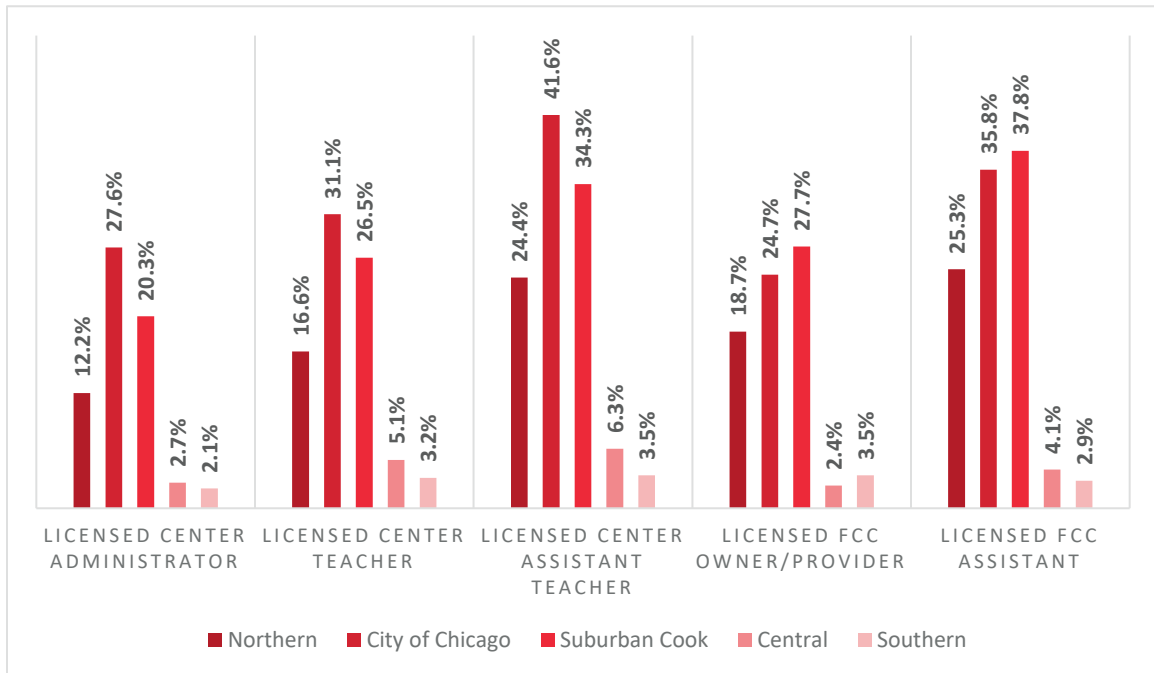


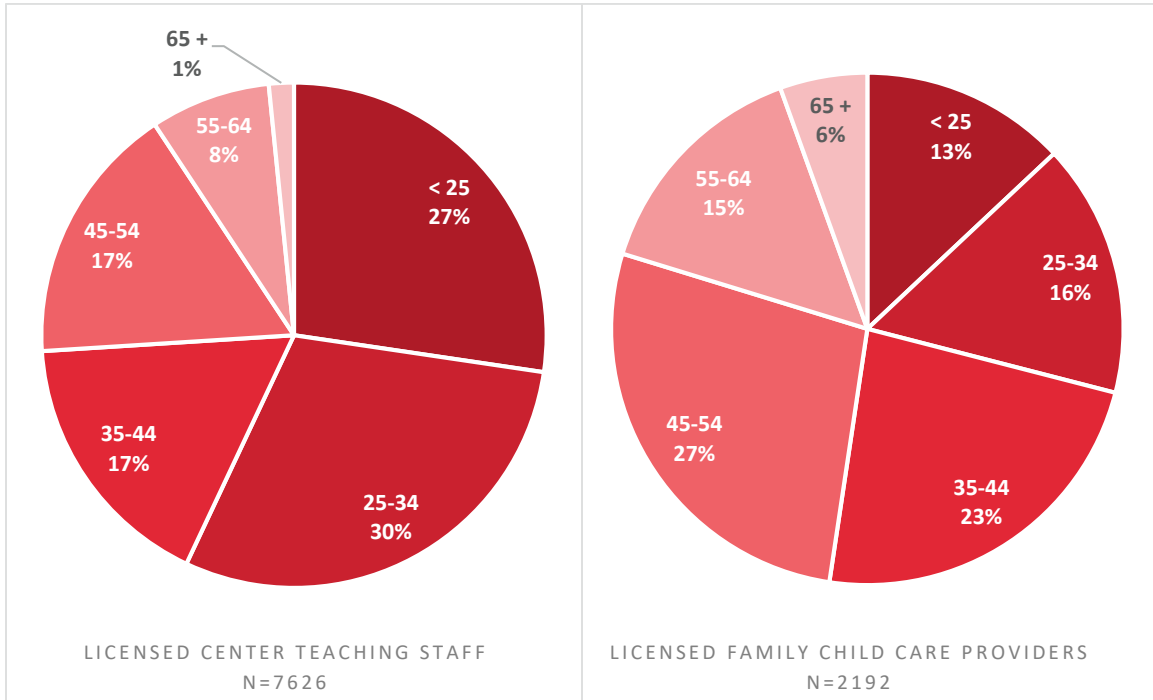
FIGURE 3 | PERCENT OF BILINGUAL PROFESSIONALS BY REGION



Note: See Table 5 on the previous page for a listing of the sizes of each population.

Additional analysis, shown in Figure 4, revealed that in licensed child care centers, over half of the bilingual teaching staff were under the age of 35, and just 10% of the bilingual staff were age 55 or older.¹³ In licensed family child care homes, half of the bilingual providers are age 35-54. This is generally consistent with the age distribution of teaching staff overall.

FIGURE 4 | BILINGUAL PROFESSIONALS IN LICENSED SETTINGS BY AGE COHORT

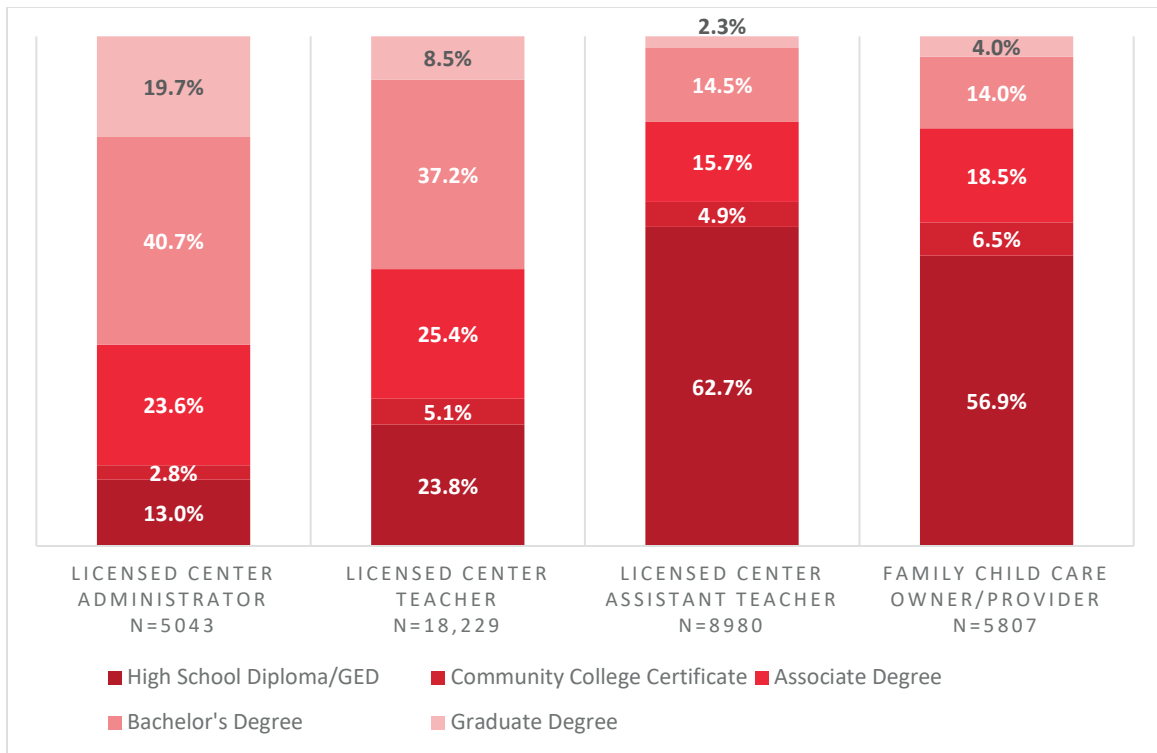


Education

The educational qualifications of early childhood education professionals in Illinois tend to be higher than the national averages, which can in part be attributed to Illinois licensing regulations having higher staff qualification requirements than many other states.¹⁴ Even so, we know that within Illinois there is a great deal of variability in qualifications based on the setting and funding source(s) of the early childhood education program. For example, the requirements to be a licensed family child care provider and to work in a licensed child care center are lower than those required to work in a classroom with Head Start or Preschool for All funding.

The 2017 Gateways Registry data indicated that center-based administrators and teachers especially had a solid educational foundation with degrees typically higher than what were required by licensing. Over 82% of licensed center administrators and close to three-quarters of licensed center teachers had completed a college degree. Figure 5 shows the highest level of education completed by setting and role in licensed centers and family child care homes.

FIGURE 5 | HIGHEST LEVEL OF EDUCATION BY SETTING AND ROLE

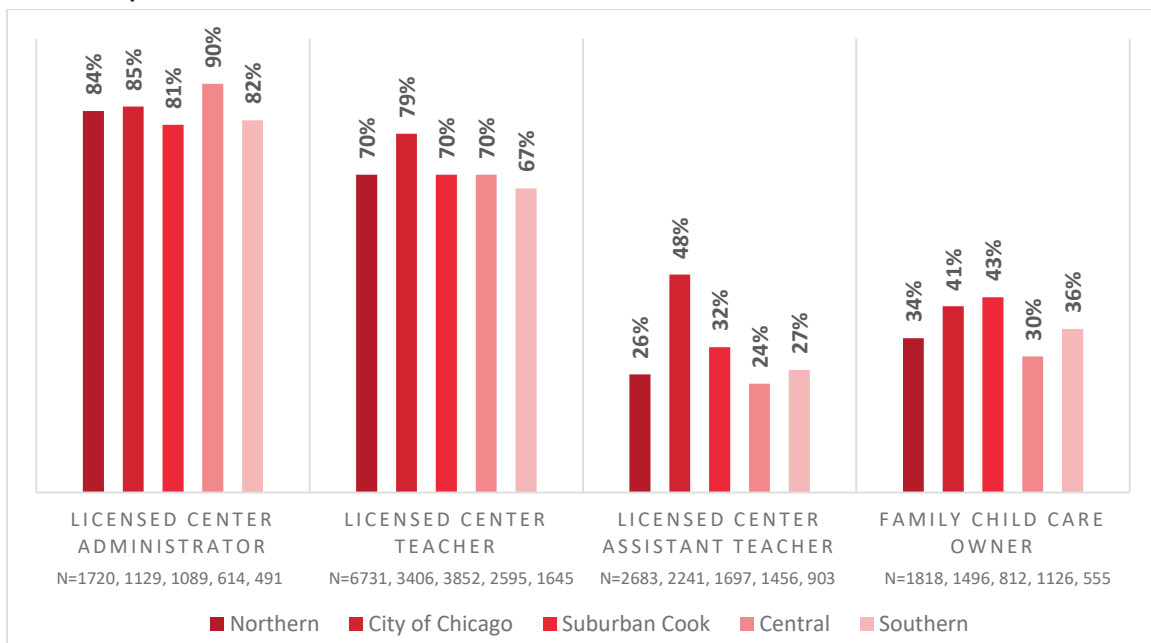


COMPLETION OF COLLEGE DEGREES

While the licensed child care workforce in Illinois overall has a higher level of educational qualifications than in many states, an important question to ask is whether there are regional differences within Illinois. Analysis of the 2017 data revealed that while there were some regional differences to be found, they were not necessarily significant differences.

One remarkable exception was the percentage of licensed center teachers and assistant teachers in the City of Chicago with completed college degrees. As displayed in Figure 6, the City of Chicago percentages were notably higher compared to other regions. This may be attributed to the fact that more licensed centers in Chicago blend and braid sources of funding (such as Head Start and Preschool for All), which come with higher educational requirements for teaching staff. Analysis of program-level data from the statewide Illinois Child Care Resource and Referral System database showed that 35% of licensed centers in Chicago report having Head Start and/or Preschool for All funding, compared to 19% of centers in the rest of the state.¹⁵

FIGURE 6 | COMPLETION OF COLLEGE DEGREE BY REGION



Are we losing our most qualified professionals to retirement?

In 2005, a report by Herzenberg, Price, and Bradley called *Losing Ground in Early Childhood Education: Declining Workforce Qualifications in an Expanding Industry, 1979-2004* explored the relationship between educational attainment and age cohort.¹⁶ One of the findings from their analysis was that during the period from 2000-2004, the most highly educated age cohort was in their mid-to-late 50s and younger workers entering the field were less educated. This raised

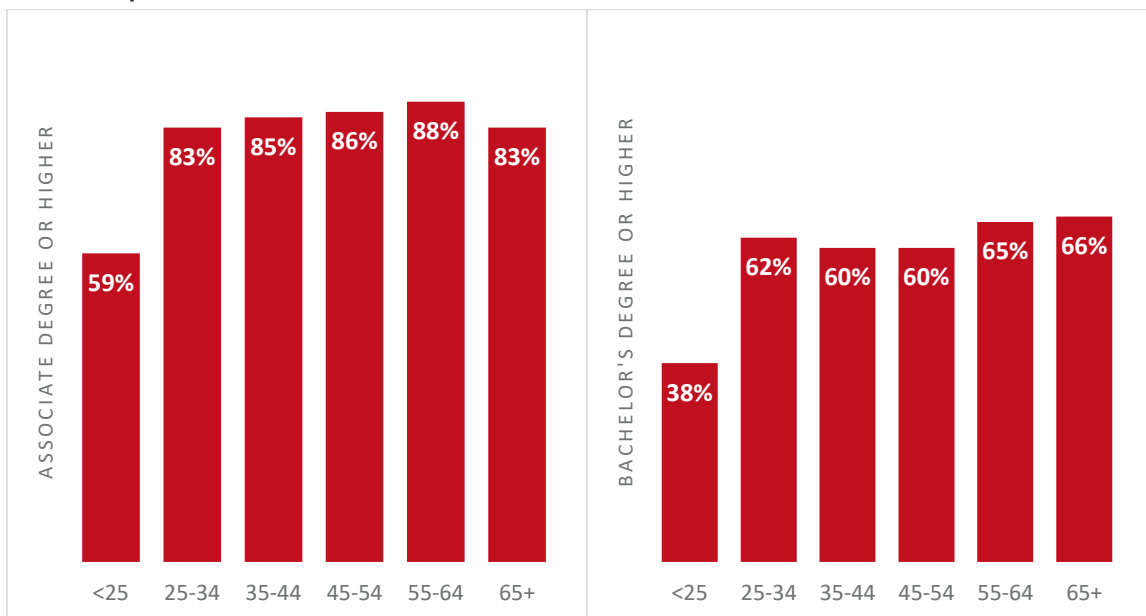
concerns about what would happen to the workforce as the most-educated generation retired over the next 10-15 years.

Analysis of Illinois data on degree attainment by age cohorts revealed some significant differences. Figures 7-9 show the percentage of administrators, teachers, and assistant teachers in licensed center-based settings whose highest completed level of education was an associate degree or higher or a bachelor's degree or higher. For each of these roles, the proportions were compared across age categories and the statistically significant results are summarized in Tables 6.¹⁷

For center-based professionals, those younger than 25 had the lowest educational attainment and were significantly less likely to have a degree compared to all other age categories. With licensed center administrators, there were no other significant differences across age cohorts at the bachelor's degree or higher level. For those with at least an associate degree, the older administrators (age 55-64) were more likely to have attained that level of education than their younger counterparts (age 25-34). This finding offers some support to the Herzenberg, Price, and Bradley work.

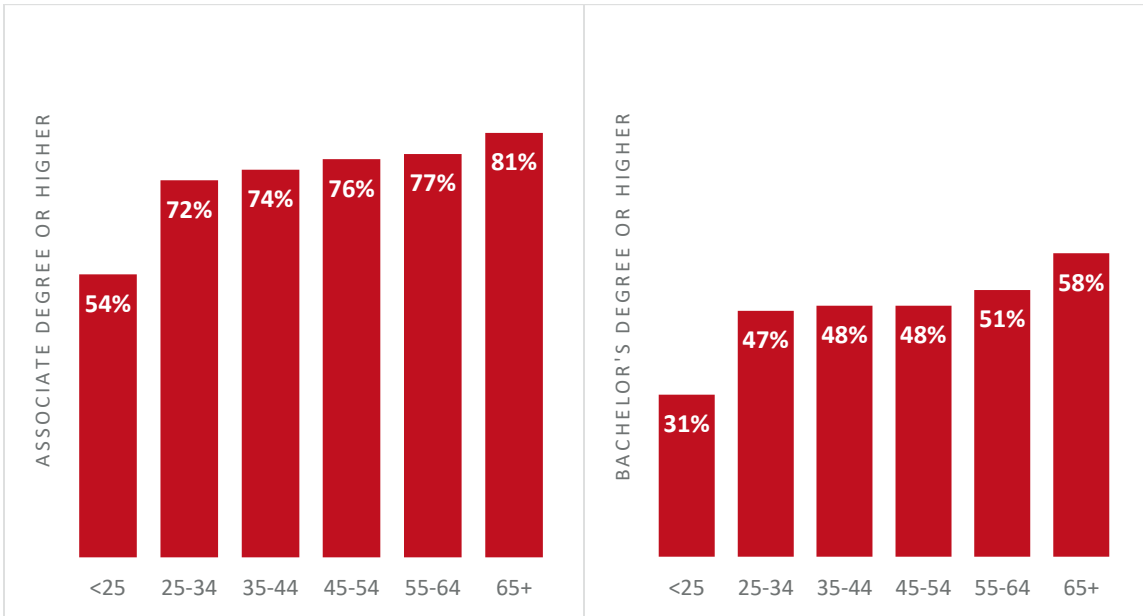
The data for licensed center teachers were more closely related to the findings of Herzenberg et al. Teachers age 65 and older were more likely to have at least a bachelor's degree compared to all other age groups, except 55-64. For assistant teachers, those aged 25-34 were less likely to have at least an associate degree compared to colleagues age 35-44 and 55-65; they were also less likely to have at least a bachelor's degree than those aged 45-54.

FIGURE 7 | LICENSED CENTER ADMINISTRATORS DEGREE ATTAINMENT BY AGE COHORT



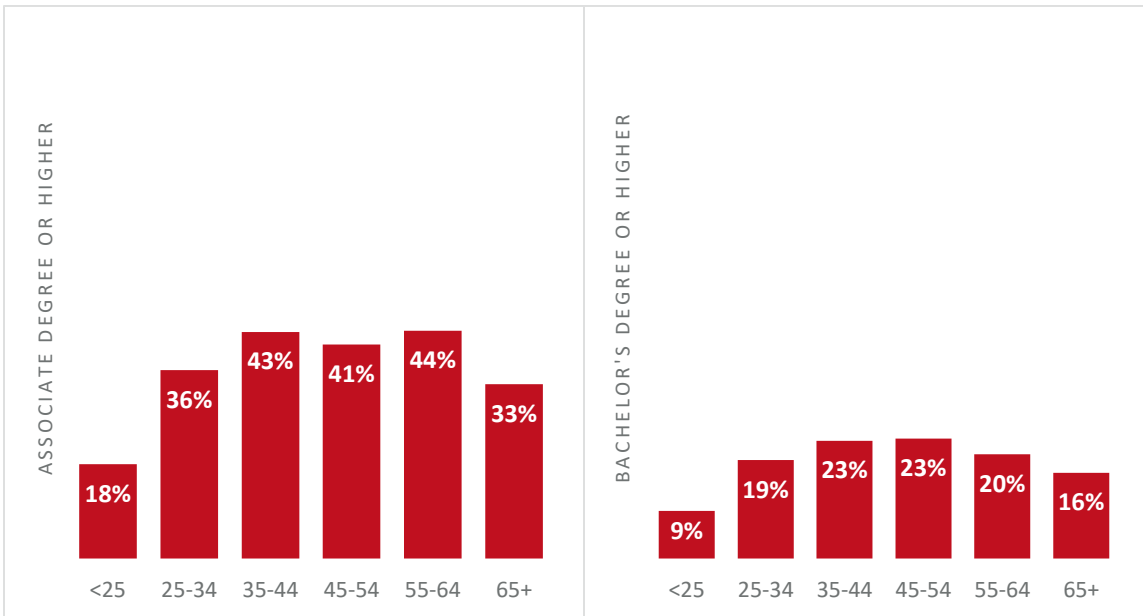
Note: Sample sizes are: <25=186; 25-34=1335; 35-44=1300; 45-54=1170; 55-64=820; 65+=232

FIGURE 8 | LICENSED CENTER TEACHERS DEGREE ATTAINMENT BY AGE COHORT



Note: Sample sizes are: <25=2683; 25-34=6051; 35-44=3675; 45-54=3388; 55-64=1996; 65+=436

FIGURE 9 | LICENSED CENTER ASSISTANT TEACHERS DEGREE ATTAINMENT BY AGE COHORT



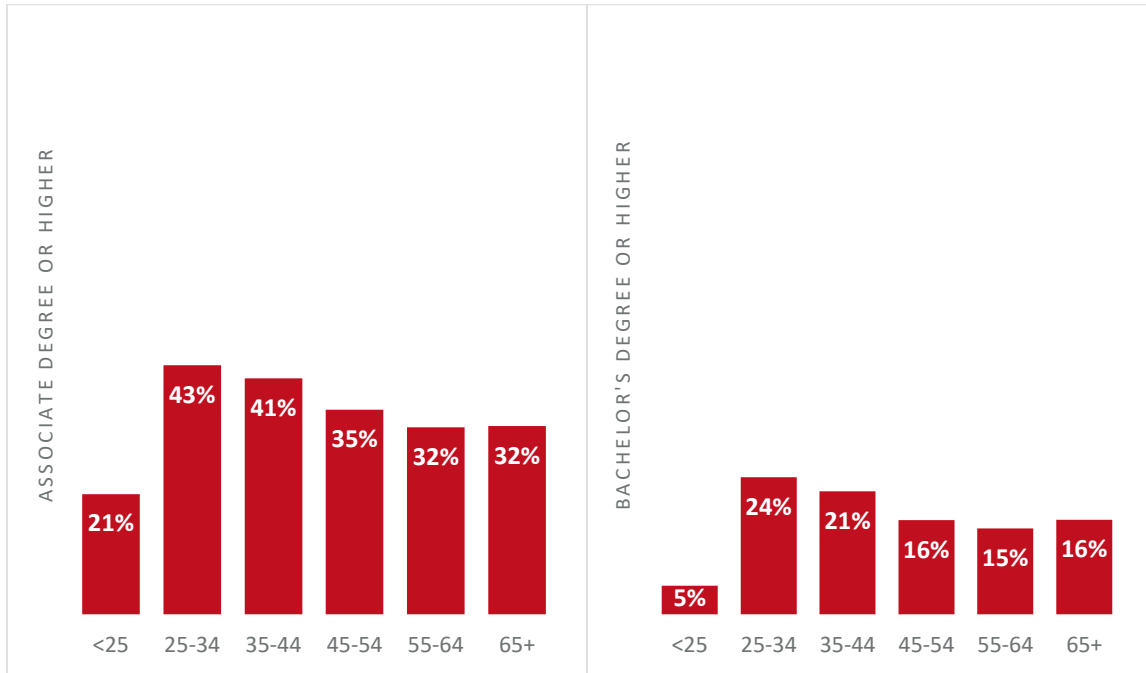
Note: Sample sizes are: <25=2948; 25-34=2452; 35-44=1300; 45-54=1291; 55-64=800; 65+=189

TABLE 6 | STATISTICALLY SIGNIFICANT RESULTS OF EDUCATIONAL ATTAINMENT BY AGE CATEGORY ANALYSIS: LICENSED CENTERS

Educational Attainment	Licensed Center Administrators	Licensed Center Teachers	Licensed Center Assistant Teachers
Associate Degree or Higher	<ul style="list-style-type: none"> • < 25 are less likely to have degree compared to all categories • 25-34 are less likely to have degree compared to 55-64 	<ul style="list-style-type: none"> • < 25 are less likely to have degree compared to all categories • 25-34 are less likely to have a degree than 45-54, 55-64, and 65+ 	<ul style="list-style-type: none"> • < 25 are less likely to have degree compared to all categories • 25-34 are less likely to have degree compared to 35-44 and 55-64
Bachelor's Degree or Higher	<ul style="list-style-type: none"> • < 25 are less likely to have degree compared to all categories 	<ul style="list-style-type: none"> • < 25 are less likely to have degree compared to all categories • 25-34 are less likely to have degree compared to 55-64 and 65+ • 65+ are more likely to have degree compared to all except 55-64 	<ul style="list-style-type: none"> • < 25 are less likely to have degree compared to all age categories • 25-34 are less likely to have degree than 45-54

Similar analysis was completed for licensed family child care providers, as shown in Figure 10. As summarized in Table 7, licensed family child care provider educational attainment data were shifted more toward younger age cohorts. Except for those younger than 25, the younger cohorts (25-34 and 45-44) were more likely to have at least an associate degree compared to all other age categories. They were also more likely to have a bachelor's degree or higher compared to all but those age 65 and older.

FIGURE 10 | LICENSED FAMILY CHILD CARE PROVIDERS DEGREE ATTAINMENT BY AGE COHORT



Note: Sample sizes are: <25=82; 25-34=674; 35-44=1597; 45-54=1848; 55-64=1202; 65+=404

TABLE 7 | STATISTICALLY SIGNIFICANT RESULTS OF EDUCATIONAL ATTAINMENT BY AGE CATEGORY ANALYSIS: LICENSED FAMILY CHILD CARE

Educational Attainment	Licensed Family Child Care Owners/Providers
Associate Degree or Higher	<ul style="list-style-type: none"> 25-34 and 35-44 are more likely to have degree compared to all other age categories
Bachelor's Degree or Higher	<ul style="list-style-type: none"> 25-34 and 35-44 are more likely to have degree compared to all other age categories except for 65+

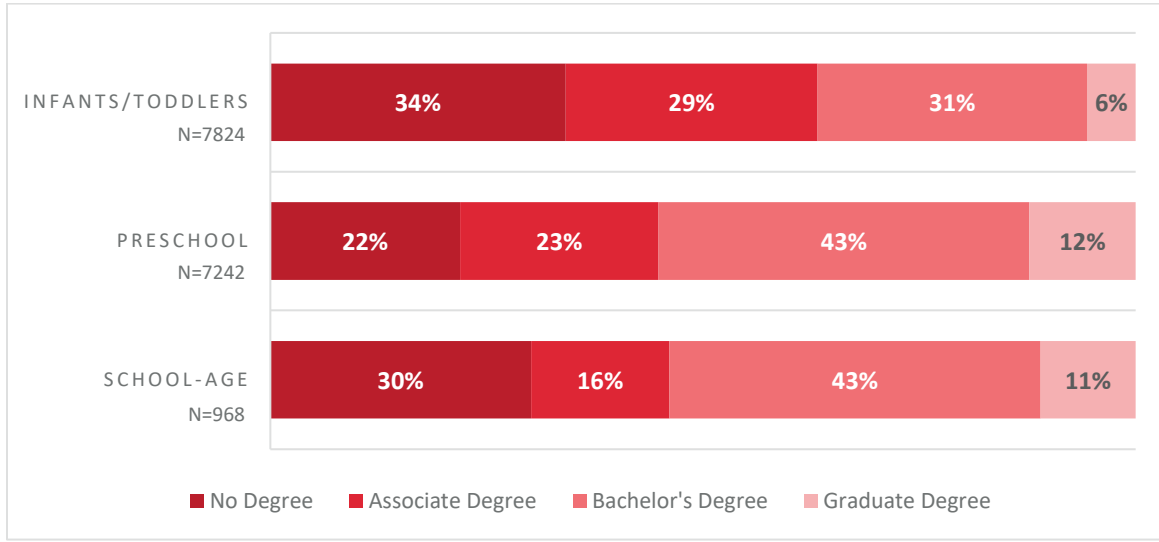
These findings suggest that, generally speaking, older professionals in licensed centers are more likely to have degrees than their younger counterparts, while the opposite is true in licensed family child care homes.

Do teachers that serve different ages of children have the similar levels of education?

The National Survey of Early Care and Education (NSECE) has provided a wealth of nationally-representative data about the ECE workforce. The 2013 report titled *Number and Characteristics of Early Care and Education (ECE) Teachers and Caregivers: Initial Findings from the National Survey of Early Care and Education (NSECE)* revealed that center-based teachers working with infants and toddlers had lower levels of education than those working with preschool-age children. Only 36% of teachers serving 0-3 year-olds had an associate degree or

higher compared to 62% of their colleagues serving 3-5 year-olds. Data from the *National Workforce Registry Alliance 2015 Dataset Report* supported this finding and showed that 43% of teachers of infants and toddlers have an associate degree or higher compared to 68% of those teaching preschoolers. Illinois data, shown in Figure 11, revealed a similar gap, though not as large as what was seen nationally; 66% of infant/toddler teachers completed a college degree compared to 78% of preschool teachers.

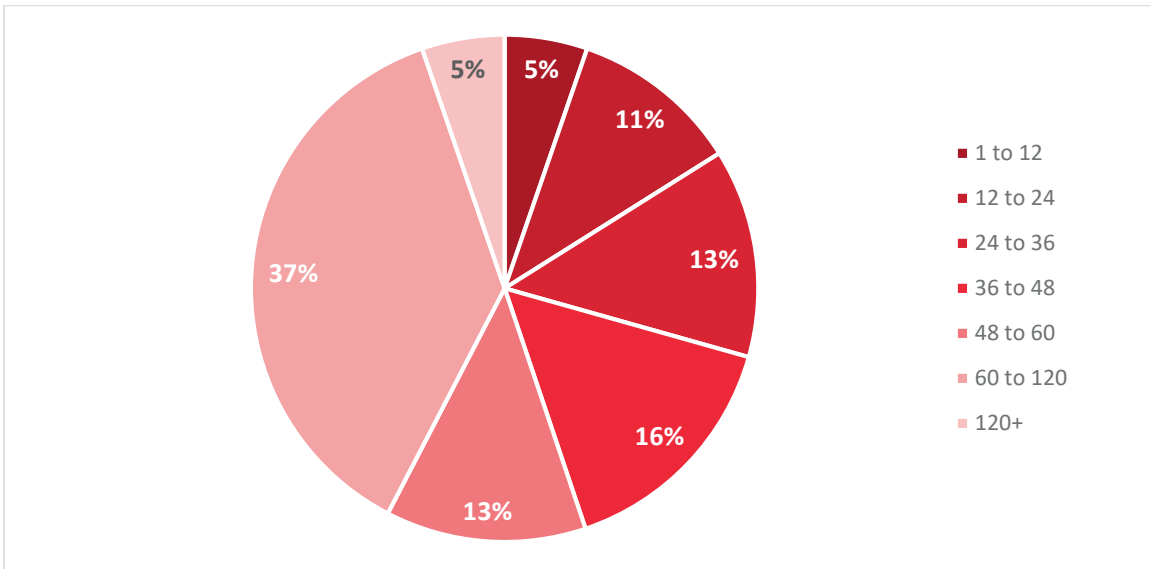
FIGURE 11 | EDUCATION OF LICENSED CENTER TEACHERS BY AGE OF CHILDREN SERVED



IMPACT OF SOME COLLEGE, NO DEGREE

Data from the United States Census Bureau show that 23% of adults have earned some college credit, but have not completed a degree.¹⁸ The Gateways Registry also tracks data on the number of early childhood educators who have earned some college credit but do not have a degree. In the 2017 Gateways Registry dataset there were 4,336 teachers in licensed child care centers whose highest completed degree was a high school diploma or GED. Of those teachers, 31% had taken some college coursework, with credit hours ranging from 1 to 205 and an average of 56. In fact, more than 42% of those teachers with “some college” had amassed 60 credit hours or more – the equivalent of an associate degree. Figure 12 shows the distribution of college credits earned by licensed center teachers who have some college coursework, but no completed degree.

FIGURE 12 | TOTAL COLLEGE CREDITS EARNED BY LICENSED CENTER TEACHERS WITH “SOME COLLEGE, NO DEGREE” (N=1345)



We then examined records for all participants that worked in licensed child care settings and had completed some college coursework but not a degree, and saw a similar profile with regard to the number of credit hours earned, as shown in Figure 13. This specific population was made up of younger professionals, with an average age of 36, and completion of a college degree would lead to a significant increase in earning potential. As shown in Figure 14, early childhood educators with a bachelor’s degree would earn 21% more than those with a high school diploma over 30 years (\$987,000 compared to \$814,000). For those with some college coursework, completion of a bachelor’s degree would mean a 17% increase in earnings over 30 years compared to their current wages. Given this potential, great importance should be given to working with this population of the workforce to assist them in completing college degrees through successful research-based models, such as cohorts, articulation pathways, and new innovations being developed within higher education.

FIGURE 13 | TOTAL COLLEGE CREDITS EARNED BY LICENSED CENTER STAFF AND FAMILY CHILD CARE PROVIDERS WITH “SOME COLLEGE, NO DEGREE” BY AGE COHORT

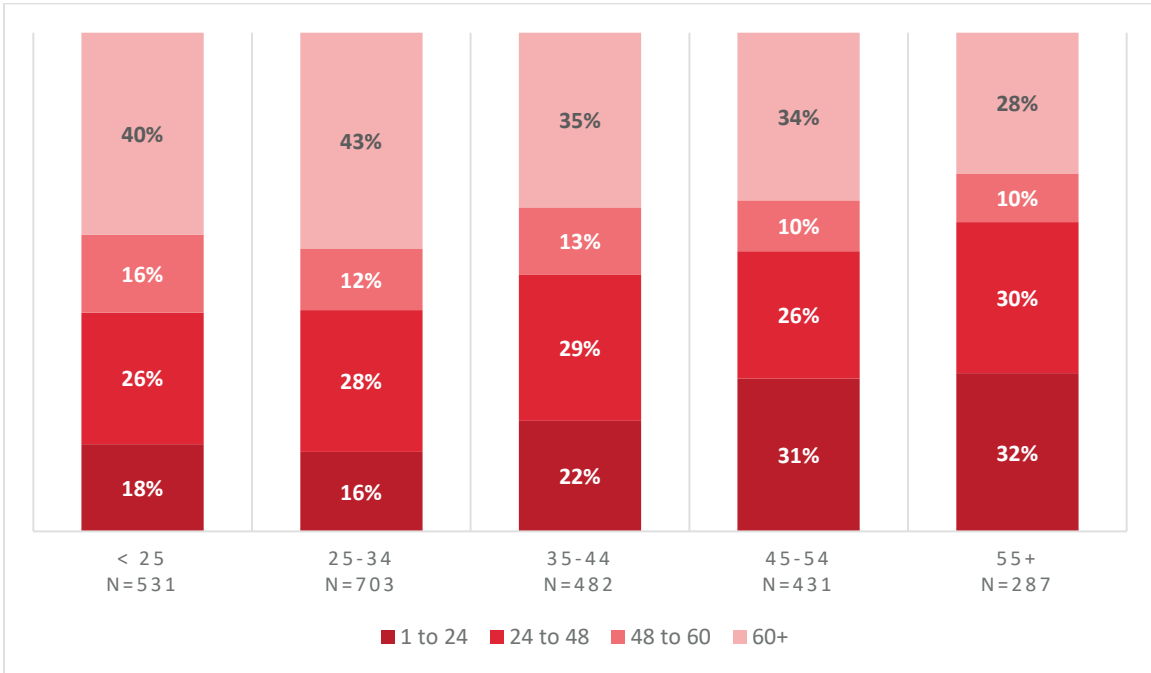
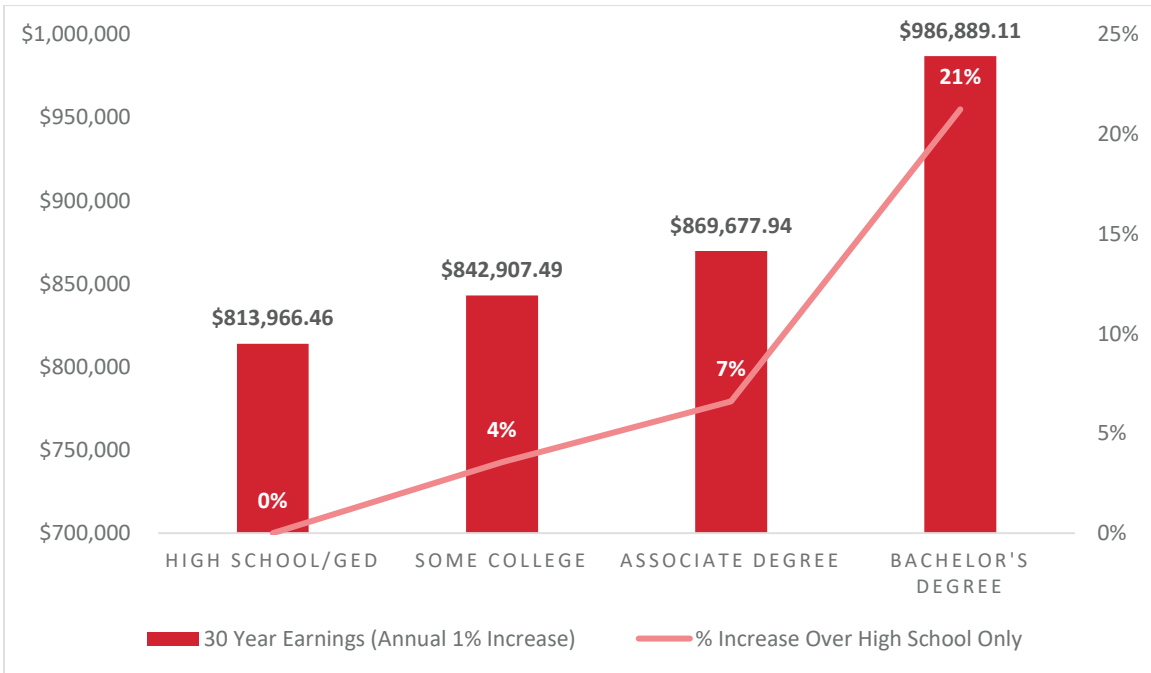


FIGURE 14 | 30-YEAR EARNING POTENTIAL FOR LICENSED CENTER TEACHERS BY EDUCATION



Training

Ongoing professional development is an important aspect of being a professional in any field, and early childhood education is no exception. According to the National Association for the Education of Young Children (NAEYC), “Professional development experiences must be evidence based; structured to promote linkages between research and practice; and responsive to each learner’s background, experiences, and the current context of his/her role.”¹⁹ In Illinois, early childhood educators working in licensed settings are required by the Department of Children and Family Services (DCFS) to take at least 15 contact hours of training per year.

The Gateways Registry documents, in the form of a Professional Development Record (PDR), the college coursework and training that professionals complete. College coursework is recorded in the system if it is verified based on receipt of an official college transcript. The training records include both verified and self-reported training. A verified record indicates not only that the individual completed the training, but also that the training itself went through the quality assurance process required for it to be considered a Registry-approved training. In March 2017, there were 123 Registry “authorized entities” – organizations that offer professional development to early childhood educators and have been through a quality assurance review to ensure their trainer and training processes meet the Gateways Registry standards. Those organizations offered more than 4,380 Registry-approved training events during calendar year 2016. In addition, individual Registry-approved trainers (those not already working with a training organization) offered another 181 trainings, making more than 4,500 Registry-approved trainings available for early childhood educators in 2016.

For purposes of the following analyses, we explored only the verified college coursework and verified training records in the Gateways Registry. College credit hours were converted into contact hours by using the formula that 1 semester hour is equivalent to 15 contact hours.

What is the average number of contact hours taken in a year?

In order to examine the number of contact hours that early childhood educators took in 2016, we first limited the dataset to only those individuals who had a valid employment record with a start date before January 1, 2016.²⁰ The reason for this limitation was to ensure that an individual had likely been employed for the full year and as such, had a more complete training record. While this may have caused some under-representation of the data, it provided a more accurate basis for analysis.

Table 8 shows results of the analysis. On average, professionals in licensed settings took between 10 and 15 hours of training that was recorded by the Gateways Registry, or between 15 and 19 hours if converted college coursework was included.

TABLE 8 | 2016 TRAINING CONTACT HOURS RECORDED AND VERIFIED BY THE REGISTRY

Role	Contact Hours (Including College Coursework)		Contact Hours (Training Only)	
	Mean	Median	Mean	Median
Licensed Center Administrator	18.8	8.0	12.9	8.0
Licensed Center Teacher	16.6	7.5	10.3	7.0
Licensed Center Assistant Teacher	14.5	6.0	10.2	6.0
Licensed Family Child Care Owner/Provider	18.9	9.0	14.6	9.0
Licensed Family Child Care Assistant	16.0	8.5	14.0	8.5

How much of the DCFS-required training being taken is Registry-approved and verified?

As seen in Table 8, not all 15 hours of training required by DCFS came from Registry-approved and verified training. DCFS licensing representatives utilize the Gateways Registry tools, including the Professional Development Record (PDR), to verify the training contact hours professionals have completed; however, there is no requirement for how many of those hours must be Registry-approved.

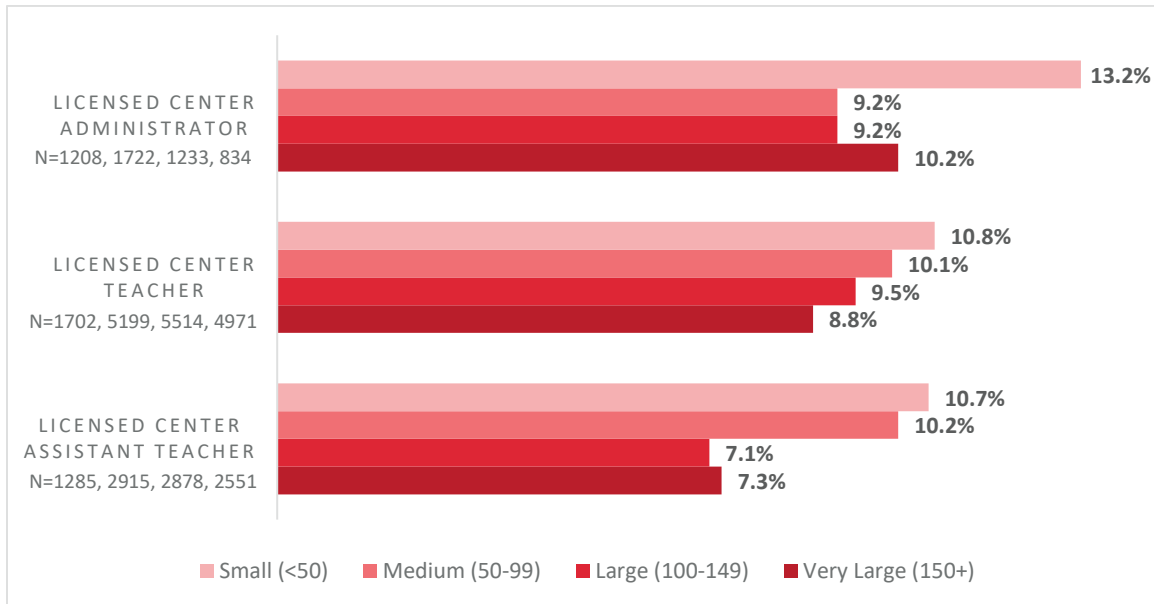
Even though there is not a requirement, the analysis revealed that the vast majority of early childhood educators earned at least half of their training hours from Gateways Registry-approved sources. Table 9 displays the findings for each position in licensed settings. As an example, of the 17,434 licensed center teachers employed at the same program during 2016, 90.4% took at least some Registry-approved training. The mean percentage of the 15 hours required by DCFS that were from Registry-approved training was 55% (or 8.25 contact hours).

TABLE 9 | PROFESSIONALS WITH 2016 TRAINING CONTACT HOURS VERIFIED BY THE REGISTRY

	Number w/ Same Employer in 2016	Percent with Verified Training in Registry	Mean Percent of DCFS Hours in Registry
Licensed Center Administrator	5036	89.7%	63.3%
Licensed Center Teacher	17,434	90.4%	55.0%
Licensed Center Assistant Teacher	9658	91.5%	53.3%
Licensed Family Child Care Owner/Provider	6810	94.9%	63.3%
Licensed Family Child Care Assistant	3123	96.9%	63.3%

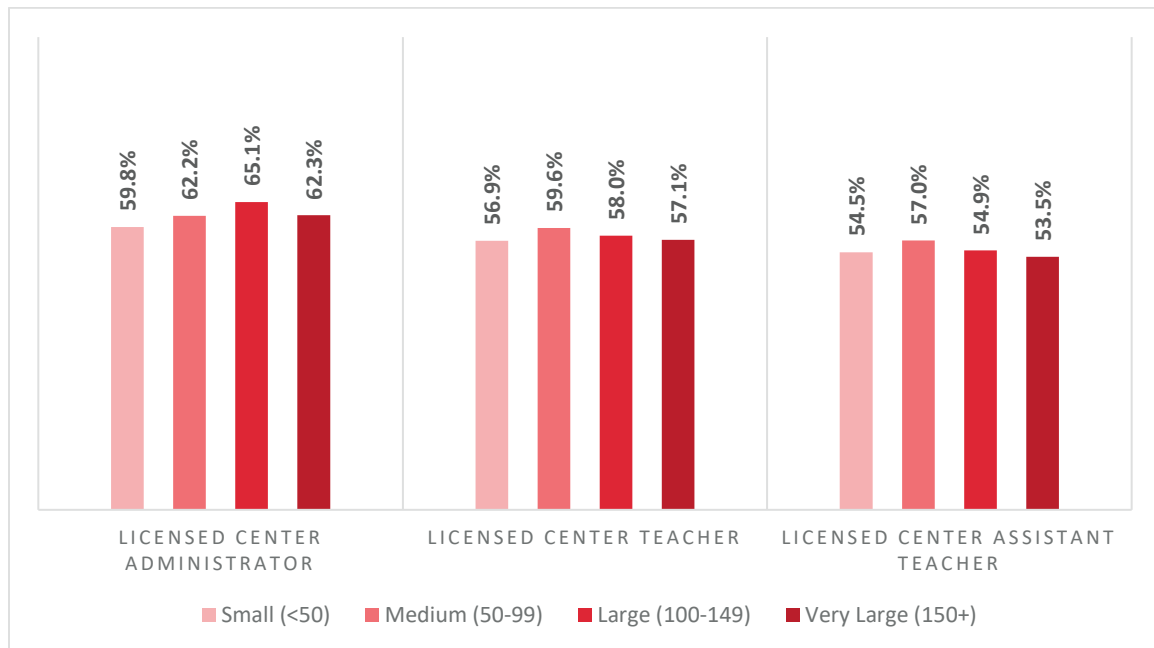
In addition to utilizing the sources of Registry-approved training available, early childhood programs may bring trainers to their center to offer in-service training, or the director may provide training for the staff. In order to determine whether there was a difference in Registry-approved training utilization based on the size of the center, we first looked to see how many staff did not have any training hours verified by the Registry in 2016. This means that they would have received all 15 hours of training from sources that had not gone through the Registry’s quality assurance process. The results showed that there were only slight differences, and smaller centers tended to have higher percentages of staff who had no verified hours in the Registry when compared to staff in larger programs.

FIGURE 15 | LICENSED CENTER STAFF WITHOUT VERIFIED TRAINING IN THE REGISTRY BY CENTER SIZE (BASED ON TOTAL LICENSED CAPACITY)



Since staff utilization of Registry-approved trainings varied so little by center size, we proceeded to plot the mean percentage of DCFS-required training hours verified by the Registry across positions and center size. Licensed center administrators received 60-62% of their required training through Registry-approved sources. Teachers and assistant teachers received somewhat less approved training, but still received 57-60% and 54-57% of their required training hours through approved sources, respectively. Like the previous analysis, there was very little difference across center size. Regardless of the size of the program, staff earned more than half of the required training hours via Registry-approved training.

FIGURE 16 | MEAN PERCENT OF DCFS REQUIRED TRAINING VERIFIED BY REGISTRY BY POSITION AND CENTER SIZE



These findings provide a strong foundation from which to launch discussions about the quality of on-going professional development trainings early childhood educators receive.

Credentials

CHILD DEVELOPMENT ASSOCIATE (CDA) CREDENTIAL™

The Child Development Associate (CDA) Credential™ plays an important role in professional development for early childhood educators. It is based on a core set of competency standards and available for several settings, age-levels, and specializations, including center-based preschool, center-based infant/toddler, family child care home-based, and home visitors. All have bilingual specializations available.

While the CDA Credential is one option to demonstrate qualifications for a roles such as licensed center teachers and Head Start assistant teachers, there are relatively few professionals in the Gateways Registry that reported holding a valid CDA. In fact, just 3.5% of all licensed center teachers and 1.6% of licensed center assistant teachers had listed a valid CDA in the Registry. This may represent some level of underreporting, as those with higher educational qualifications could have chosen to simply not report the fact that they had earned a CDA. Characteristics of CDA holders in Illinois are shown in Figures 17-19.

FIGURE 17 | CDA TYPE BY ROLE

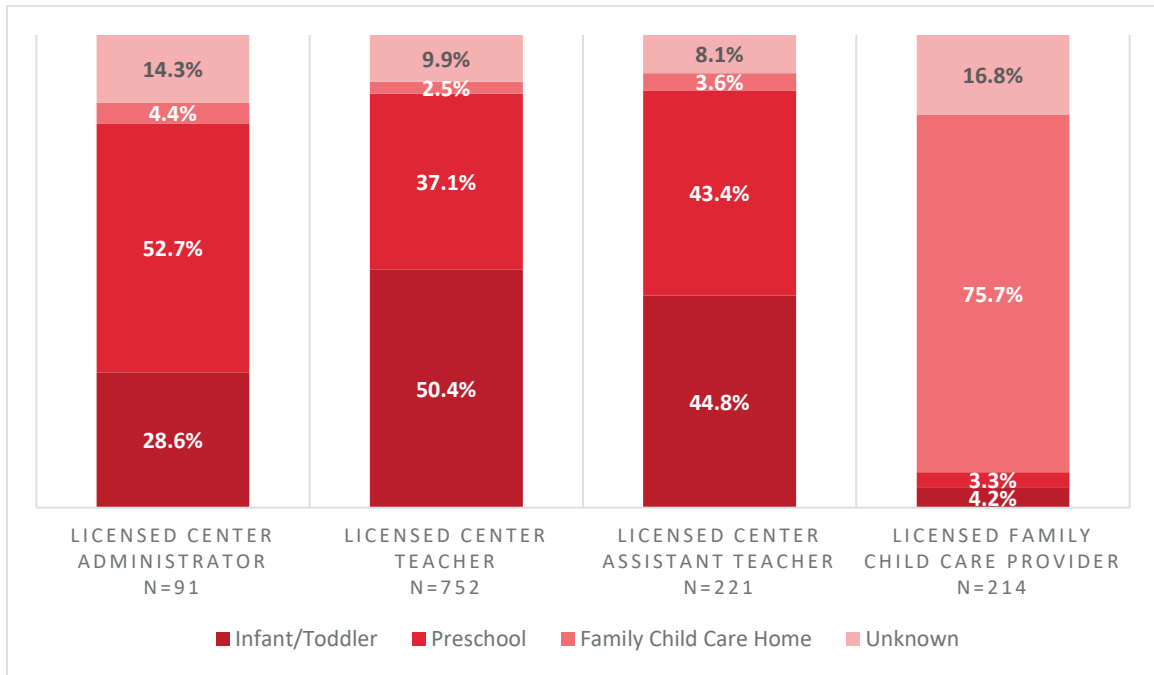


FIGURE 18 | RACE/ETHNICITY OF CDA HOLDERS

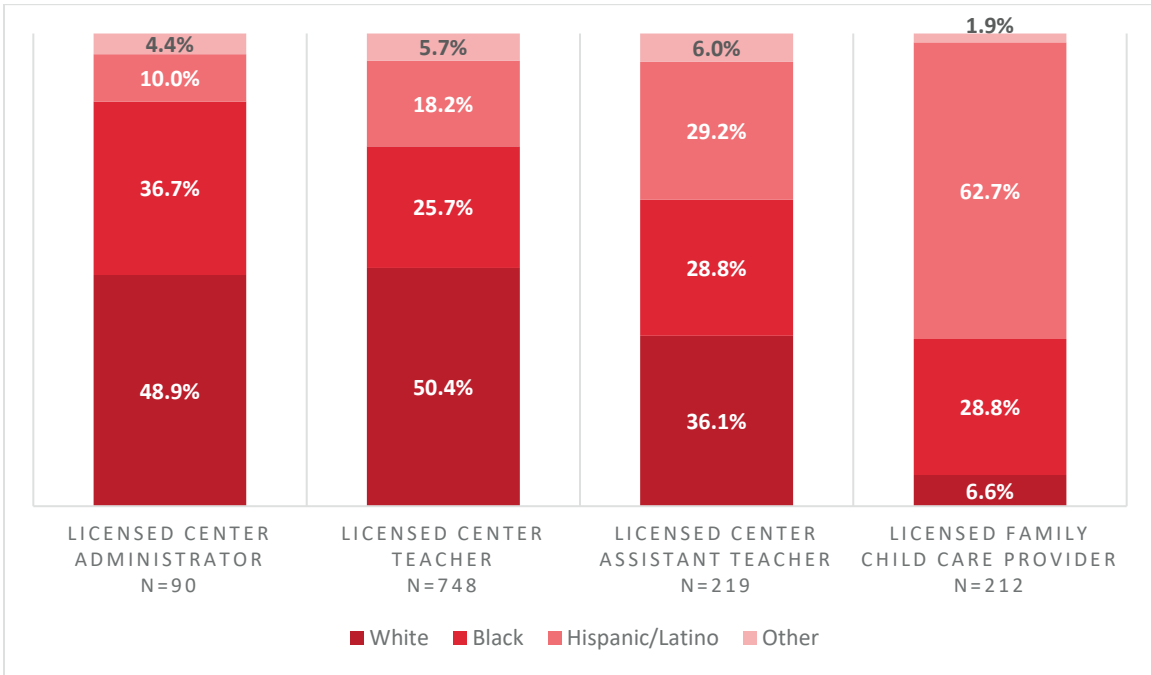
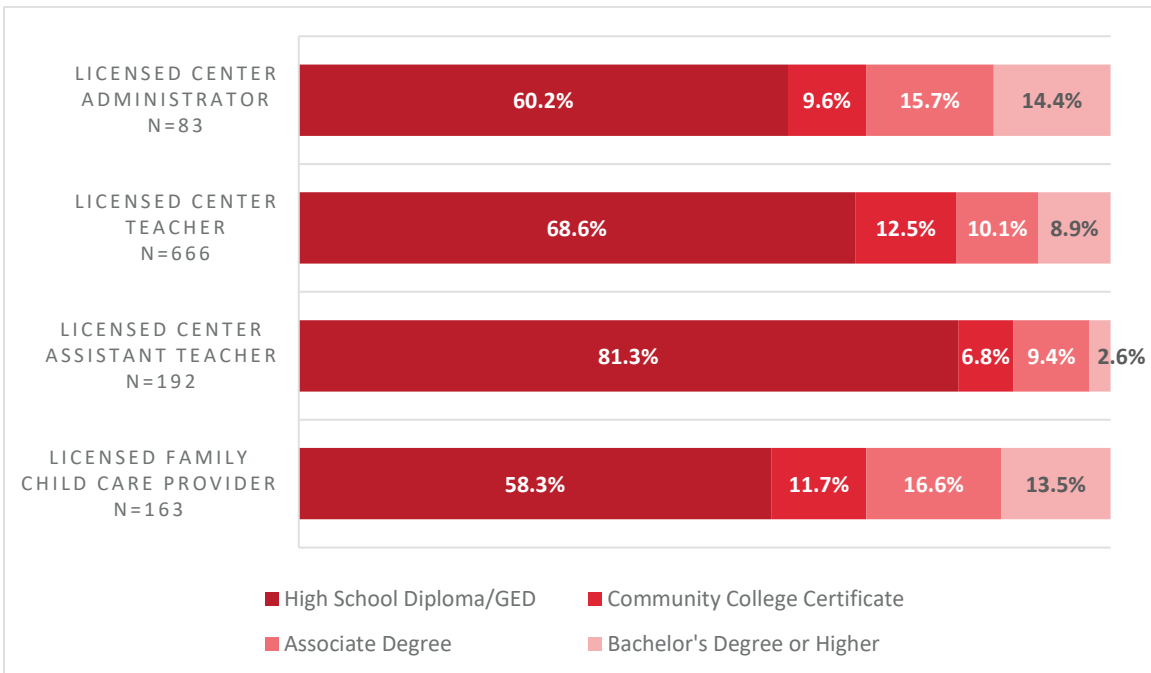


FIGURE 19 | HIGHEST COMPLETED DEGREES OF CDA HOLDERS



GATEWAYS TO OPPORTUNITY® CREDENTIALS

Gateways to Opportunity® Credentials are symbols of professional achievement that demonstrate a professional’s knowledge, skills, and experience in caring for and educating children and youth. These credentials are awarded and recognized by the Illinois Department of Human Services (IDHS) Bureau of Child Care and Development. Some credentials have been integrated within licensing regulations through the Department of Children and Family Services (DCFS) and also included within requirements for receiving state-funded Preschool for All dollars through the Illinois State Board of Education (ISBE). In addition, the ECE Credential, Infant Toddler Credential, and Illinois Director Credential are included within staff and director qualification standards in ExceleRate® Illinois, the state’s quality recognition and improvement system (QRIS).

There has been an exponential increase in the number of Gateways Credentials awarded over the last several years, as seen in Figure 20. In State Fiscal Year 2015 (FY15; 7/1/14-6/30/15), a total of 6,818 Gateways Credentials were awarded and 8,257 were awarded during FY16 (7/1/15-6/30/16). A major contributing factor to this increase was the Race to the Top – Early Learning Challenge Grant (RTT-ELC). ExceleRate, created through the RTT-ELC grant, represented the first time that staff and director qualification standards in the form of credentials were included within the state’s QRIS. In preparation for the increased demand for credentials, grant funds were also utilized to reduce the fees for Gateways Credentials, making a \$30 application fee an accessible option for staff in programs pursuing a circle of quality in ExceleRate. In addition, during this time period there were several policy changes made to remove barriers for first-time credential-earners. This resulted in being able to award many credentials that had previously been pending completion of additional requirements.

As a result of these policy decisions, there has also been dramatic increase in the proportion of the early childhood education workforce that holds a stackable credential (Figure 21). As of March 1, 2017, 26% of all licensed center directors and 23% of licensed center teachers held an ECE Credential. The data revealed there was also a greater percentage of licensed family child care providers who held an ECE Credential compared to two years prior.

GATEWAYS CREDENTIALS

ECE Credential

Infant Toddler Credential

Illinois Director Credential

Family Child Care Credential

**School-Age and Youth
Development Credential**

Technical Assistance Credential

Family Specialist Credential

FIGURE 20 | NUMBER OF GATEWAYS CREDENTIALS AWARDED BY STATE FISCAL YEAR

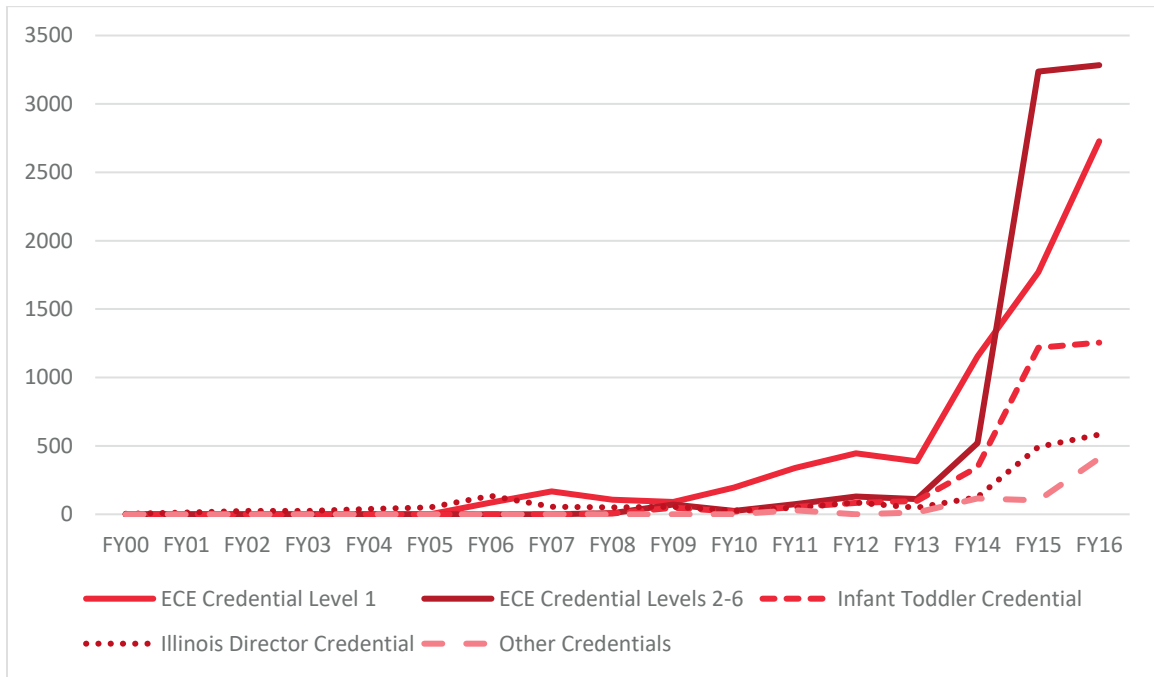
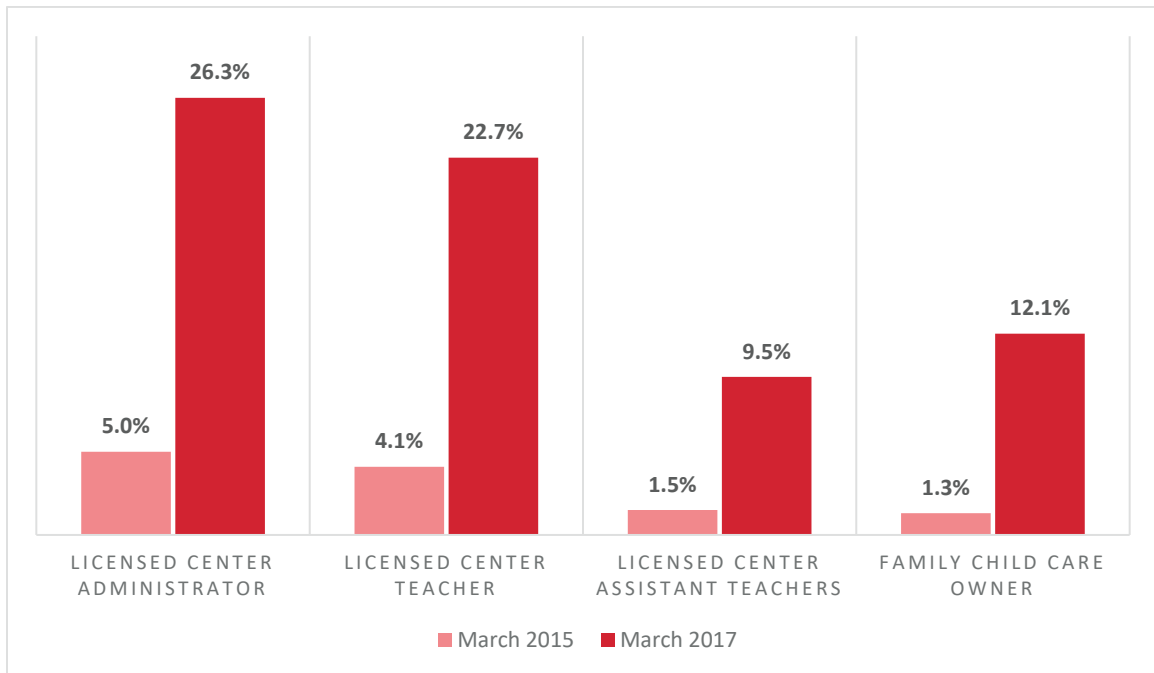


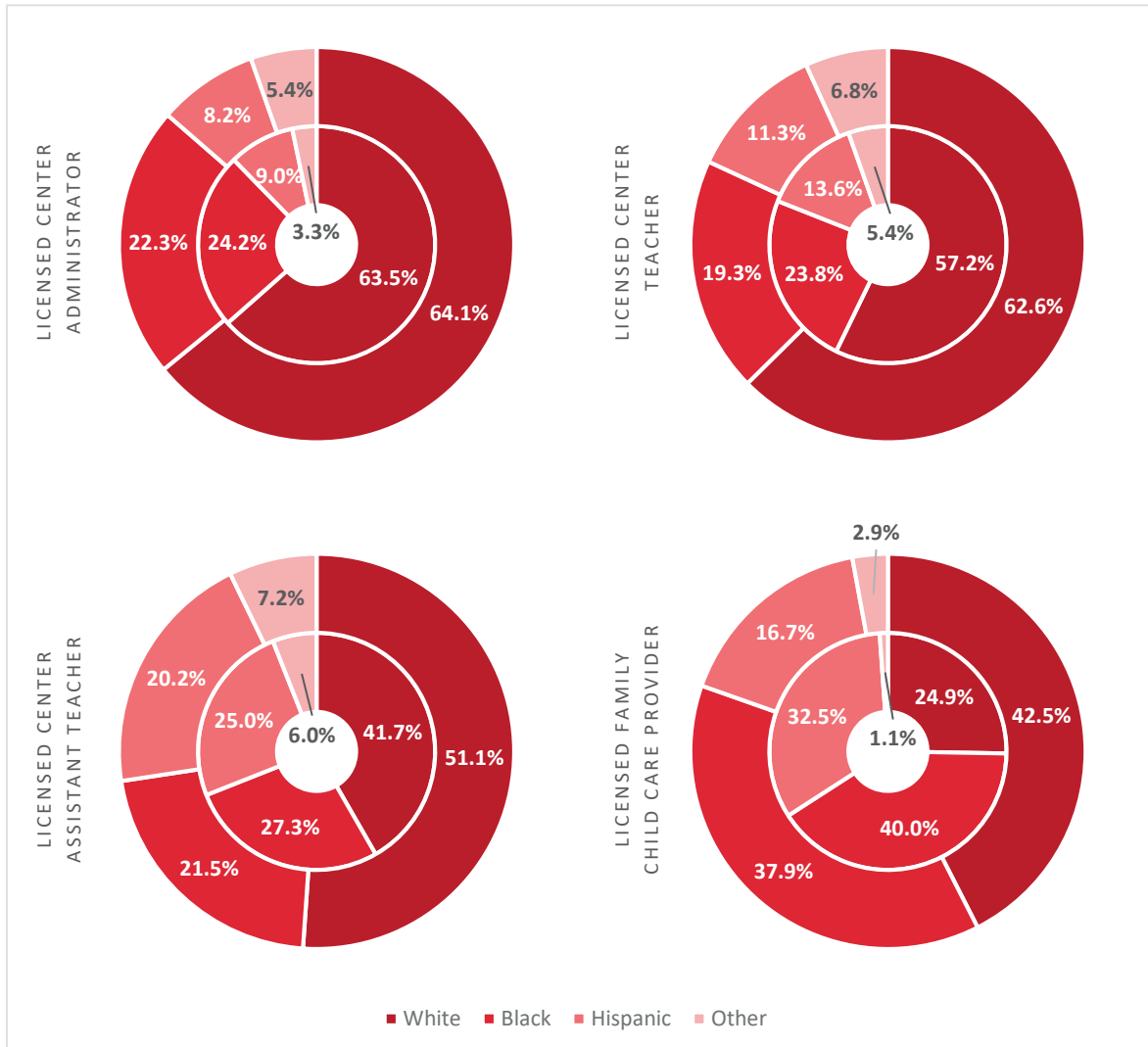
FIGURE 21 | PROFESSIONALS WITH GATEWAYS ECE CREDENTIALS – 2015 TO 2017 COMPARISON



What are the demographic characteristics of Gateways Credential holders?

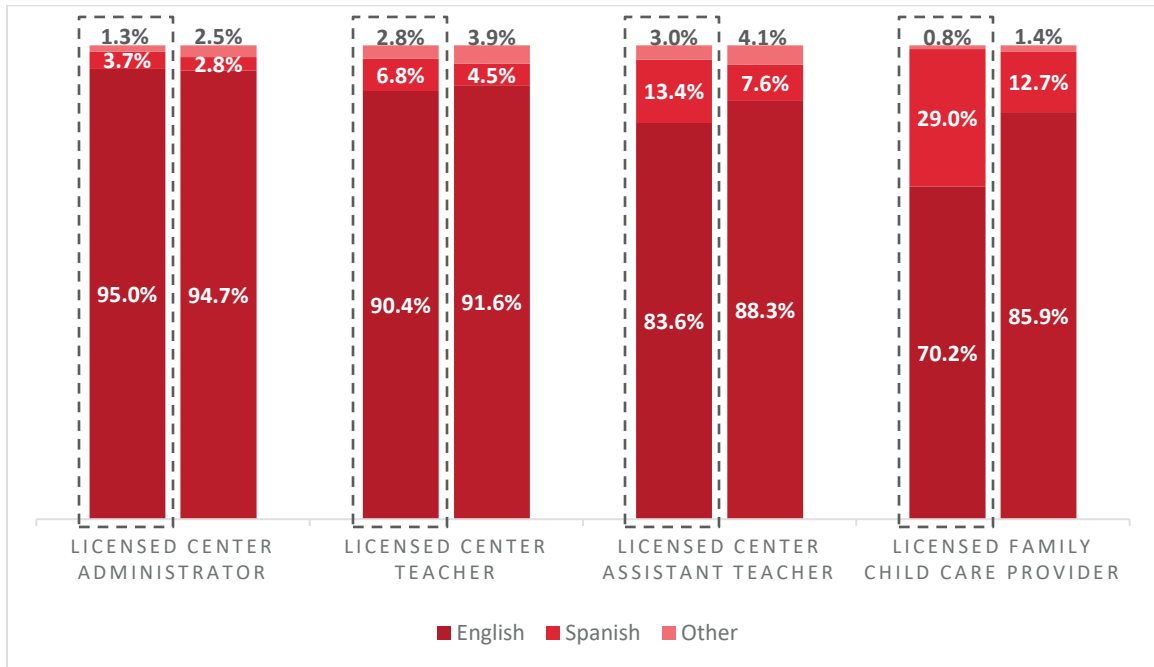
Gateways Credential holders are typically more diverse – both in race and language spoken – than the early childhood education workforce at large, especially licensed center teaching staff and licensed family child care providers. Figures 22 and 23 show comparisons of race and primary language between Gateways Credential holders and the full workforce.

FIGURE 22 | RACE/ETHNICITY OF GATEWAYS CREDENTIAL HOLDERS COMPARED TO OVERALL WORKFORCE BY ROLE



Note: Gateways Credential holders are represented by the inner-most ring. These charts should be read, "Of licensed center teachers with Gateways Credentials, 23.8% are Black compared to 19.3% of licensed center teachers overall."

FIGURE 23 | PRIMARY LANGUAGE SPOKEN BY GATEWAYS CREDENTIAL HOLDERS COMPARED TO OVERALL WORKFORCE BY ROLE



Note: Gateways Credential holders depicted in the columns that have a dotted outline. This chart should be read, “Of all licensed family child care providers in Illinois with a Gateways Credential, 29% speak Spanish as their primary language, compared to just 12.7% overall for licensed family child care providers.”

Taking the analysis a step further, we split the data into two groups – those who held a Gateways Credential and those who did not – and conducted chi-square analyses to compare proportions across race categories. There were several significant findings for licensed center teachers and licensed family child care providers:

- Black and Hispanic/Latino teachers in licensed centers were more likely to have a Gateways Credential than teachers in the other race categories.
- Black licensed family child care providers were more likely to have a Gateways Credential than their White counterparts; and Hispanic/Latino family child care providers were more likely to have a credential than those in the other race categories.

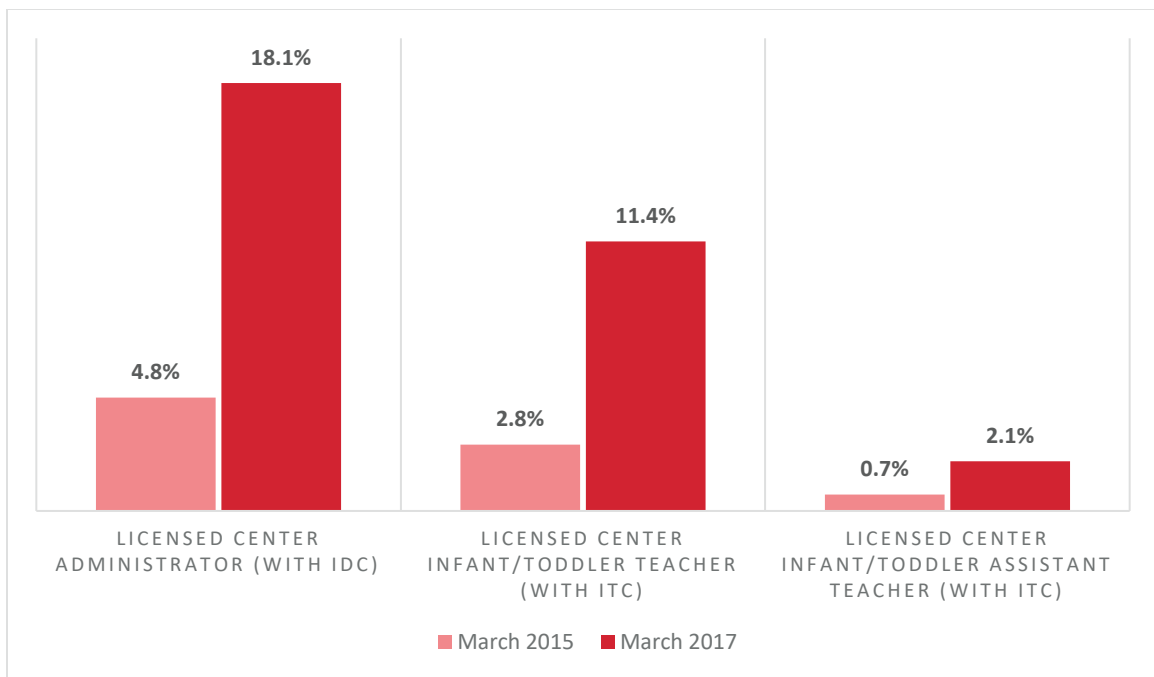
What percentage of the workforce have age-specific and role-specific credentials?

While the ECE Credential forms the foundation of the ECE career lattice, there are several age-specific and role-specific credentials that build off that foundation. The Illinois Director Credential (IDC) was the inaugural Gateways Credential and the first one was awarded in 2000. The Infant Toddler Credential (ITC) was designed as a specialization for those working with children age 0-3 and was implemented in 2008. A Family Child Care Credential (FCCC) was

launched in 2017 as a result of development and pilot work that occurred during the RTT-ELC grant.

In addition to the increase in percentage of early childhood educators holding a Gateways ECE Credential, there was also positive growth in the percentage of individuals holding these age-specific and role-specific credentials. Nearly 20% of licensed center directors had an Illinois Director Credential (IDC) and almost 12% of licensed center teachers who worked exclusively with infants and toddlers held an Infant Toddler Credential (ITC), as shown in Figure 24. (Data were not available for family child care providers holding an FCC Credential as it was still in the pilot phase when the data were pulled.)

FIGURE 24 | PROFESSIONALS WITH AGE-SPECIFIC/ROLE-SPECIFIC CREDENTIALS – 2015 TO 2017 COMPARISON



Wages

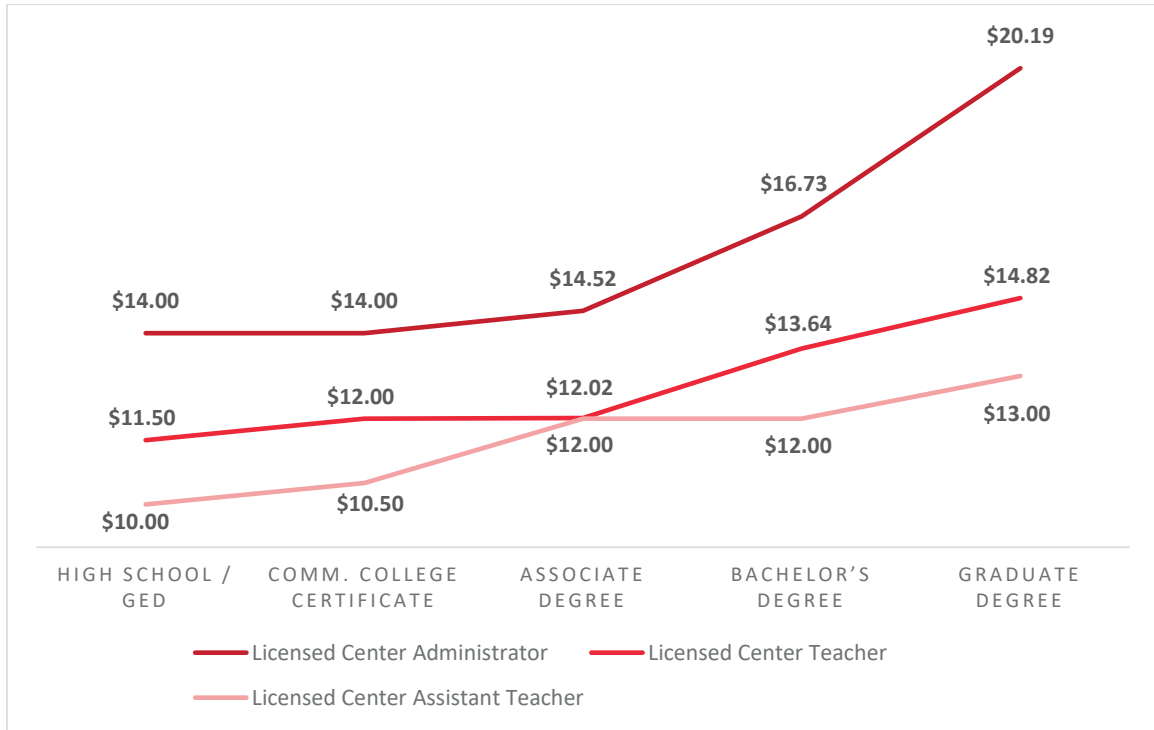
There are numerous sources of data that show early childhood educators are some of the lowest-paid workers in the country. The National Survey of Early Care and Education (NSECE) found the median hourly wage for all center-based teachers and caregivers working with children birth through five was \$10.60.²¹ The Center for the Study of Child Care Employment is another excellent source of information on compensation issues in early childhood education. In their 2014 report titled *Worthy Work, STILL Unlivable Wages: The Early Childhood Workforce 25 Years after the National Child Care Staffing Study*, they explore this issue in depth. Their analysis of Bureau of Labor Statistics data showed that “child care worker” is one of the occupations that has consistently been paid the lowest, ranking in the 2nd or 3rd percentile among all occupations based on mean annual salary. Occupations at a similar percentile included food preparation workers, parking lot attendants, and dry-cleaning workers.²²

In 2017, the median hourly wage for a teacher in a licensed child care center in Illinois was \$12.50. Center-based administrators earned a median wage of \$15.39 per hour and assistant teachers made \$10.00 per hour. As expected, wages increased with higher levels of education. A licensed center teacher with a bachelor’s degree made \$13.64 per hour compared to \$11.50 for a teacher with a high school diploma or GED.²³ Additional wage data are presented in Table 10 and Figure 25.

TABLE 10 | HOURLY WAGE BY ROLE IN LICENSED CHILD CARE CENTERS

Role	N	Mean	Std. Dev.	10 th Percentile	Median	90 th Percentile
Licensed Center Administrator	3347	\$17.50	\$7.00	\$10.50	\$15.39	\$26.04
Licensed Center Teacher	14,131	\$13.14	\$4.00	\$9.60	\$12.50	\$16.52
Licensed Center Assistant Teacher	9758	\$10.67	\$2.52	\$8.35	\$10.00	\$13.50

FIGURE 25 | MEDIAN HOURLY WAGE BY HIGHEST LEVEL OF EDUCATION



The hourly wage for teachers in licensed centers also varied based on the age group they worked with. Comparing median hourly wages, teachers that worked solely with infants and toddlers made \$1.00 less per hour than their colleagues that worked with preschool-age children. The gap increased to \$4.50 an hour for teachers with wages in the 90th percentile, as shown in Table 11.

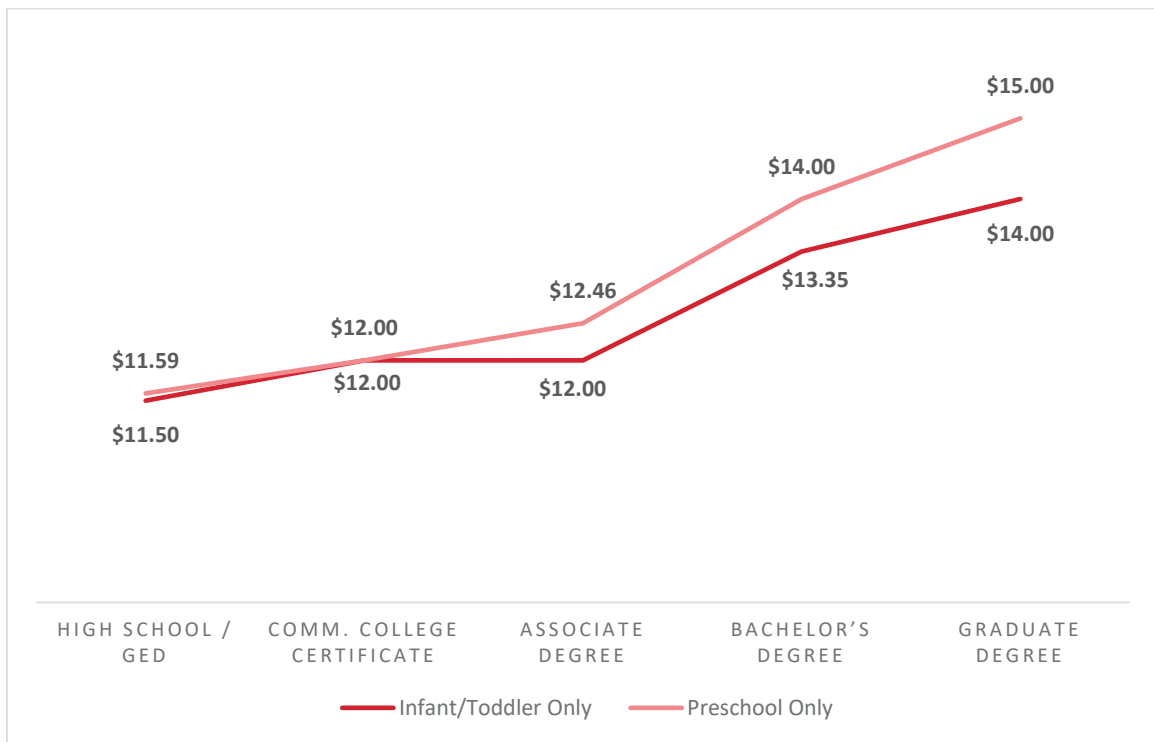
TABLE 11 | HOURLY WAGE OF LICENSED CENTER TEACHERS BY AGE OF CHILDREN SERVED

Age Group Served	N	Mean	Std. Dev.	10 th Percentile	Median	90 th Percentile
Infant/Toddler Only	6943	\$12.59	\$3.22	\$9.50	\$12.00	\$15.50
Preschool Only	5938	\$13.92	\$4.67	\$10.00	\$13.00	\$19.00
School-Age Only	937	\$12.68	\$3.98	\$9.00	\$12.00	\$16.36
Multiple Ages	147	\$11.96	\$2.16	\$9.00	\$12.00	\$14.82

One consideration for this wage gap may be the fact that infant/toddler teachers had lower levels of education compared to teachers of preschool children. To better understand this, we examined median hourly wages by age group taught and highest level of education, as displayed in Figure 26. The analysis showed that even teachers with like educational qualifications

experienced a wage gap based on the ages of children served, and the gap increased as the level of education increased. For teachers that held an associate degree, there was only a difference of \$0.46 an hour compared to a difference of \$0.65 per hour for those with a bachelor’s degree and \$1.00 an hour for those with a graduate degree. It is likely that a portion of this gap can be attributed to Illinois’ policies that teachers in center-based classrooms with state-funded Preschool for All (PFA), who must meet the same educational qualifications as their colleagues in school-based settings, also receive the same compensation. The higher wages earned by these teachers impact the overall median wages for teachers with bachelor’s degrees or higher, but we do not know to what degree. To unpack this further, additional data is needed to know which center-based programs have PFA funding and which teachers in those programs are considered the PFA teachers and as such, receive greater compensation by requirement.

FIGURE 26 | LICENSED CENTER TEACHER MEDIAN WAGE BY AGE GROUP TAUGHT AND HIGHEST LEVEL OF EDUCATION

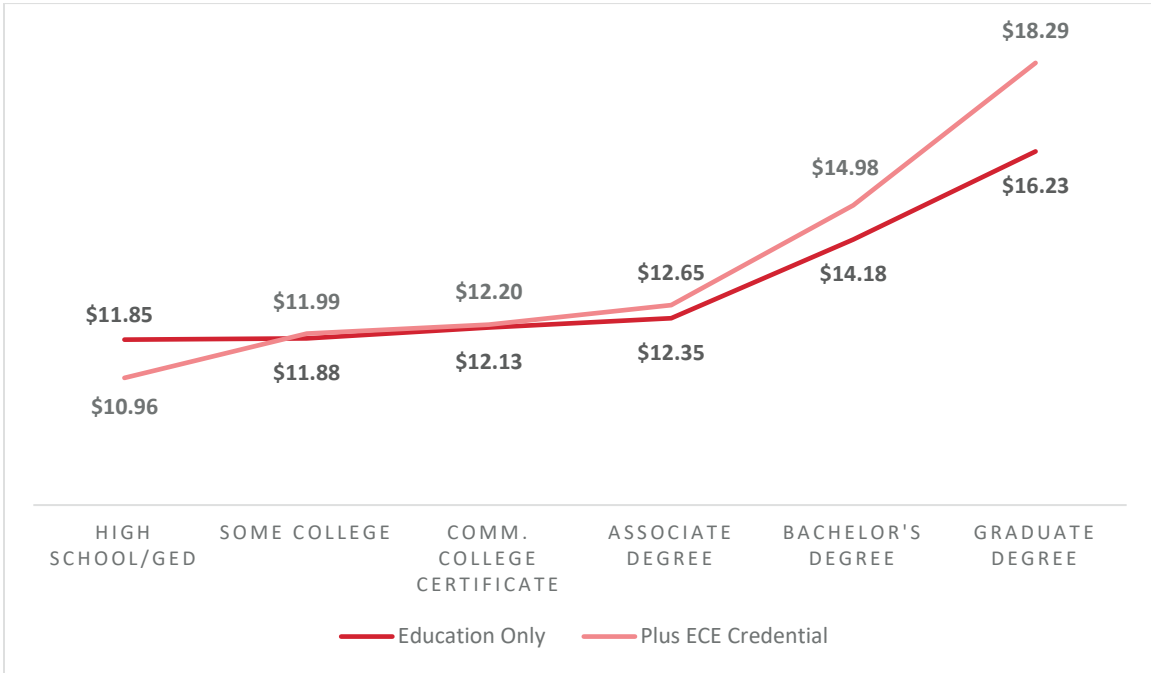


What impact did attainment of a Gateways Credentials have on wages?

Earning a Gateways ECE Credential had a positive impact on the wages that early childhood educators made. At nearly all levels of education, professionals with an ECE Credential earned more than colleagues with education alone, as shown in Figure 27. For example, licensed center teachers with an associate degree make \$12.35 per hour, but those with an associate degree and an ECE Credential make \$12.65 per hour. This \$0.30 per hour difference adds up to more

than \$600 per year. Teachers with a bachelor’s degree and an ECE Credential earn nearly \$1700 more per year than those with the degree alone. While these wages are still far from what they should be, they demonstrate the additional value given to attainment of Gateways Credentials and increased earning potential of those that have earned them.

FIGURE 27 | MEDIAN HOURLY WAGES FOR LICENSED CENTER TEACHERS BY EDUCATION AND ATTAINMENT OF A GATEWAYS ECE CREDENTIAL



Turnover and Job Longevity

Turnover in early childhood settings is a concern both statewide and nationally. When children experience turnover in their teachers, it impacts the quality of their care. Wages are one of the leading factors influencing turnover. Conversely, research has shown that centers with low turnover that pay high wages have been able to increase and sustain higher quality care, as evidenced by increased scores on The Early Childhood Environment Rating Scale (ECERS) and by earning program accreditation.²⁴ In an effort to address the high rates of turnover in Illinois, the Illinois Department of Human Services (IDHS) created the Great START Wage Supplement Program. This program, created in 2000, rewards eligible early childhood and school-age professionals with a wage supplement for attaining education beyond what is required for their position and for remaining at their current place of employment. The program has been successful in its goal of reducing turnover in licensed settings: recipients of Great START wage supplements had a turnover rate of 12% in State Fiscal Year 2016 (FY16; 7/1/15-6/30/17)²⁵, compared to statewide turnover rates of 27% for early childhood teachers and 34% for assistant teachers.²⁶

Collection of turnover data within the Gateways Registry is relatively new and is still being refined. Typically, professionals do not report when they leave a job, so turnover records are limited. They are currently created when a center director with access to the Registry's Director Portal updates their staff listing and notes employment end dates for staff that are no longer with their program. During this process, the director selects their best understanding of the reason the employee left or the type of position to which they went. In many cases, the turnover reason selected is "other" or "unknown". Given these limitations, caution should be exercised in interpreting these data; however, they do represent some initial findings that can be explored further as more data become available.

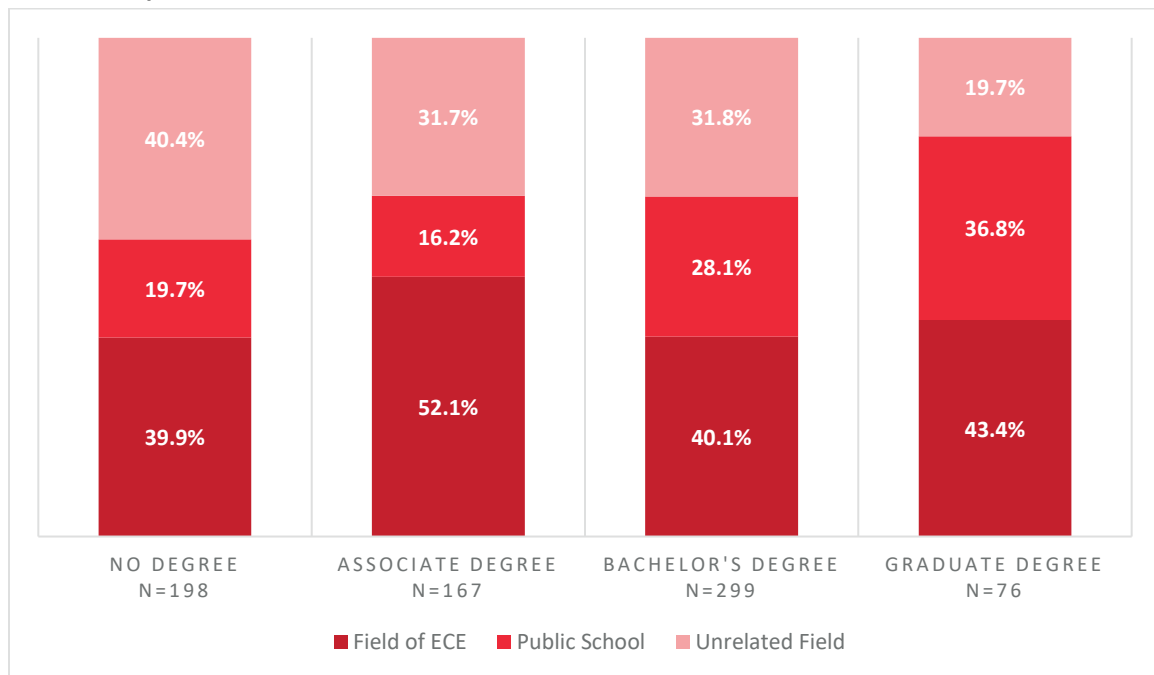
Program directors and administrators who left their position voluntarily in 2016 had been with their employer for an average of 5 years and 65% of them stayed in the field of ECE. Assistant teachers had been employed for about the same length of time, but more often left for a job in an unrelated field (59%) compared to staying in ECE (31%). Additional detail on the practitioners with reported turnover by new job location is shown in the Table 12.

TABLE 12 | PRACTITIONERS WITH REPORTED TURNOVER IN 2016 BY NEW JOB LOCATION AND AVERAGE MONTHS AT PREVIOUS EMPLOYER

Role	Total Individuals	Field of ECE		Public School		Unrelated Field	
		%	Avg.	%	Avg.	%	Avg.
Administrator / Director	113	64.6%	62.0	11.5%	33.5	23.9%	25.2
Teacher	889	40.8%	74.1	24.5%	30.9	34.6%	27.9
Assistant Teacher	482	30.7%	58.6	10.6%	29.1	58.7%	23.6

While the sample size of the population with turnover records indicating new job location is small, an interesting finding emerged when we brought in the highest level of education attained. Early childhood teachers that did not have a degree left their job for new positions in the field of ECE and new positions in unrelated fields in similar proportions (both 40%). With increasing levels of education, the percentage of teachers that stayed in the field of ECE remained relatively constant, but the percentage of those that took positions in public schools began to increase, from 16% at the associate degree level to 37% at the graduate degree level. Only teachers that had an associate degree tended to stay within the field of ECE more than half of the time. (Due to small cell sizes, this analysis was limited to only those who reported their previous position was as a “teacher”.)

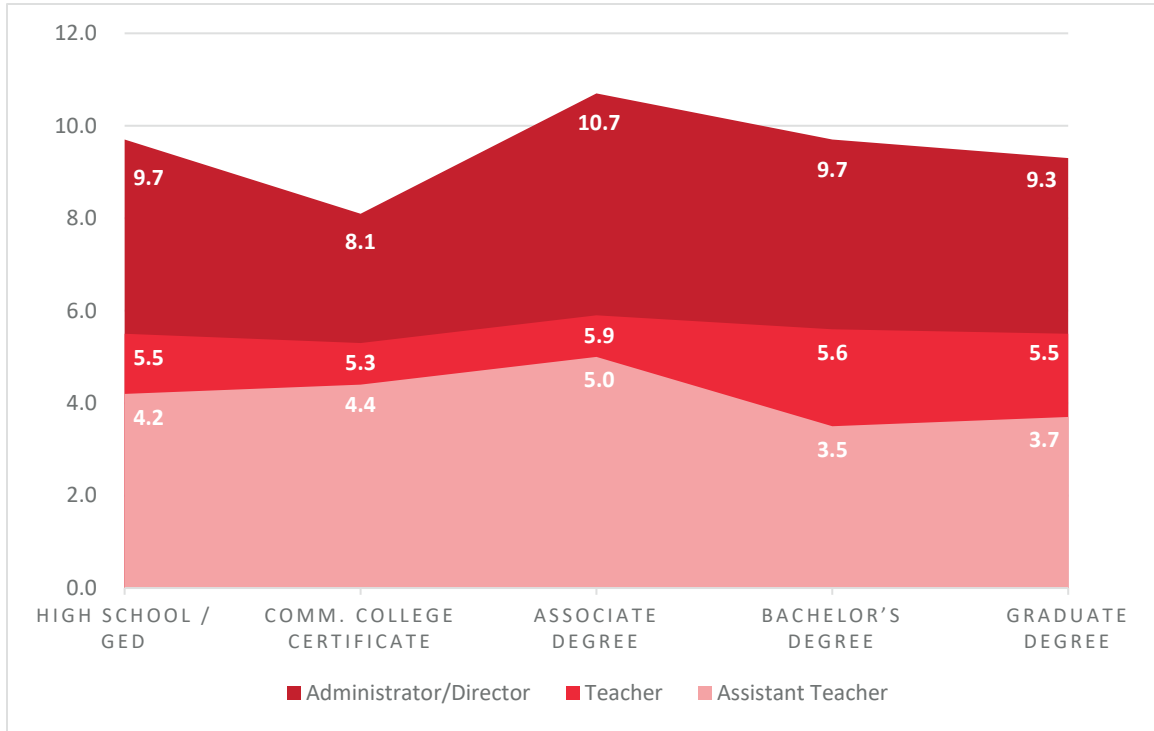
FIGURE 28 | TEACHER TURNOVER BY EDUCATION AND NEW JOB LOCATION



How long do early childhood educators stay with the same employer?

Related to the topic of turnover is job longevity. In Illinois the average licensed center director had been at the same program for 9.5 years, teachers for 5 years, and assistant teachers for just over 3 years. Staff in licensed centers who held an associate degree had the greatest job longevity across all roles. Figure 29 shows that with increasing levels of education, job longevity began to drop off slightly, though for teachers it remained relatively constant.

FIGURE 29 | JOB LONGEVITY (IN YEARS) AT CURRENT EMPLOYER BY ROLE AND EDUCATION



Conclusion

Data from the Gateways to Opportunity Registry provide a comprehensive picture of the demographic characteristics, qualifications, wages, and ongoing professional development of Illinois' early childhood education workforce in licensed settings. This 2017 report provides insight into many of the workforce-related research questions on the Illinois Early Learning Council's research agenda, but comprehensive data from other sectors of the workforce is needed to provide a more robust understanding of these issues across the whole field of early childhood education. Even so, several interesting findings emerged from the analysis that warrant additional analysis and in-depth exploration.

Bilingual Professionals in the Early Childhood Education Pipeline

The number of children in Illinois who are English language learners (ELL) is on the rise, but preliminary findings from the *Illinois Early Childhood Workforce Hiring Survey* show that 56% of early childhood education programs find it very or extremely difficult to find the bilingual teachers they need to support those children.²⁷ There is a significant population of bilingual early childhood educators that could be bolstered to meet this increasing demand; however, many of these professionals have not yet completed a college degree, and additional education is often needed to meet qualification requirements. Ensuring that these educators have a clear pathway and supports toward degree attainment and specialized credentials for bilingual/ESL teaching is an important step toward developing this pipeline.

The Illinois Early Learning Council Quality Committee has been working to advance recommendations for pathways to address educator shortages across the state. One shortage is the number of qualified professionals that have the knowledge and skills to be linguistically responsive to an increasing number of multilingual children. A pathway currently exists in the form of the Bilingual/ESL endorsement available through the Illinois State Board of Education (ISBE) teacher licensure process; however, it requires both completion of a bachelor's degree and Professional Educator Licensure (PEL), and supply of educators with these qualifications is low. To address this gap between increasing demand and limited supply, the Illinois Early Learning Council Quality Committee is recommending development of an additional pathway: a Bilingual/ESL credential at the associate degree level.²⁸ Additionally, a group of experts convened by the Latino Policy Forum and Ounce of Prevention have outlined further action steps to include bilingual/ESL pedagogy within associate degree and non-licensure bachelor's degree programs.²⁹

As progress is made toward these recommendations, the Gateways Registry can be used to track the supply of educators with these endorsements and credentials, and to continue to identify bilingual professionals that may be candidates to participate in cohorts to achieve these credentials.

Professionals with Some College, No Degree

There is a distinct population of early childhood educators in Illinois who have completed some college coursework, but have not earned a degree. With 42% of the “some college, no degree” professionals having amassed 60 credit hours or more, concerted effort to assist with degree completion would be beneficial to opening more career pathways and opportunities for higher wages. One prospect for further study is to explore what the barriers have been toward degree completion and consider designing supports accordingly. A promising model that has shown preliminary success is the Education Reimbursement Initiative, first funded through the Race to the Top-Early Learning Challenge Grant in 2017. This time-limited program allowed for reimbursement of tuition, fees, or outstanding student debt. Approximately 97% of the recipients indicated that the funds would help them to enroll (or re-enroll) in ECE coursework and 61% indicated that the support was needed for degree completion.³⁰

Aside from supports to encourage degree completion, consideration should be given to the fact that many of these professionals have earned a state- and employer-recognized Gateways ECE Credential and as such, could be counted towards Illinois’ goal of ensuring that 60% of all adults have a college or career credential by 2025.³¹ Relying on traditional reporting mechanisms would likely miss these educators as they have not completed a degree program. The Gateways Registry, as part of the Illinois Longitudinal Data System (ILDS) and in partnership with the Illinois Board of Higher Education (IBHE) and Illinois Community College Board (ICCB), can play an important role by ensuring that individuals with some college and no degree who also attained an employer-recognized Gateways credential can be counted toward the 60 by 2025 goal.³²

Identification of Center-Based Teachers in Preschool for All Classrooms

Given the disconnected nature of the systems containing data about the early childhood education workforce, we are limited in our ability to provide analysis across the broad spectrum of early childhood settings and programs. Though we have data on the full universe of the workforce in licensed center- and home-based settings, those settings can have multiple funding streams that require differing qualifications and compensation. Because of this, there is some amount of impact on our analysis of education and wages, but to what extent? Obtaining a list of licensed centers that have Preschool for All funding, as an example, is a task that can be accomplished by working with state agencies, though this would not be enough to identify which specific staff at those sites are being funded and thus are required to have higher levels of education and pay. In order to most accurately describe the qualifications and compensation of the early childhood education workforce, it is important to be able to examine the data by funding stream as it relates to the teacher, not just at a program level. Continued conversations are needed to develop meaningful ways to get to this level of detail, be it through data sharing activities or clearly-articulated and reliable data collection parameters.

Turnover in Early Childhood Settings

Given the significance of strong emotional attachments between children and the important adults in their lives, we know the negative impact that occurs when a child's teacher leaves. Better understanding the turnover that occurs in early childhood programs is essential for development of supports and policies needed to mitigate the reasons for that turnover. There are recent state studies, including the *Illinois Salary and Staffing Survey of Licensed Child Care Programs* and the *Early Childhood Workforce Hiring Survey*, that highlight the impact of turnover on program hiring practices.³³ As a complement to those program-focused reports, the Gateways Registry can help provide a picture of turnover from the teacher's perspective to help us better understand the characteristics of those who are leaving programs, their reason for leaving, and even the type of setting/field to which they are moving. Currently, turnover data in the Gateways Registry is limited to reporting by program directors as they maintain staff listings and report turnover to the best of their ability. Further development investments are needed to ensure that the Registry is well-positioned to capture and report key data related to turnover in early childhood settings.

In conclusion, children's development and learning in the early years provide the foundation for success in school and beyond. Educators and caregivers who are knowledgeable, skilled, consistent, and represent the diversity of the children they serve are a vital component of high-quality early learning environments important to the success of Illinois' 626,700 children under the age of six whose parents work. The challenges faced by the early childhood education workforce are varied and complex, from the lack of clear pathways to advance toward more career opportunities, to the low wages that are frequently a barrier to earning the educational qualifications required in order to advance. Without a well-qualified and well-compensated workforce, the children of Illinois will not experience the full range of benefits that can be realized through high-quality early childhood education. Comprehensive data, including what is tracked through the Gateways to Opportunity Registry and provided in this report, is an essential resource for leaders and policy-makers to inform conversations that will further support and advance the early childhood education workforce in Illinois.

Endnotes

¹ Illinois Early Learning Council. (2015). *Data, Research, and Evaluation Committee Research Agenda (working copy as of 12/12/15)*. Retrieved from <https://www2.illinois.gov/sites/oecd/documents/dre%20research%20agenda%20working%20copy%20as%20of%2012.12.15.pdf>

² Alexander, D., Cahn, S., Slaughter, S., & Traill, S. (2005). *The Economic Impact of the Early Care and Education Industry in Illinois*. Retrieved from <http://www.iff.org/wp-content/uploads/2017/05/eisreport.pdf>

³ Author's calculations based on *B23008: Age of Own Children Under 18 Years in Families and Subfamilies by Living Arrangements by Employment Status of Parents*. Data Set: 2016 American Community Survey 1-Year Estimates. Retrieved November 8, 2017 from American FactFinder (U.S. Census Bureau), <https://factfinder.census.gov>

⁴ Garcia, J., Heckman, J., Leaf, D., Prados, M. (2017). *Quantifying the Life-cycle Benefits of a Prototypical Early Childhood Program*. Retrieved January 9, 2018 from <https://heckmanequation.org/resource/lifecycle-benefits-influential-early-childhood-program/>

⁵ As of June 30, 2017, there were 3,175 licensed child care centers with the capacity to serve 252,140 children in Illinois. There were also 7,928 licensed family child care homes with capacity to serve an additional 76,602 children.

⁶ Participation in the Gateways Registry is also required for non-licensed paraprofessionals working in state-funded Preschool for All programs and is also required for home visitors funded by the state's Maternal, Infant, and Early Childhood Home Visiting (MIECHV) program.

⁷ Direct service refers to individuals who work in settings that directly serve children as opposed to those in indirect service who work with families or "on behalf of" children.

⁸ IOM (Institute of Medicine) and NRC (National Research Council). (2012). *The early childhood care and education workforce: Challenges and opportunities: A workshop report*. Washington, DC: The National Academies Press.

⁹ Ibid.

¹⁰ Illinois State Board of Education. (2017). [Teacher demographics donut chart showing State Teacher Demographics by Ethnicity (2017).] *Illinois Report Card 2016-2017*. Retrieved November 8, 2017 from <https://www.illinoisreportcard.com/state.aspx?source=profile&Stateid=IL>

¹¹ Author's calculations based on *B03002: Hispanic or Latino Origin by Race*. Data Set: 2011-2015 American Community Survey 5-Year Estimates. Retrieved November 9, 2017 from American FactFinder (U.S. Census Bureau), <https://factfinder.census.gov>

¹² Author's calculations based on Illinois State Board of Education. (2004). *Illinois Bilingual Education Programs 2004 Evaluation Report*. Retrieved November 8, 2017 from https://www.isbe.net/Documents/ell_stu-prog_eval_rpt04.pdf. Also, Illinois State Board of Education. (2014). *Bilingual Education Programs and English Learners in Illinois SY 2014 (2013-2014 School Year) Statistical Report*. Retrieved November 8, 2017 from <https://www.isbe.net/Documents/el-program-stat-rpt14.pdf>

- ¹³ For this analysis, both teachers and assistant teachers were included.
- ¹⁴ Child Care Aware of America. (2013). We Can Do Better 2013 Update. Retrieved November 8, 2017 from https://usa.childcareaware.org/wp-content/uploads/2015/10/wecandobetter_2013_final_april_11_0.pdf
- ¹⁵ Illinois Network of Child Care Resource and Referral Agencies (INCCRRA). (2017). [Illinois CCR&R System Data Custom Query: Providers and Funding Sources]. Unpublished raw data.
- ¹⁶ Herzenberg, S., Price, M., & Bradley, D. (2005). *Losing ground in early childhood education: Declining workforce qualifications in an expanding industry, 1979-2004*. Washington, DC: Economic Policy Institute.
- ¹⁷ Specifically, the proportions were compared using chi-square analyses with Bonferroni adjustments for multiple comparisons with the significance threshold set at .05.
- ¹⁸ Author's calculations based on *B15001: Sex by Age by Educational Attainment for the Population 18 Years and Over*. Data Set: 2010 American Community Survey 1-Year Estimates. Retrieved October 6, 2017 from American FactFinder (U.S. Census Bureau), <https://factfinder.census.gov>
- ¹⁹ National Association for the Education of Young Children. (n.d.) *What is professional development?* Retrieved October 6, 2017 from <https://www.naeyc.org/files/naeyc/What%20Is%20Professional%20Development%20in%20Early%20Childhood%20Education.pdf>
- ²⁰ Calendar year 2016 was used as the time period for training hour analysis as it was the last complete calendar year prior to the March 1, 2017 data pull.
- ²¹ 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.
- ²² Whitebook, M., Phillips, D., & Howes, C. (2014). *Worthy work, STILL unlivable wages: The early childhood workforce 25 years after the National Child Care Staffing Study*. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley.
- ²³ The educational qualifications for a licensed early childhood teacher in Illinois vary. Minimum qualifications are a high school diploma/GED with additional experience and/or coursework, or an approved credential such as the Child Development Associate (CDA) Credential. For more information, see https://www.illinois.gov/dcf/aboutus/notices/Documents/Rules_407.pdf
- ²⁴ Whitebook, M., Sakai, L., Gerber, E., & Howes, C. (2001). *Then & Now, Changes in Child Care Staffing, 1994-2000*. Retrieved from <http://cscce.berkeley.edu/files/2001/Then-and-Now.pdf>
- ²⁵ Illinois Department of Human Services. (2017). [Great START Wage Supplement Program June 2017]. Unpublished raw data.
- ²⁶ Whitehead, J., Anderson, K., Darragh Ernst, J., & Presley, D. (2016). *Illinois Salary and Staffing Survey of Licensed Child Care Facilities FY2015*. Retrieved from <http://www.dhs.state.il.us/page.aspx?item=85484>
- ²⁷ Main, C. (2017). *Illinois Early Childhood Workforce Hiring Survey Preliminary Results*. Presentation at the Professional Development Advisory Council (PDAC) meeting on September 15, 2017 in Bloomington, Illinois.

²⁸ Illinois Early Learning Council. (December 2017). *Illinois Early Learning Council Quality Committee Ad Hoc Long Term Strategies December 19, 2017 Meeting Notes (Draft)*. Retrieved from <https://www2.illinois.gov/sites/OECD/Events/Event%20Documents/Draft%2012.19.17%20mtg%20notes.pdf>

²⁹ Latino Policy Forum and Ounce of Prevention. (2017). Recommendation for Building a Linguistically and Culturally Diverse IL Early Childhood (Birth-age 8) Workforce. Retrieved from <http://www.latinopolicyforum.org/publications/briefs/document/LCD-ECE-Recommendations-.pdf>

³⁰ INCCRRA. (2017). *Education Reimbursement Initiative recipient data* [Data file].

³¹ More information about Illinois' 60 by 2025 efforts can be found at <http://60by25.org>

³² This appears also in the 2018 report produced through a partnership between the Governor's Office of Early Childhood Development (OECD), Illinois Board of Higher Education (IBHE), Illinois Community College Board (ICCB), and INCCRRA, entitled *The College Enrollment and Completion Patterns of Gateways Credential Holders*. The full report and an executive summary can be found at <http://www.inccrra.org/data-reports/reports>

³³ The most recent Illinois Salary and Staffing Survey report (FY2015) is available from <http://www.dhs.state.il.us/page.aspx?item=85484> and includes discussion of turnover rates, director perceptions on reasons for turnover, and challenges in hiring qualified personnel. The 2017 Illinois Early Childhood Workforce Hiring Survey publication is forthcoming and will be available on the Illinois Governor's Office of Early Childhood Development website (<https://www2.illinois.gov/sites/OECD/Pages/default.aspx>).

