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The State of Early Childhood Higher Education in Florida:

Technical Report

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The Center for the Study of Child Care Employment (CSCCE) was founded in 1999 to focus on achieving comprehensive public investments that enable and reward the early childhood workforce to deliver high-quality care and education for all children. To achieve this goal, CSCCE conducts cutting-edge research and proposes policy solutions aimed at improving how our nation prepares, supports, and rewards the early care and education workforce to ensure young children's optimal development.

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Introduction

Teacher preparation in the field of early childhood education (ECE) has historically included a variety of higher education degree programs in various child-related disciplines, all of which have generally been considered equally acceptable. Too often, these highly diverse degree programs are assumed to produce equivalent results (Maxwell, Lim, & Early, 2006; Whitebook et al., 2012). In contrast, programs to prepare teachers and administrators to work with older children reflect far greater uniformity and stringency related to specific preparation standards and certification requirements. In recent years, however, rising expectations about the knowledge and skills that early childhood practitioners need to work effectively with young children before kindergarten, along with the introduction of new ECE programs and standards, have led many to question whether the current wide array of ECE-related degree programs can be assumed to produce equivalent results.

In Florida, despite progress over the last decade to improve ECE services and to ensure that teacher education degree and certification programs can better prepare their graduates to meet the complex needs of young children (Hyson, Horm, & Winton, 2012; Ray, Bowman, & Robbins, 2006; Swartz & Johnson, 2010), there remains great variability among associate and bachelor's degree programs regarding what constitutes an appropriate course of study for teachers and administrators serving young children.

To address this issue, the *Early Childhood Higher Education Inventory II* (Center for the Study of Child Care Employment [CSCCE], 2016) was designed to gain a clearer picture of the early childhood-related offerings in a given state's higher education system. The *Inventory* describes early childhood degree programs offered in the state, focusing on variations in program content, age-group focus, student field-based learning, and faculty characteristics.

In addition, a recent report by the Institute of Medicine and the National Research Council documented the need to strengthen early educator competencies along multiple dimensions, including mathematics, family engagement, and supporting dual language learners (Institute of Medicine [IOM] & National Research Council [NRC], 2015). While the link between young children's math competency and later school success has been demonstrated in recent research, there is concern that institutions of higher education are not adequately preparing teachers of young children to assess or facilitate children's mathematical understanding and skills (Ryan, Whitebook, & Cassidy, 2014). Additionally, given research evidence that family involvement in children's learning at home and at school contributes to school success (Dearing & Tang, 2010; Reynolds & Shlafer, 2010), we were interested in learning the extent to which ECE higher education programs are addressing the topic of engaging with families to enhance children's learning. A series of questions developed for the *Inventory* focuses specifically on these issues, with particular attention to program content and faculty attitudes. Finally, while many teachers of young children are monolingual (speaking only English), census data indicate that, nationally, more than one-quarter of children under age six speak more than one language (Capps, Fix, Ost, Reardon-Anderson, & Passel, 2004). In light of this reality, the *Inventory* examines the capacity of higher education programs to prepare their students to teach dual language learners.

The totality of the data collected through the *Inventory* allows stakeholders to identify gaps and opportunities in the available offerings and to assess the capacity of the state's higher education system over time.

The *Inventory* was implemented in Florida during the 2016-2017 academic year. This Technical Report presents detailed findings collected by implementing the *Inventory's* mapping, program, and faculty modules (CSCCE, 2016). An accompanying report, *Teaching the Teachers of our Youngest Children: The State of Early Childhood Higher Education in Florida, 2017*, summarizes the major findings and provides recommendations for policy changes that could lead to more effective teacher practices to support children's learning.

Methodology

Mapping Module

Through an extensive document review, the Mapping Module identifies the state's early childhood degree programs by collecting information on each college or university, the departments in which programs are housed, degrees and certificates offered, and characteristics of the students attending the programs.

During the summer and fall of 2016, CSCCE compiled a comprehensive list of institutions offering early childhood degrees. To identify state colleges[1] and universities for participation in the *Inventory*, our research team conducted an Internet search of early childhood education-related degree programs in the state of Florida. This search included terms such as "early childhood education," "child studies," and "human development and family studies."[2] We also referenced the National Association for the Education of Young Children (NAEYC) Early Childhood Higher Education Directory and a list of institutions provided by the Children's Forum.

For each college and university identified, we conducted an extensive Internet search to identify:

- Early childhood degree offerings;
- Departments in which early childhood degree programs were housed;
- Early childhood certificates and other programs offered; and
- Additional contact information for the dean or program coordinator.

After compiling information about the programs, CSCCE shared the list with the Children's Forum for assistance in confirming or clarifying the above information.

A letter was emailed to each contact, introducing CSCCE, describing the purpose of the *Inventory*, and identifying the Children's Forum and the Office of Early Learning as the funding source for the *Inventory*. We then attempted to contact, via telephone, the identified deans or program coordinators to verify the information gathered through our various sources. Institutions that actually did not offer an early childhood degree were excluded from the sample (e.g., an identified program focused on developmental psychology, but with no mention of early education or of preparing students to work as classroom teachers).

Florida's Population of Early Childhood Degree Programs

Through this process, we identified a robust population of public and private institutions of higher education in Florida that serve thousands of prospective and current early childhood practitioners across the state.[3] **Appendix A1-1 and A1-2** display the early childhood degrees offered by these institutions.

[1] Florida state colleges were originally called "community colleges"; however, many of these institutions now offer both associate and bachelor's degrees in certain disciplines, including early childhood.

[2] Since the *Inventory* is focused on formal degree offerings available at institutions of higher education, programs that solely offered a credential or certificate were not included in the *Inventory*. In addition, programs offered exclusively online by national, for-profit institutions of higher education were also excluded.

[3] Based on information provided by the programs that participated in the *Inventory*, it is estimated that during the 2015-2016 academic year, 2,249 students were registered in associate degree programs, 1,071 students were

During our initial research of early childhood higher education degree programs in Florida, we identified 44 institutions of higher education offering a total of 78 early childhood degree programs. Among these, 28 were state colleges, which offered 32 early childhood associate degree programs and 11 bachelor's degree programs. Sixteen universities (six private and 10 public) offered two associate degree programs, 15 bachelor's degree programs, 12 master's degree programs, and six doctoral degree program in early childhood. We then emailed the dean or coordinator of each program[4] and scheduled phone interviews. During these phone calls, we confirmed 32 institutions of higher education offering a total of 55 early childhood degree programs.[5]

Program Module

Using an online survey tool completed by each degree program lead, this module collects information on program content and age-group focus; connections to state standards; methods of student assessment; types, sequencing, duration, and supervision of clinical experiences; student supports; and challenges currently faced by the institution.

Sample Development

During the telephone call with the program leads, CSCCE identified the appropriate person to respond to the Program Module of the *Inventory*. We then asked the appropriate respondent whether they were willing to participate. Of the 32 institutions of higher education offering early childhood degree programs, 97 percent of the institutions agreed to participate in the *Inventory*, including 96 percent of the state colleges (n=22) and 100 percent of the public and private universities (n=9). (See **Table 1.1.**)

Table 1.1
Population of Institutions of Higher Education in Florida Offering Early Childhood Education Degrees [1]

Program Type	Number of IHE Identified as Offering ECE Degree	Number of IHE Agreeing to Participate in the Inventory	Number/Percentage of IHE That Completed at Least One Survey	
			Number	Percentage
State Colleges	23	22	17	77%
Universities	9	9	8	89%

For those institutions offering early childhood degree programs at multiple levels (e.g., bachelor's and master's degrees), these programs were surveyed separately. For those institutions offering more than one degree program at the same level (e.g., a bachelor's degree in early childhood education and a bachelor's degree in child development), a member of our research team engaged in a phone conversation with the program lead prior to sending the online survey in order to determine the degree of

registered in bachelor's degree programs, and 83 students were registered in graduate degree programs. During this same period, the colleges and universities that participated in the *Inventory* estimated that they conferred 281 associate degrees, 281 bachelor's degrees, and 30 graduate degrees.

[4] For the remainder of this report, we will refer to these faculty and staff as "program leads."

[5] Of the 11 institutions of higher education that were *not* confirmed as offering early childhood degree programs, two did not currently offer a degree in early childhood and four were national private colleges, which are not included in the *Inventory*. We were unable to contact a program lead for five programs.

variability among these different degree programs (e.g., some differed only with respect to elective courses) and whether more than one version of the Program Module would be sent to them to complete.

Response Rate

A total of 52 program surveys were emailed to the degree programs: 25 to associate degree programs; 19 to bachelor's degree programs; five to master's degree programs; and three to doctoral degree programs. The final sample consisted of 19 associate and 14 bachelor's degree program surveys.[6] The response rate for associate degree programs was 76 percent and for bachelor's degree programs, 74 percent. (See **Table 1.2.**)

Table 1.2
Response Rate for the Program Module of the Florida Early Childhood Higher Education Inventory

Program Type	Number of Degree Programs Offered by IHE in Sample[1]	Number of Program Modules Administered [2]	Program Module Response Rate	
			Number	Percentage
Associate	26	25	19	76%
Bachelor's	19	19	14	74%

[1] This includes only institutions that agreed to participate in the *Inventory*. See Table 1.1.
[2] For those institutions offering more than one degree program at the same level (e.g., multiple bachelor's degrees), a member of our research team engaged in a phone conversation with the identified program representative to determine whether one or more Program Modules would be sent to them to complete. As a result, some institutions were sent one Program Module to be completed for multiple degree programs at the same level.

Data Collection

The Program Module was emailed to all respondents using Qualtrics, an online survey software program. The Program Module was open for respondents for approximately 65 days during the spring 2017 term.

Program Content of Degree Programs

The Program Module for degree programs included closed-ended questions focusing on the following topics:

- Goals of the early childhood degree program related to training students for specific job roles and early childhood settings;
- Format in which the degree was offered (e.g., online/distance learning; traditional/on-campus program);
- Program content and age-group focus, including:
    - Course content related to early childhood administration and leadership (asked if offered, not required);

[6] Data were collected from four master's degree programs and one doctoral degree program in Florida specifically identified as early childhood education. As data for these graduate programs cannot be de-identified, data collected for these programs are not included in this report.

    - Course content to prepare students for a variety of professional development service roles, for example, as mentors, coaches, quality improvement staff, or trainers; and
    - Course content related to self-reflection and awareness of culture, bias, and discriminatory practices;
- Structure of instruction on early childhood topics (e.g, whether content areas are taught as a separate course and/or as part of a broader course covering multiple topics);
- Coursework alignment with state and national ECE standards and degree program articulation;
- Strategies to assess student competencies;
- Clinical experiences for students, i.e., student teaching and/or practica experiences;
- Student population including:
    - Target: Pre-service teachers and/or experienced teachers; and
    - Number of students enrolled and number attaining degrees;
- Available student services; and
- Challenges facing the degree program.

Data Analysis

Using the Statistical Package for the Social Sciences (SPSS) 24, we computed frequencies for all questions, by program degree level (associate and bachelor's). Data are reported by program degree level.

Faculty Module

Using an online survey tool completed by all faculty members teaching in a given degree program, the Faculty Module collects information on faculty employment status, teaching experience and expertise, professional development experiences and needs, and past experience within the early childhood field.

Sample Development

We attempted to survey all faculty members employed at each college or university identified as offering an early childhood degree program. For each of the institutions, our telephone conversation with the dean or program coordinator included a request for a list of names and email addresses for all full- and part-time/adjunct faculty teaching in the early care and education degree program. All colleges that agreed to participate sent CSCCE a faculty list, and these names served as the sample universe for the Faculty Module. If the program lead also taught in the early childhood program, they were included in the Faculty Module sample.

A total of 198 surveys were emailed to individual faculty members, resulting in an eligible sample of 135 state college and 63 university faculty members. The final sample consisted of 122 faculty members. Fifty of these faculty members teach only in associate degree programs, 23 teach only in bachelor's degree programs, another 28 teach in both associate and bachelor's programs (referred to as "dual-level faculty"), and 21 teach in graduate degree programs. The response rate for state college faculty was 62 percent and for university faculty, 60 percent. (See **Table 1.3**.)

While we cannot assume that findings from this module are representative of all ECE teacher educators in the state, as documented in the Narrative Report findings from the Faculty Module concerning course content topics covered and age-group focus were consistent with those from the Program Module.

Data Collection

Each faculty member received a letter from CSCCE describing the *Inventory* and encouraging participation. The Faculty Module was emailed to all faculty identified for the sample using Qualtrics. The Faculty Module was open for respondents for approximately 65 days during the spring 2017 semester.

Faculty Module Content: All Degree Levels

The Faculty Module included closed-ended questions focusing on the following topics:

- Demographics;
- Educational background and experience in the early childhood field;
- Current employment;
- Faculty opinions on the importance of topic areas included in higher education teacher preparation;
- Faculty capacity to teach different domains;
- Current teaching experience;
- Professional development participation and interest; and
- Resources that would be helpful to the degree program.

Response Rate

Table 1.3
Response Rate for the Faculty Module of the Florida Early Childhood Higher Education Inventory

Faculty Type	Number of Faculty Modules Administered[1]	Number of Faculty Responses[2]	Faculty Module Response Rate
State College Faculty	135	84	62%
University Faculty	63	38	60%
TOTAL	198	122	62%

[1]This number is adjusted for email bounces and reflects the eligible sample from the faculty list supplied by program leads.
[2]Faculty members may teach at one or more degree levels.

Data Analysis

Using SPSS 24 and Microsoft Excel 2013, we computed frequencies for all questions for faculty teaching at each degree level (associate, bachelor's, dual-level, and graduate).

Chapter 2:
Early Childhood Degree Programs

What we asked about program goals, the student population, and student services:

The *Inventory* asked program leads to select the primary goal of their degree programs. The options included:

- To prepare students for teaching and/or administrative roles *only* in early childhood education settings, such as preschools, child care centers, and family child care homes, for children birth to five;
- To prepare students for teaching and/or administrative roles in early childhood *and* elementary education settings;
- To prepare students for the roles of early interventionist or early childhood special educator;
- To prepare students for multiple roles involving young children, working in many types of settings; and
- To prepare students for a career as a researcher or a college-level faculty member.

(See **Figure 2.1**.)

The *Inventory* asked program leads a series of questions about the students in their programs. Program leads were first asked to indicate their target student population. The options included:

- Adults already working in early childhood settings;
- Pre-service students; and
- A mix of both groups.

They were then asked to estimate the number of students registered in the degree program and the number of degrees conferred during the 2015-2016 academic year.

Finally, they were asked to indicate which services, if any, were offered to students in the degree program. These included three general categories of student services:

- Skills support, such as academic tutoring and assistance with technology;
- Counseling support, such as academic and financial aid counseling; and
- Access support, such as classes in convenient locations and at convenient times (e.g., evenings, weekends).

Primary Goals of Florida Early Childhood Degree Programs

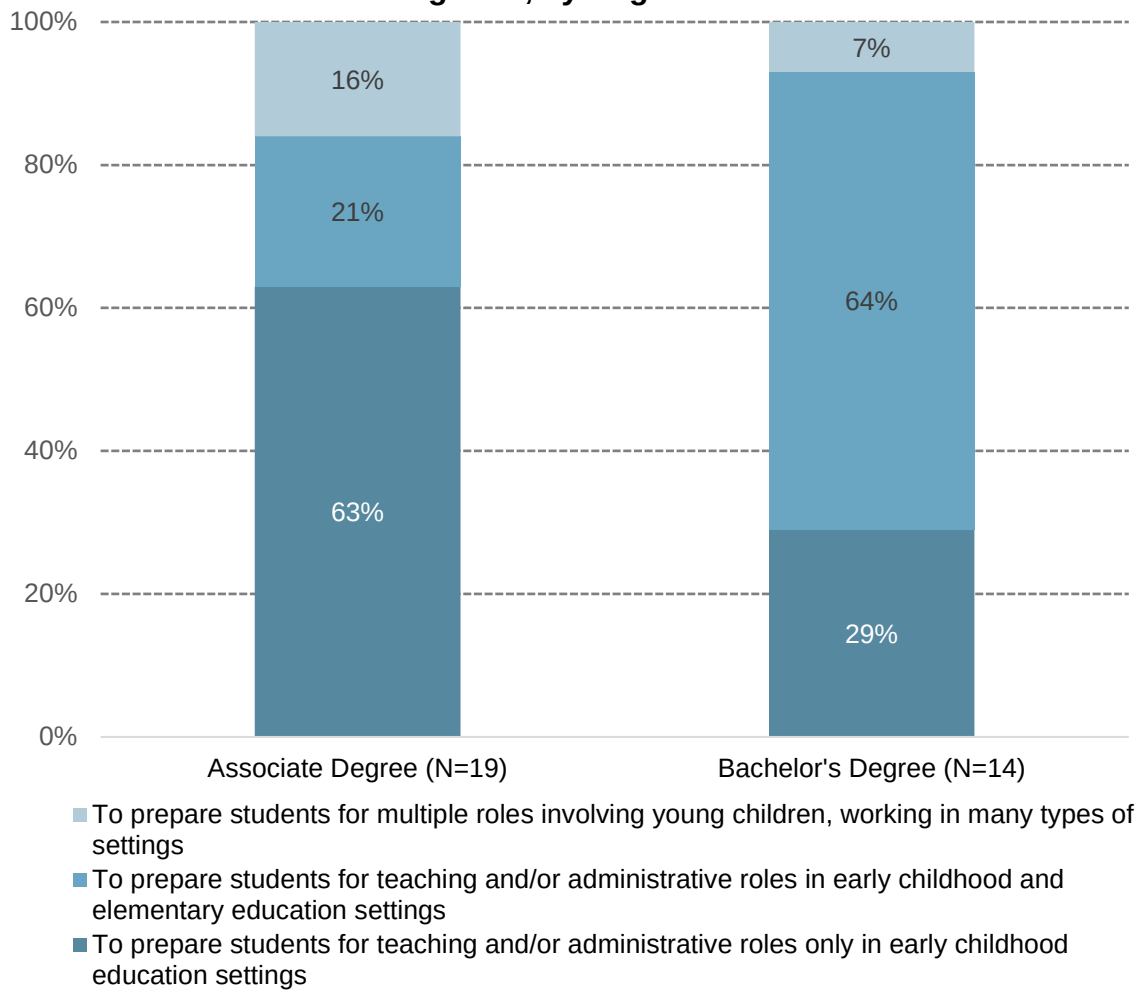
- About eight in 10 associate degree programs reported that their primary goal was “to prepare students for teaching and/or administrative roles in early childhood and elementary settings” or “to prepare students for teaching and/or administrative roles, only in early childhood education settings for children birth to five.”

  ⇒ Less than 20 percent of associate degree programs reported any other goals.

- Almost two-thirds (64 percent) of bachelor’s degree programs reported that their primary goal was to “prepare students for teaching and/or administrative roles in early childhood and elementary education settings,” and almost one-third (29 percent) reported that their primary goal was to “prepare students for teaching and/or administrative roles only in early childhood education settings.”

  ⇒ Less than 10 percent of bachelor’s degree programs reported any other goals.

Figure 2.1: Primary Goal of Florida Early Childhood Degree Programs, by Degree Level



Students Served in Florida Early Childhood Degree Programs

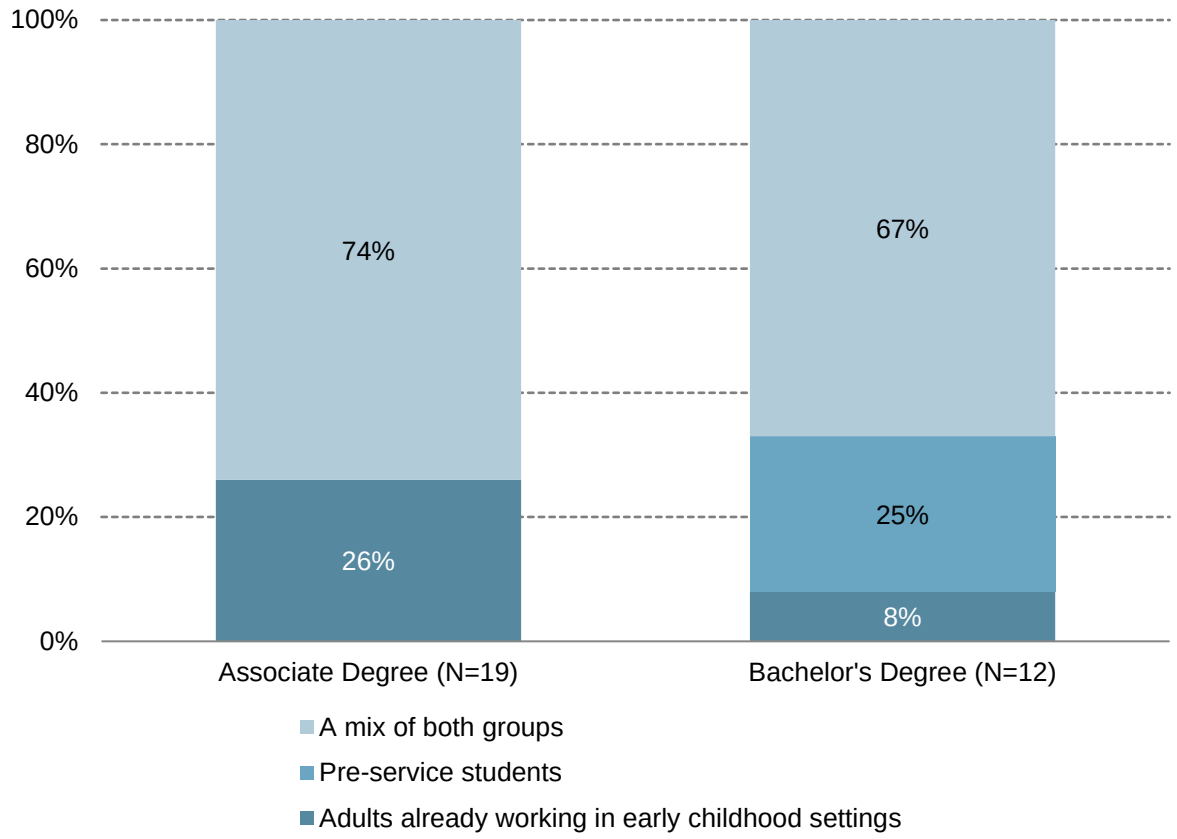
Target Student Population (See Figure 2.2)

- A majority of associate and bachelor's degree programs reported targeting both groups of students: pre-service students and those already working in the early childhood field.

  ⇒ Almost three-quarters (74 percent) of associate degree programs reported targeting both groups of students.
  ⇒ Approximately two-thirds (67 percent) of bachelor's degree programs reported targeting both groups of students.

- A smaller percentage of programs reported exclusively targeting pre-service students or adults already working in early childhood settings, but this finding varied by degree level. While one-quarter (26 percent) of associate degree programs reported *exclusively* targeting adults already working in early childhood, bachelor's degree programs (25 percent) were more likely to *exclusively* target pre-service students.

Figure 2.2: Target Student Population of Florida Early Childhood Degree Programs, by Degree Level



Number of Students and Degrees Conferred (See **Figures 2.3** and **2.4)**

- Degree programs reported a wide range in the number of students enrolled in their programs (from two to 500) and in the number of degrees conferred (from zero to 75) during the 2015-2016 academic year.
- Associate degree programs were more likely to report enrolling 100 or more students. Approximately 57 percent of associate degree programs did so, compared to approximately 32 percent of bachelor's degree programs.
- In contrast, bachelor's degree programs were more likely to report conferring 50 or more degrees during the 2015-2016 academic year. Eighteen percent of bachelor's degree programs did so, while none of the associate degree programs reported conferring 50 or more degrees.

Figure 2.3: Number of Students Enrolled in Florida Early Childhood Degree Programs in the 2015-2016 Academic Year, by Degree Level

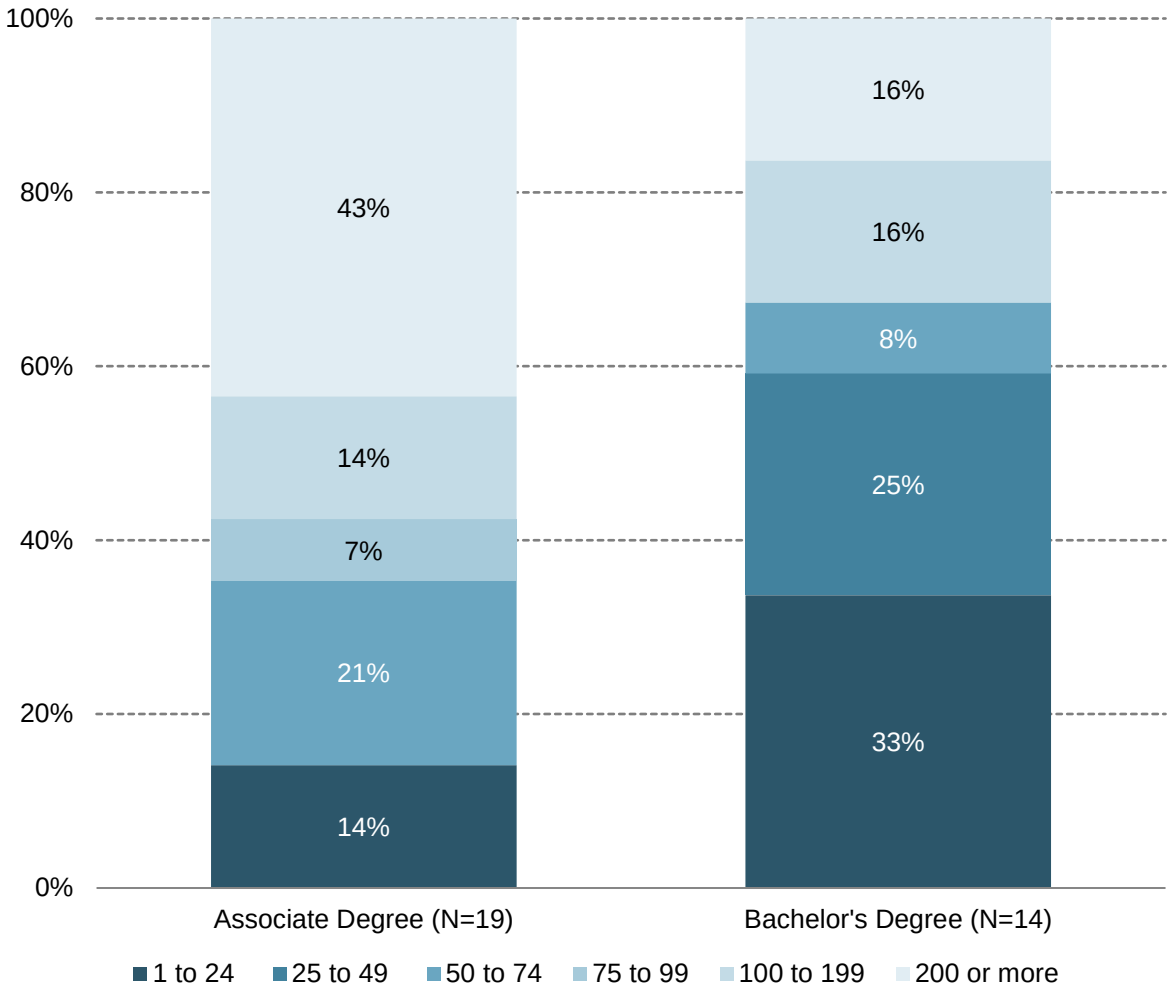
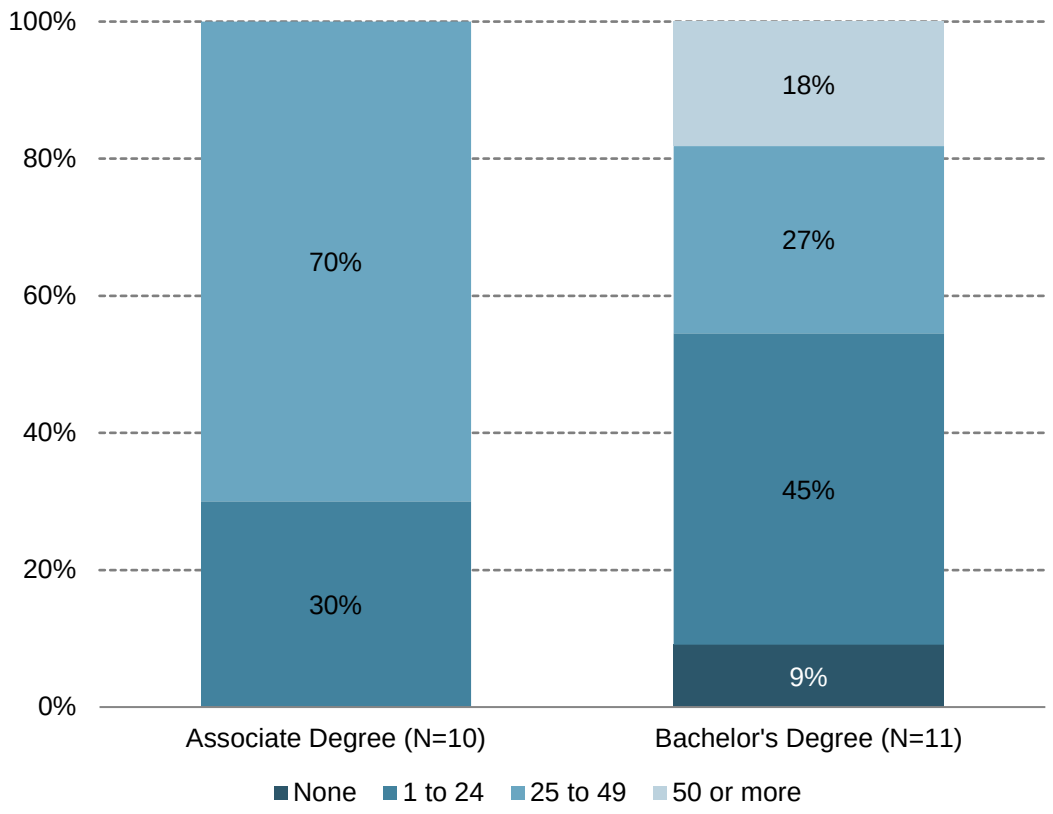


Figure 2.4: Number of Degrees Conferred in Florida Early Childhood Higher Education Degree Programs in the 2015-2016 Academic Year, by Degree Level



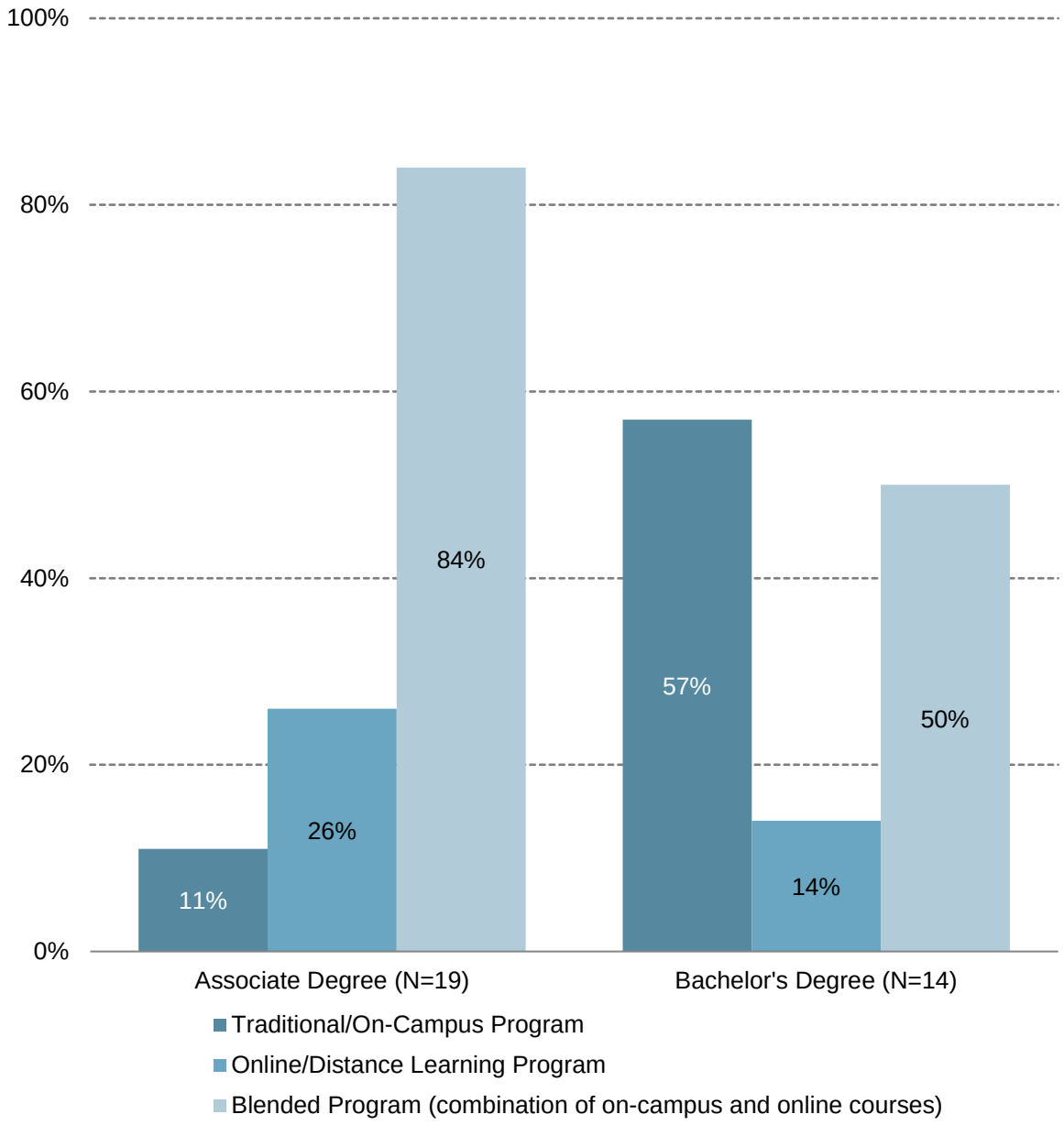
Format of Degree Program (See Figure 2.5)

- Program leads were asked about the formats in which students are able to take courses to complete their degrees. The formats available varied by degree level.

  ⇒ Associate degree programs were most likely offered as blended programs (84 percent), combining on-campus coursework and online or distance learning experiences. Only one in 10 (11 percent) associate degree programs reported offering the degree program entirely on-campus.

  ⇒ A greater proportion of bachelor's degree programs (57 percent) offered a traditional, on-campus degree program. In addition, one-half of bachelor's degree programs were offered in the blended program format.

Figure 2.5: Format of Florida Early Childhood Degree Programs, by Degree Level



Student Services (See Figures 2.6, 2.7, and 2.8)

- Degree programs reported that students were offered a variety of services to help them access their education and succeed in their educational careers. These services spanned three general categories: counseling support, such as academic and financial aid counseling; access support, such as classes in convenient locations and at convenient times (e.g., evenings, weekends); and skills support, such as academic tutoring and assistance with technology.

- There was some variation among degree programs regarding specific student services offered.

  ⇒ Bachelor's degree programs were more likely than associate degree programs to report offering cohort programs in which small groups of students move through their degree programs together (36 percent vs. 11 percent).

  ⇒ Bachelor's degree programs were also more likely to report offering classes off campus in community-based settings. Approximately 27 percent did so, compared to 17 percent of associate degree programs.

  ⇒ Associate degree programs were more likely than bachelor's degree programs to offer academic counseling (67 percent vs. 55 percent). In addition, one-half (50 percent) of associate degree programs reported offering tutoring in math or reading, compared with slightly more than one-quarter (27 percent) of bachelor's degree programs.

  ⇒ Bachelor's degree programs were more likely than associate degree programs to report offering financial assistance to students in their program, compared to associate degree programs (64 percent vs. 50 percent).

Figure 2.6: Student Services Offered in Florida Early Childhood Degree Programs: Counseling Support, by Degree Level

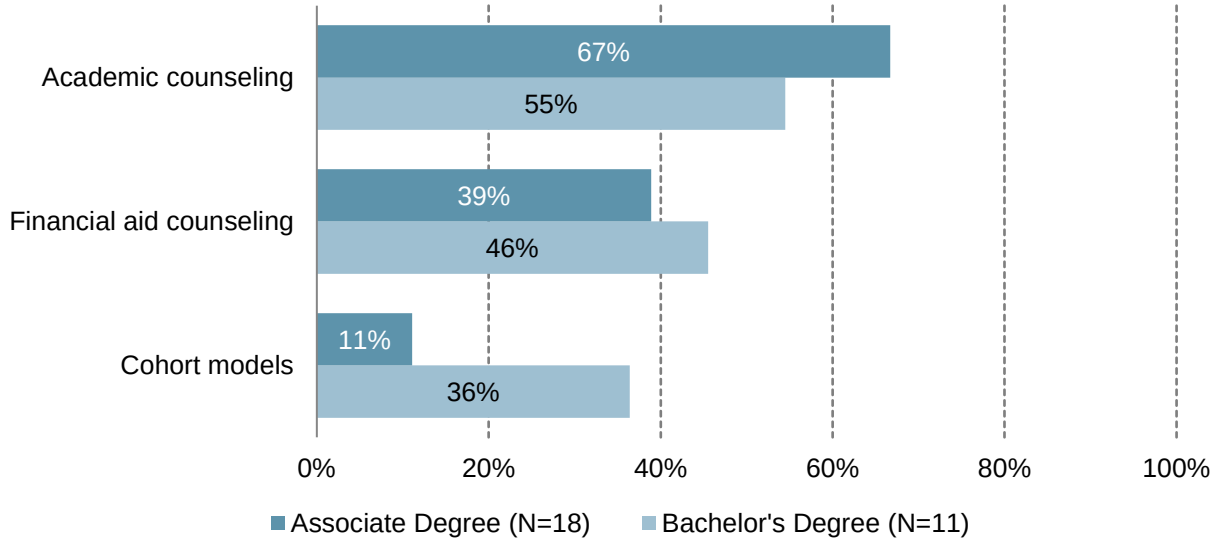


Figure 2.7: Student Services Offered in Florida Early Childhood Degree Programs: Access Support, by Degree Level

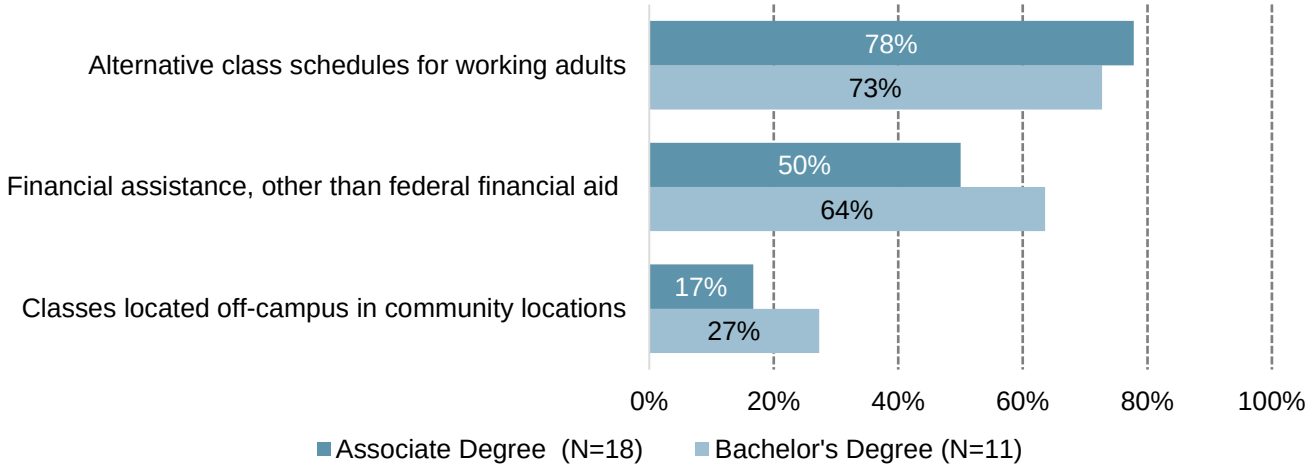
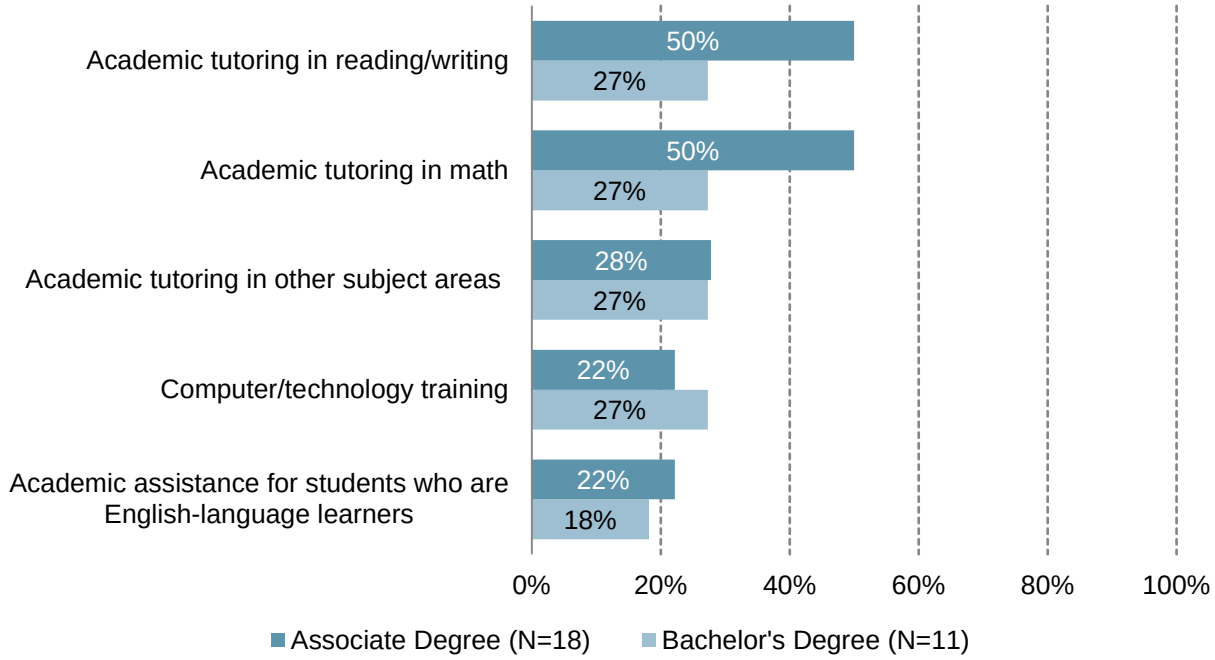


Figure 2.8: Student Services Offered in Florida Early Childhood Degree Programs: Skills Support, by Degree Level



Content and Age-Group Focus of Florida Early Childhood Degree Programs

What we asked about course content and age-group focus:

The *Inventory* asked program leads to identify the topics required for the degree. Topics were categorized into broad areas:

- Child Development and Learning;
- Teaching Diverse Child Populations;
- Teaching and Curriculum;
- Teaching Skills in Early Childhood Settings;
- Early Childhood Administration and Leadership (offered, not required);
- Family Engagement;*
- Early Mathematics;*
  - Teaching young children math skills; and
  - Development of young children's mathematical understanding; and
- Teaching Dual Language Learners.*

Respondents were then asked to specify the age-group focus of the required topics. The three age groups were:

- Infants and toddlers (birth to age two);
- Preschool (age three and/or four); and
- Kindergarten through third grade or higher.

*Findings related to family engagement, early mathematics, and teaching young dual language learners are reported in Chapter 5.

- **Child Development and Learning**: Nearly all associate and bachelor's degree programs reported requiring each of the six "child development and learning" topics listed in the *Inventory*, with a few exceptions. (See **Figure 2.9** and **Appendix Table A2-1**.)

  ⇒ Eighty-nine percent of associate degree programs required content related to the "development of children's scientific understanding."
  ⇒ Ninety-four percent of associate degree programs required students to learn about the "effects of race, gender, and culture on children's development."

- **Teaching Diverse Child Populations***:* For each of the five topics related to "teaching diverse child populations," 89 percent or more of associate and bachelor's degree program leads reported requiring the topic, with one exception. Seventy-nine percent) of associate and 85 percent of bachelor's degree programs required "teaching children who have experienced trauma." (See **Figure 2.10** and **Appendix Table A2-2**.)

- In addition, the *Inventory* asked whether programs required course content related to developing a self-awareness of culture, bias, and discriminatory practices, as well as examining the effects of teachers' own beliefs and attitudes. More than three-quarters of associate and nearly all bachelor's degree programs required course content on self-reflection and awareness around issues of culture and bias (79 percent and 92 percent, respectively).

- **Teaching and Curriculum**: Similar to "teaching diverse child populations," the vast majority of associate and bachelor's degree programs reported requiring the nine "teaching and curriculum" content areas. (See **Figure 2.11** and **Appendix Table A2-3**.)

  ⇒ At least three-quarters of associate degree programs reported requiring each of the nine "teaching and curriculum" topics.
  ⇒ At least three-quarters of bachelor's degree programs reported requiring each of the nine topics listed in the *Inventory*. Four topics were required by all of the bachelor's degree programs:
    - Teaching children literacy skills;
    - Supporting children's social development;
    - Implementing integrated curriculum; and
    - Implementing inclusion strategies for children of all abilities to participate in learning.

- **Teaching Skills in Early Childhood Settings***:* All bachelor's degree programs and 95 percent of associate degree programs reported requiring each of the three "teaching skills in early childhood settings" topics listed in the *Inventory*. (See **Figure 2.12** and **Appendix Table A2-4**.)

- **Early Childhood Administration and Leadership***:* Overall, a smaller percentage of programs at all degree levels reported offering coursework related to "early childhood administration and leadership" than the content areas described above. Associate degree programs were more likely than bachelor's degree programs to offer these courses. (See **Figure 2.13** and **Figure 2.14.**)

  ⇒ The only topics offered by 50 percent or more of associate and bachelor's degree programs were:
    - Assessment and documentation to inform teaching and learning;
    - Guiding practitioners in implementing curriculum and appropriate teaching strategies; and
    - Building community partnerships and developing familiarity with community resources for children and families.

- In addition, we asked whether the degree program offers coursework to prepare students to provide professional development services, including content related to models and best practices of professional development and promoting practitioner inquiry. Slightly more than one-quarter (28 percent) of associate and about one-half (46 percent) of bachelor's degree programs offered this content to students.

Age-Group Focus (See Appendix Tables A2-1 Through A2-4)

- While degree programs consistently reported focusing their coursework on preschool-age children, the focus on children in the younger and older age groups varied by topic and by degree level.

  ⇒ For each of the child development topics listed in the *Inventory*, two-thirds or more of associate and bachelor's degree programs required coursework focused on infants and toddlers and preschoolers, with two exceptions.
    - Less than one-half (43 percent) of bachelor's degree programs required content around the development of infant and toddler's scientific understanding; and
    - Fifty-seven percent of bachelor's degree programs required content on the effects of disability on child development focused on infants and toddlers.

- About one-third of associate degree programs required child development content focused on children in kindergarten through third grade and higher.

- On average, one-quarter of associate degree programs that required students to learn content related to child development and learning reported that this content was not required to be focused on a specific age group or grade level.

*The following figures display the percentages of degree programs requiring various topics for students to attain their degrees. See **Appendix Tables A2-1** through **A2-4** for the age-group focus of each topic.*

Figure 2.9: Coursework on Child Development and Learning Required in Florida Early Childhood Degree Programs, by Degree Level

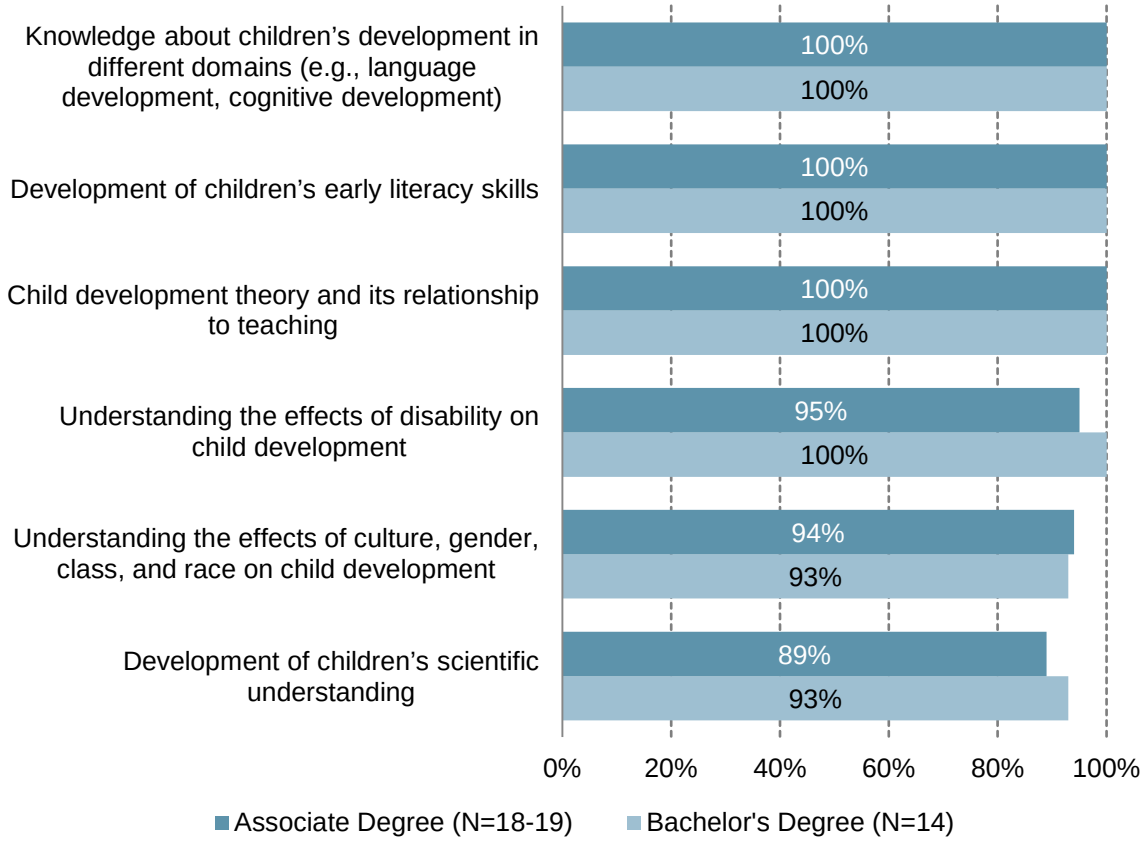


Figure 2.10: Coursework on Teaching Diverse Child Populations Required in Florida Early Childhood Degree Programs, by Degree Level

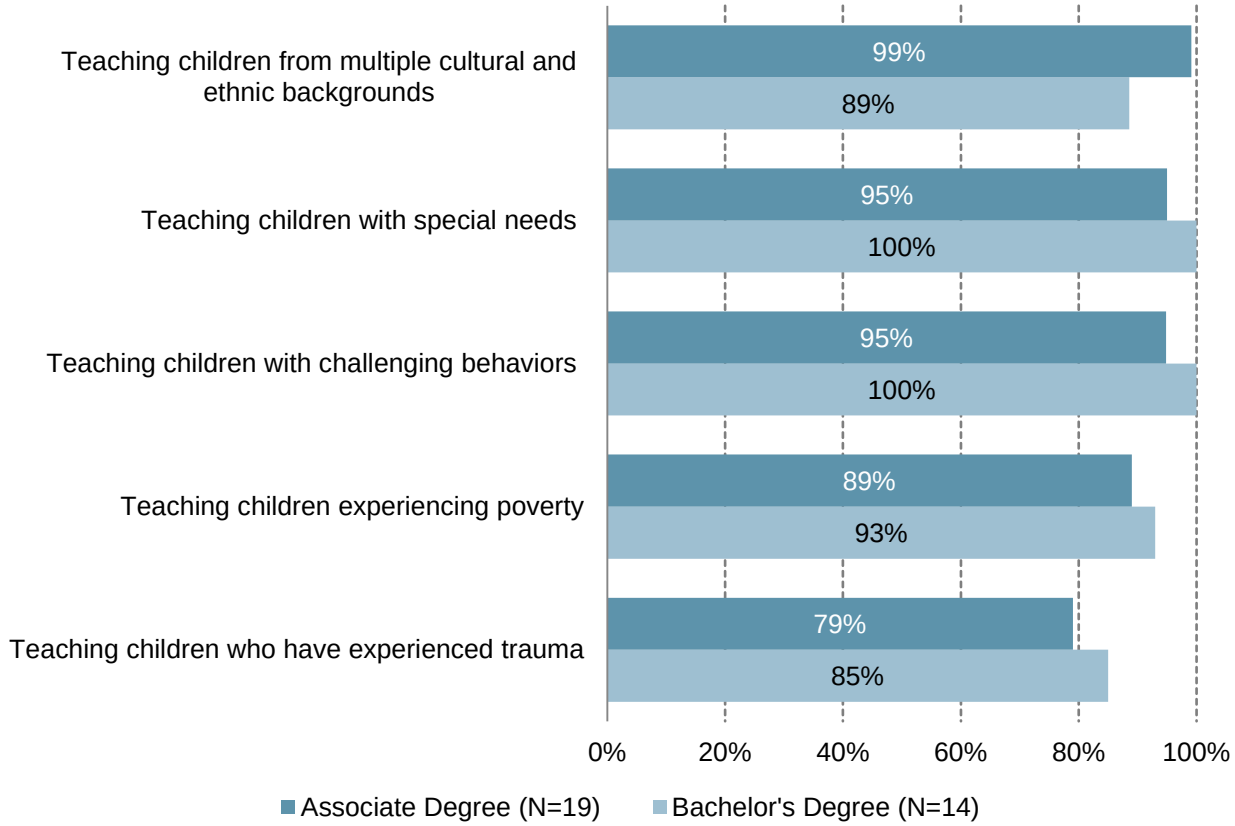


Figure 2.11: Coursework on Teaching and Curriculum Required in Florida Early Childhood Degree Programs, by Degree Level

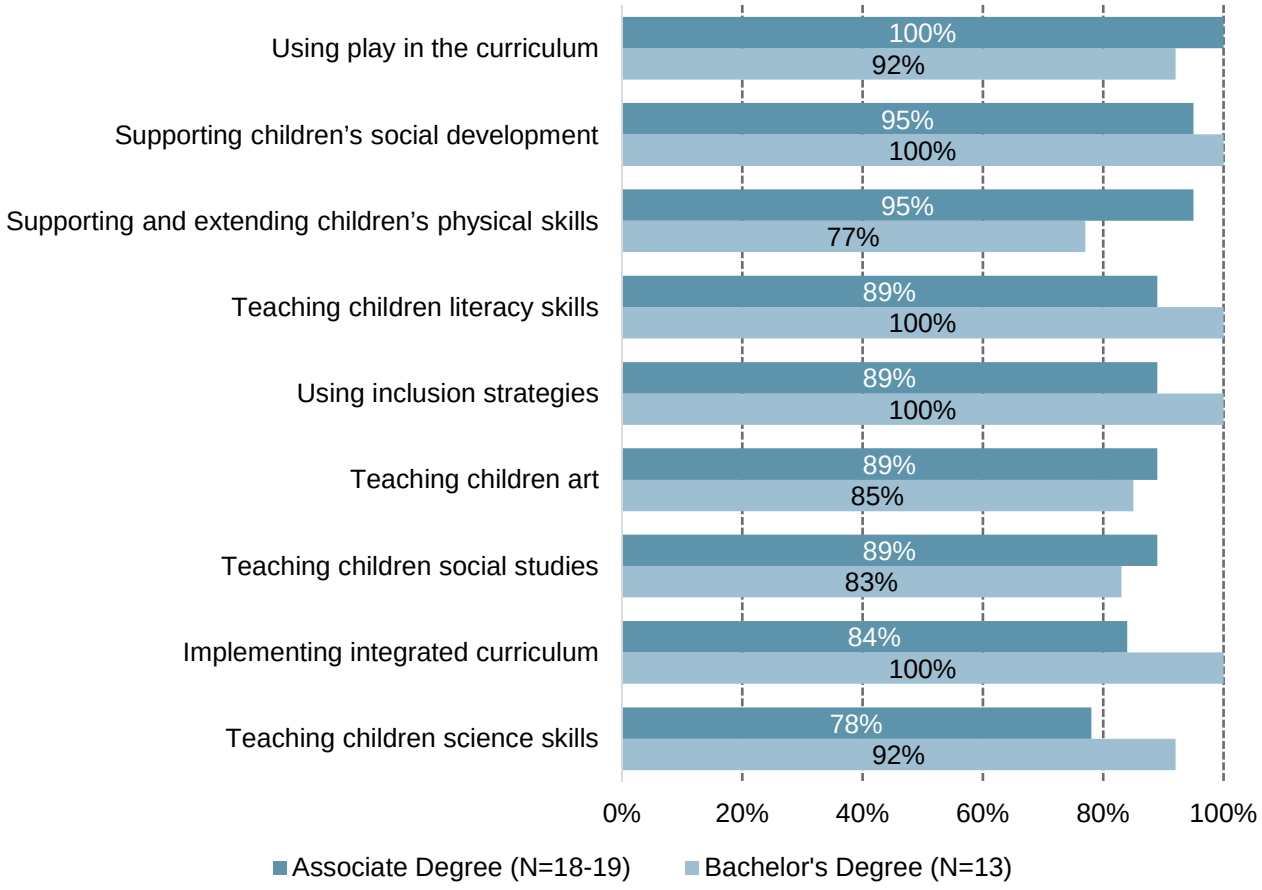


Figure 2.12: Coursework on Teaching Skills Required in Florida Early Childhood Degree Programs, by Degree Level

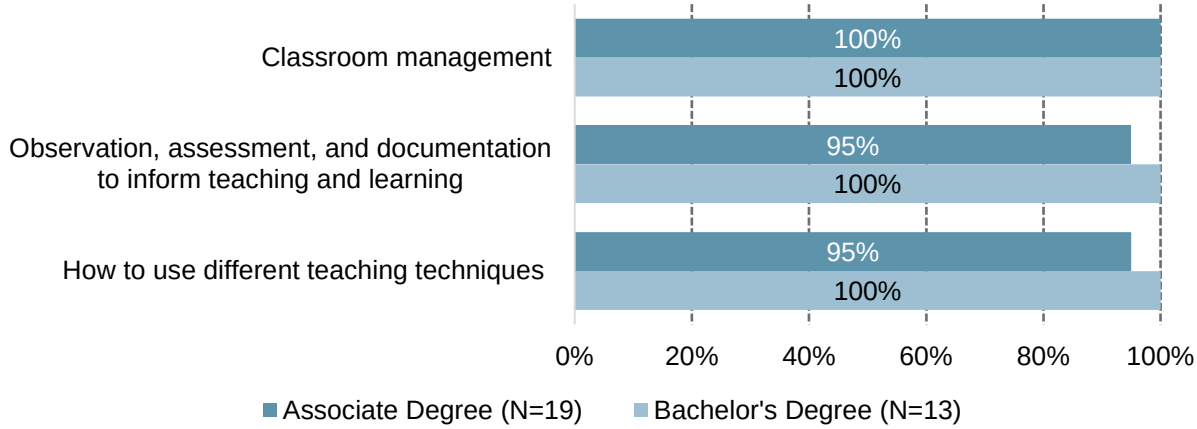


Figure 2.13: Coursework on Administration and Leadership Offered in Florida Early Childhood Degree Programs: Supervision and Operations Topics, by Degree Level

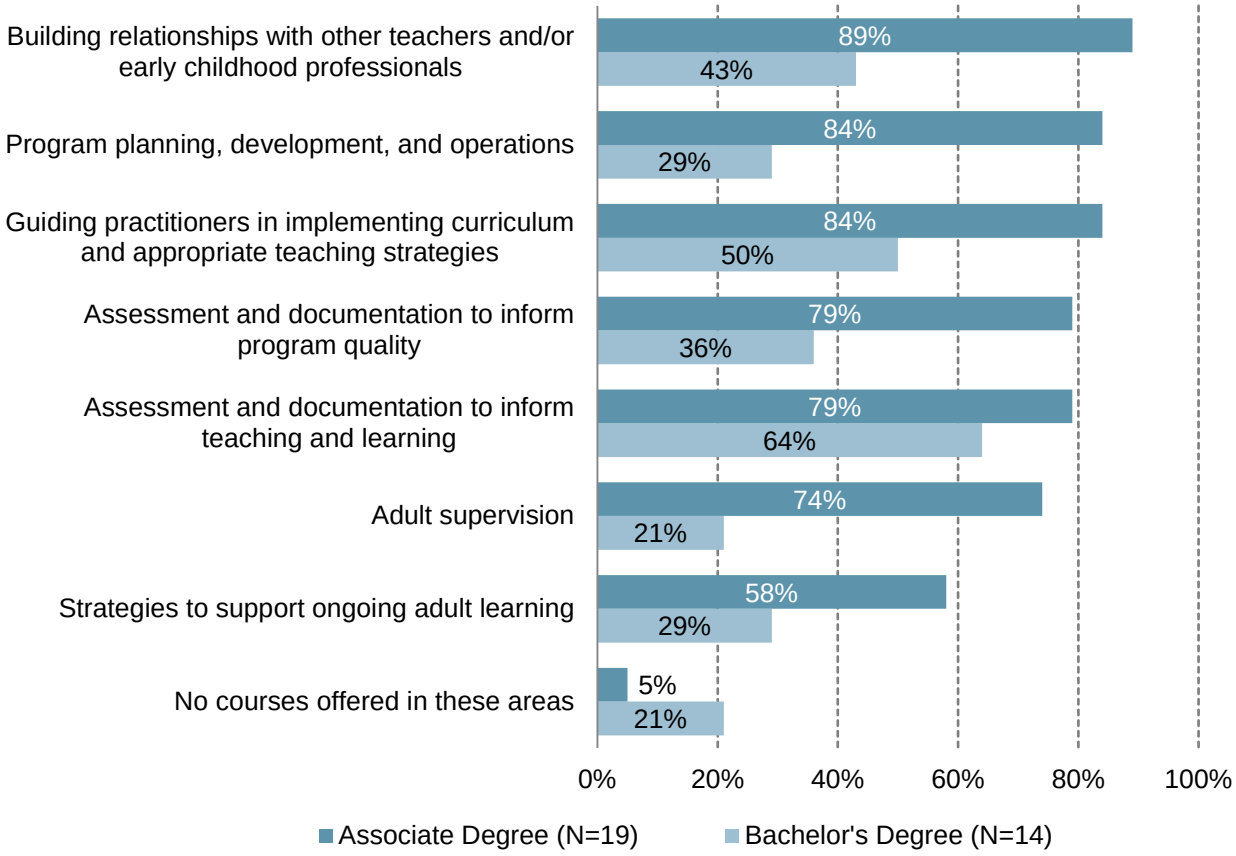
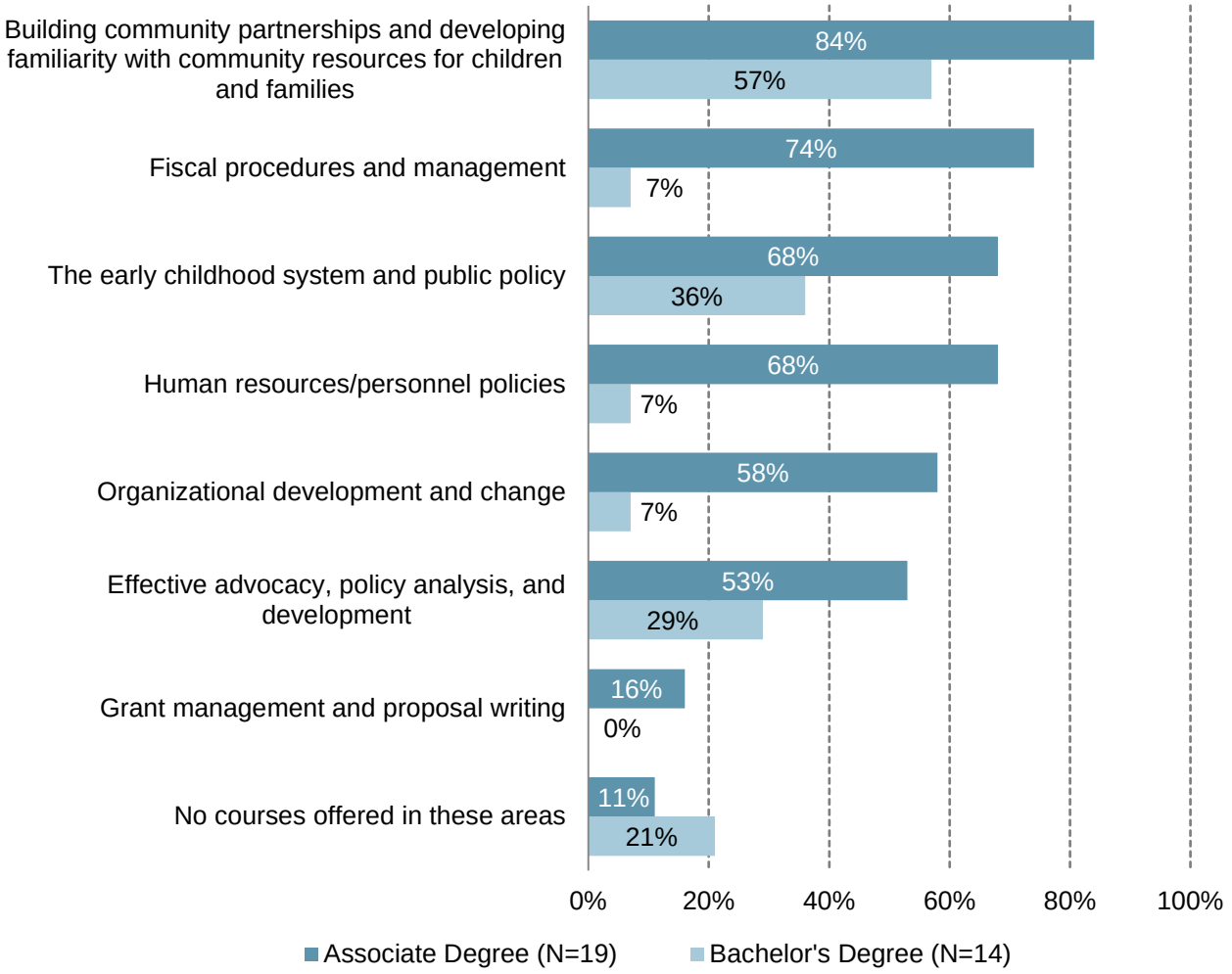


Figure 2.14: Coursework on Administration and Leadership Offered in Florida Early Childhood Degree Programs: Organization and Systems Topics, by Degree Level



Student Field Experiences

What we asked about field experiences:

The *Inventory* asked respondents about two types of field experiences offered to the students:

1. Student teaching: Defined as full-time immersion in a classroom, with increasing responsibility for curriculum planning and teaching, as well as supervision by a faculty member, cooperating teacher, and/or mentor.
2. Practicum: Defined as an experience that is short in duration, associated with a course, often focused on a particular skill or population of children, and supervised by a faculty member, cooperating teacher, and/or mentor.

If the field experience was required for attaining the degree, the *Inventory* asked about:

- Timing and duration of the field experience;
- Requirements of field experience;
  - Populations of students or families;
  - Teaching practices required of students;
- Criteria for selecting field sites;
- Supervision of field experience; and
- Differences in field experience structures for pre-service and experienced teachers.

Required Field Experiences

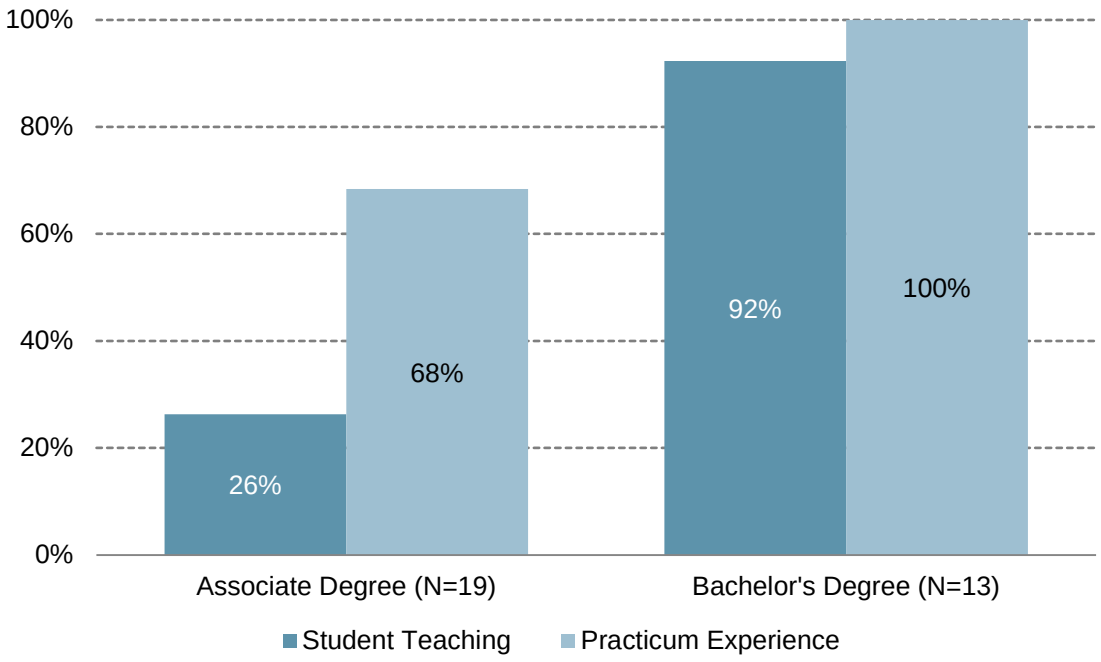
- Overall, degree programs were more likely to require practica experiences than student teaching. In addition, bachelor's degree programs were more likely than associate degree programs to require both student teaching and practica field experiences. (See **Figure 2.15**.)

  ⇒ While all bachelor's degree programs reported requiring students to participate in a practicum experience, 68 percent of associate's degree programs reported doing so.

  ⇒ Nearly all bachelor's degree programs (92 percent) reported requiring students to participate in a student teaching experience. In contrast, only 26 percent of associate degree programs required student teaching.[7]

[7] Only a few associate degree programs reported requiring student teaching. As data for these programs cannot be de-identified, data for characteristics of student teaching experiences collected for associate degree program are not included in this report.

Figure 2.15: Field Experiences Required in Florida Early Childhood Degree Programs, by Degree Level



Timing and Duration of Field Experiences

- Nearly all bachelor's degree programs (92 percent) reported that student teaching experiences primarily occurred at the end of the course of study.

- In contrast to student teaching, the practicum experience first occurred at different times for students in different degree program levels.

  ⇒ Approximately one-half (54 percent) of associate degree programs reported that the practicum first occurred at the end of the course of study. Slightly more than one-third (38 percent) reported that it occurred during the middle of the course of study and slightly more than one-third (38 percent), within the first year of study.

  ⇒ In contrast, 69 percent of bachelor's degree programs reported that the practicum first occurred during the first year of study. Approximately one-half (54 percent) reported that it occurred during the middle of the course of study and slightly less than one-third (31 percent), at the end of the course of study.

- On average, associate degree programs reported 137 hours (range: 15-480 hours) and bachelor's degree programs 107 hours (range: 15-390 hours) required to complete a practicum course.

- On average, bachelor's degree programs reported requiring an average of 16 weeks (range: 10-24 weeks) of student teaching.

Requirements of Field Experiences

In the case of degree programs that incorporated field experiences, these student teaching or practica assignments sometimes had specific requirements. (See **Appendix Tables A2-7** and **A2-8**.)

- Bachelor degree programs were more likely than associate degree programs to require a specific age group for student teaching. When age groups were required, bachelor's degree programs were more likely to focus on working with children kindergarten through third grade or higher.

  ⇒ Two-thirds (67 percent) of bachelor's degree programs required student teaching focused on children kindergarten through third grade or higher. Fewer programs required student teaching focused on preschool-age children (42 percent) or infants and toddlers (25 percent).

- Student teaching experiences working with children who are dual language learners, children with disabilities, or families were more likely to be optional or not offered rather than required.

  ⇒ One-half (50 percent) of bachelor's degree programs required student teaching with children who are dual language learners, one-third (33 percent) required student teaching with children with disabilities, and one-quarter (25 percent) required student teaching to include working with families.

- Associate degree programs were more likely to report requiring practica experiences to focus on preschoolers than on children in the other age groups.

  ⇒ One-half (54 percent) of associate degree and bachelor's degree programs reported requiring practica experiences focused on the preschool years.
  ⇒ Slightly more than one-third (38 percent) of associate degree programs and slightly less than one-quarter (23 percent) of bachelor's degree programs required a focus on infants and toddlers.
  ⇒ While 62 percent of bachelor's degree programs required a focus on children in the early elementary years, the vast majority (92 percent) of associate degree programs reported that practica experiences with children in kindergarten through third grade or higher were optional or not offered.

- Practica experiences working with children who are dual language learners, children with disabilities, or families varied for students in bachelor's degree programs.

  ⇒ More than one-half (54 percent) of bachelor's degree programs required practica experiences working with children who are dual language learners or children with disabilities.
  ⇒ More than one-third (38 percent) of bachelor's degree programs required practica experiences working with families.

(See **Appendix Table A2-7**).

- Programs varied regarding the teaching practices that were required for students in their student teaching experiences.

⇒ All bachelor's degree programs required student teaching to include "scaffolding children's literacy development and promoting their oral and written skills," and "scaffolding children's mathematical development."
⇒ Nearly all bachelor's degree programs (92 percent) required student teaching to include supporting children's socioemotional development.
⇒ Nearly all bachelor's degree programs (92 percent) reported requiring student teaching experiences to include "utilizing assessment effective to inform and individualize instruction."
⇒ Facilitating children's motor development, developing partnerships with families, and collaborating with community organizations were required by less than one-half of bachelor's degree programs.

- Similarly, programs varied both within and across degree type regarding which practices were required in their practica experiences.

⇒ A majority of associate and bachelor's degree programs required "utilizing assessments effectively to inform and individualize instruction" and scaffolding children's literacy, mathematical, and socioemotional development.
⇒ Associate degree programs were more likely than bachelor's degree programs to require "facilitating the developmental course of motor development." While 75 percent of associate degree programs required this element, only 38 percent of bachelor's degree programs did so.
⇒ Developing partnerships with families and collaborating with community organizations were more likely to be optional or not offered during practica experiences in both associate and bachelor's degree programs.

(See **Appendix A2-8**).

Criteria for Selecting Field Sites

- More than one-half of programs at all degree levels reported having criteria for selecting student teaching and practica field sites. More than two-thirds (69 percent) of associate degree programs required criteria for selecting practica sites. Bachelor's degree programs were more likely to report having criteria for student teaching sites than practica sites (75 percent vs. 54 percent).[8]

⇒ The most frequently reported criteria for practica sites reported by associate degree programs were:
  - Student currently works at the site;
  - Age of children served at the site;
  - Teacher qualifications/characteristics (asked about in more detail in another question);
  - Site is a public school; and
  - Site is a nationally accredited early childhood program.

⇒ The most frequently reported criteria for student teaching and practica sites reported by bachelor's degree programs were:
  - Site is a public school (student teaching and practica);
  - Degree program/college has a partnership with a school district (student teaching and practica);

[8] Detailed findings for field site selection criteria will not be discussed due to small sample sizes.

- Teacher qualifications/characteristics (student teaching and practica); and
- Age of children served at the site (practica).

Supervision of Field Experience

- A majority of bachelor's degree programs (83 percent) used cooperating teachers to supervise student teaching. Two-thirds (69 percent) of both associate and bachelor's degree programs reported using cooperating teachers to supervise practica experiences.

- The most frequently reported criterion for both student teaching and practica experiences in programs at all degree levels was "cooperating teacher holds a particular state credential."[9]

Field Experience Structures for Pre-Service and Experienced Teachers

- More than three-quarters of associate (77 percent) and bachelor's (83 percent) degree programs reported structuring practica experiences similarly for novice and experienced teachers. One-third (33 percent) of bachelor's degree programs reported structuring student teaching experiences differently for novice and experienced teachers.

Articulation and Alignment With the Florida Professional Development System

What we asked about articulation and alignment:

The *Inventory* asked program leads whether their degree programs had formal articulation agreements with other degree programs.

Respondents were then asked a series of questions about the alignment of coursework with the state's professional development system:

- Whether the degree program offers coursework required for the Florida Staff Credential;
- Whether the degree program offers coursework that can be applied to the national Child Development Associate (CDA) credential; and
- Whether the degree program offers certificates to students who are working towards a degree.

- More than one-half (58 percent) of associate degree programs reported articulation agreements with early childhood bachelor's degree programs. Three-quarters (75 percent) of bachelor's degree programs reported articulation agreements with associate degree programs.

[9] Detailed findings for supervisor selection criteria will not be discussed due to small sample sizes.

- More than one-half (59 percent) of programs at all degree levels reported offering coursework required for the Florida Staff Credential. Eighty-four percent of associate degree programs and 46 percent of bachelor's degree programs offered this coursework.

- More than one-half (62 percent) of programs at all degree levels reported offering coursework that can be applied to the CDA credential. Seventy-two percent of associate degree programs and 45 percent of bachelor's degree programs offered this coursework.

- Associate degree programs were the most likely to offer certificates to students who were working towards a degree.

  ⇒ More than one-half (57 percent) of associate degree programs and one in five (20 percent) of the bachelor's degree programs offered the Infant/Toddler Certificate.
  ⇒ More than one-half (60 percent) of associate and two in five bachelor's degree programs (42 percent) offered the Preschool Certificate.
  ⇒ One-quarter (25 percent) of associate degree programs, but none of the bachelor's degree programs, offered the Early Intervention Specialist Certificate.
  ⇒ Nearly two-thirds (63 percent) of associate degree and one in 10 bachelor's degree programs (10 percent) offered the Child Care Center Management Certificate.

Chapter 3:
Early Childhood Degree Program Faculty Members

Demographics of Faculty Members Participating in the Florida Inventory

What we asked of and about faculty members:

The *Inventory* asked faculty members about their demographic identification and language status, their educational and professional backgrounds, and their current employment status.

The *Inventory* also asked faculty members to indicate their primary teaching focus and their expertise related to various age groups of children.

Faculty members were asked their opinions on the importance of including certain topics in the degree program curriculum and also their capacity to teach certain topics. Finally, faculty members were asked about their recent experience teaching course content and their participation and interest in professional development on a variety of topics.

- Nearly all faculty members who participated in the *Inventory* were women (96 percent of associate degree program faculty, 95 percent of bachelor's degree program faculty, 96 percent of dual-level faculty, and 95 percent of graduate degree program faculty).

- Bachelor's degree faculty members were, on average, slightly younger than their colleagues teaching in other programs. The average age of associate degree faculty members was 53 years; for dual-level faculty members, it was 50 years; and for graduate degree faculty members, it was 58 years. In contrast, the average age of bachelor's degree faculty members was 46 years. (See **Figure 3.1**.)

  ⇒ Approximately one-half (48 percent) of graduate degree faculty members reported being age 60 years or older, potentially close to retirement. In contrast, one quarter (25 percent) of associate degree and one-third (32 percent) of dual-level faculty members reported being age 60 or older. Only 14 percent of bachelor's degree faculty members reported being age 60 or older.

  ⇒ Approximately one-half (55 percent) of faculty members across all program degree levels reported being 40 to 59 years old.

  ⇒ Approximately one-third (32 percent) of bachelor's degree faculty members reported being younger than age 40, compared to less than 20 percent of associate degree and dual-level faculty members. None of the graduate degree faculty members participating in the *Inventory* reported being younger than age 40.

- Eighty percent of associate degree faculty members and approximately 75 percent of bachelor's and graduate degree faculty members identified as white/Caucasian. Dual-level faculty members were more diverse than other faculty members participating in the *Inventory*. Sixty-one percent of dual-level faculty members identified as white/Caucasian and 25 percent identified as Hispanic or Latino. (See **Figure 3.2**.)

- All faculty members participating in the *Inventory* reported fluency in English. Although less than 10 percent of associate, bachelor's, and graduate degree faculty members reported being fluent in Spanish, more than one-quarter (29 percent) of dual-level faculty members reported that they were fluent in Spanish. (See **Figure 3.3**.)

- In addition, 64 percent of associate degree, 47 percent of bachelor's degree, and 56 percent of dual-level and graduate degree faculty members reported that it would be helpful to know another language, primarily Spanish, to communicate better with their students.

Figure 3.1: Age of Faculty Members Participating in the Florida Inventory, by Degree Level

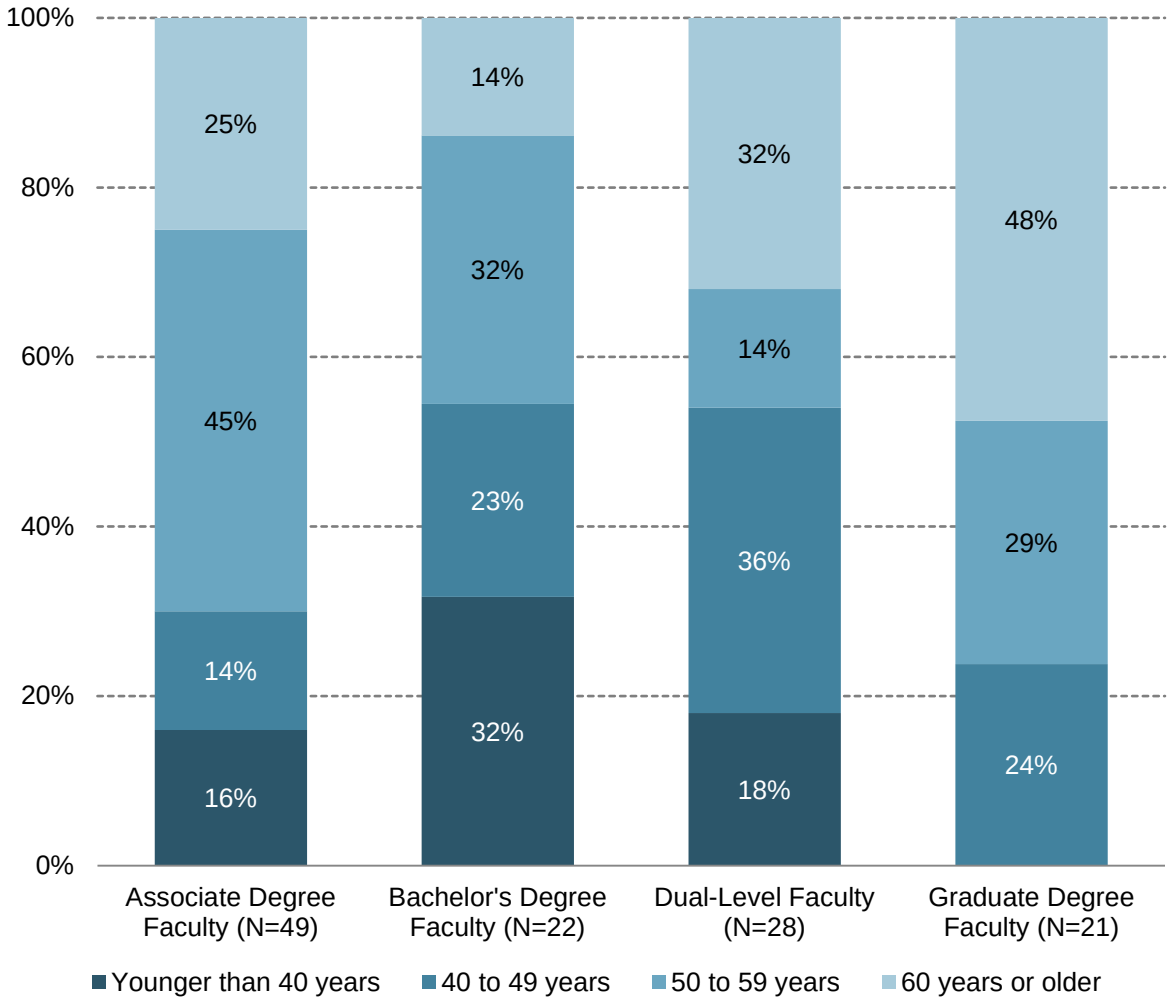


Figure 3.2: Race/Ethnicity of Faculty Members Participating in the Florida Inventory, by Degree Level

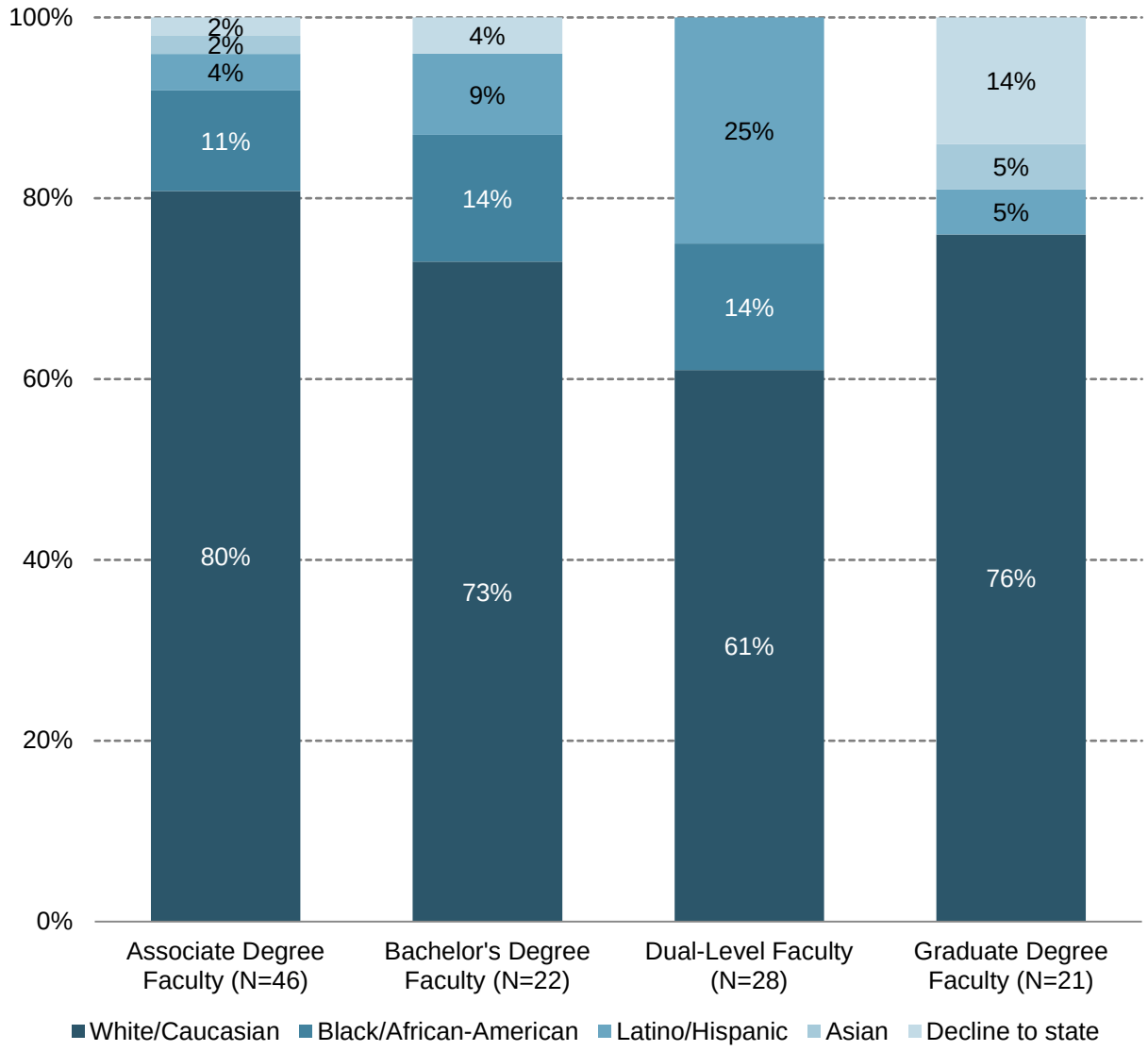
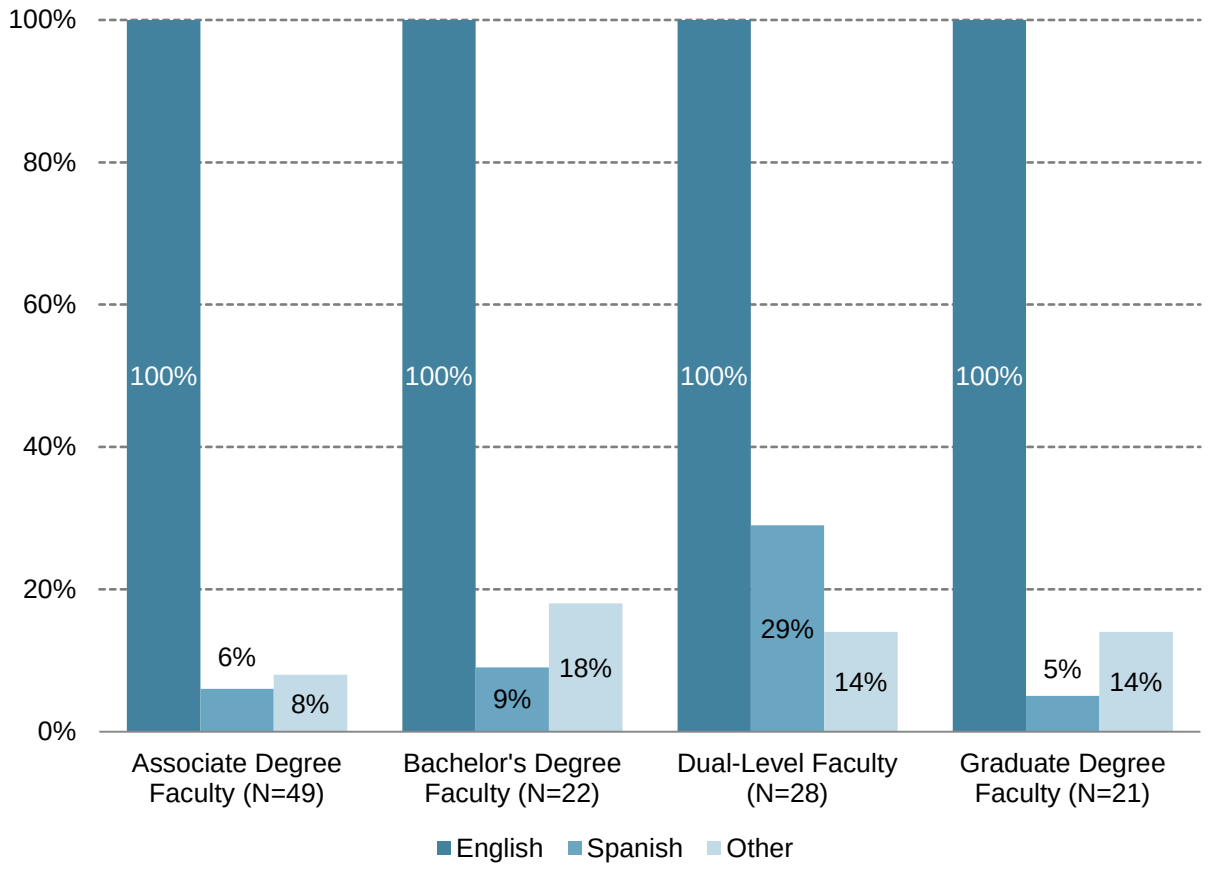


Figure 3.3: Languages Spoken Fluently by Faculty Members Participating in the Florida Inventory, by Degree Level



Education Levels of Faculty Members Participating in the Florida Inventory

- The majority of associate degree program faculty members reported having attained a master's degree as their highest level of education (71 percent). (See **Figure 3.4**.)
- The majority of bachelor's and graduate degree program faculty members reported having attained a doctoral degree (50 percent and 81 percent, respectively). (See **Figure 3.4**.)
- Three-quarters or more of faculty members at each program degree level reported having attained an early childhood education or child development (ECE/CD) degree at either the bachelor's or graduate degree level. (See **Figure 3.5**.)

Figure 3.4: Highest Level of Education Attained by Faculty Members Participating in the Florida Inventory, by Degree Level

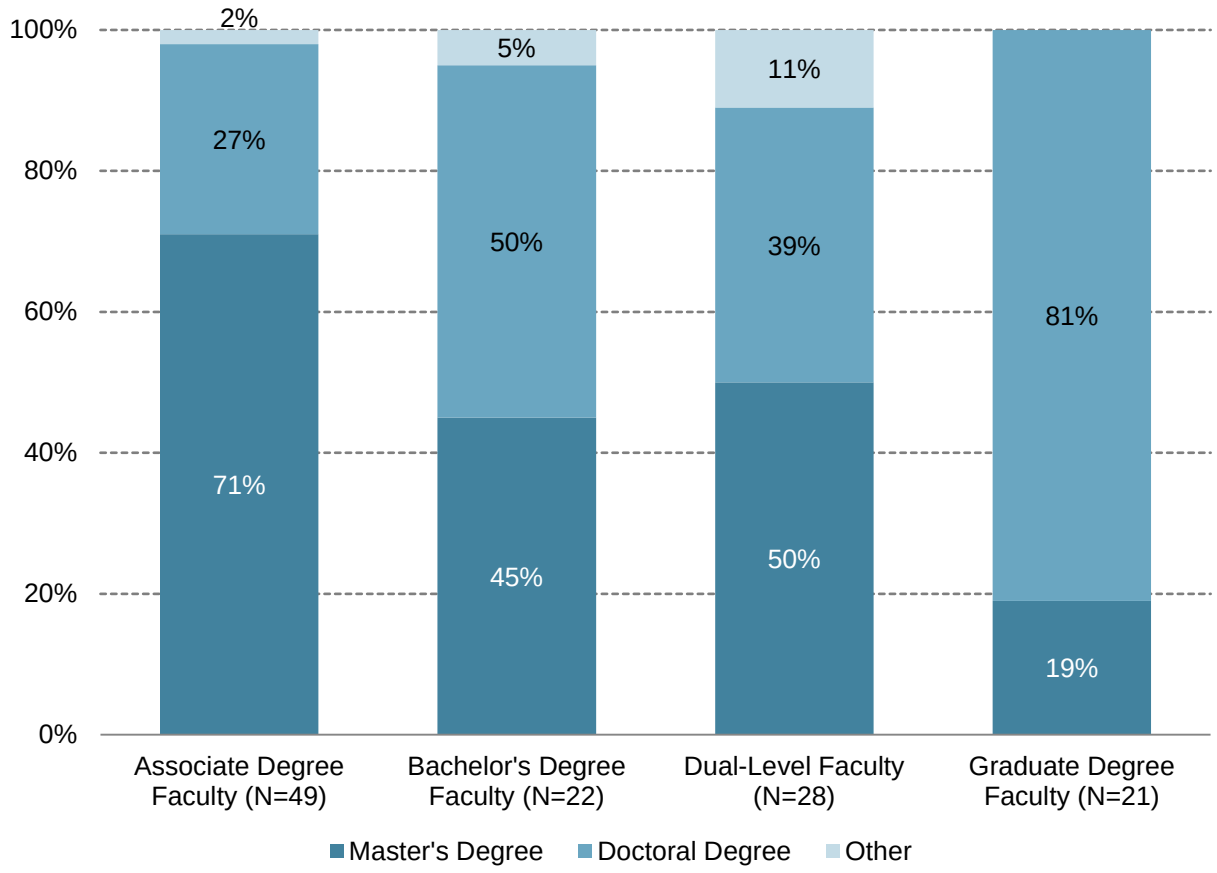
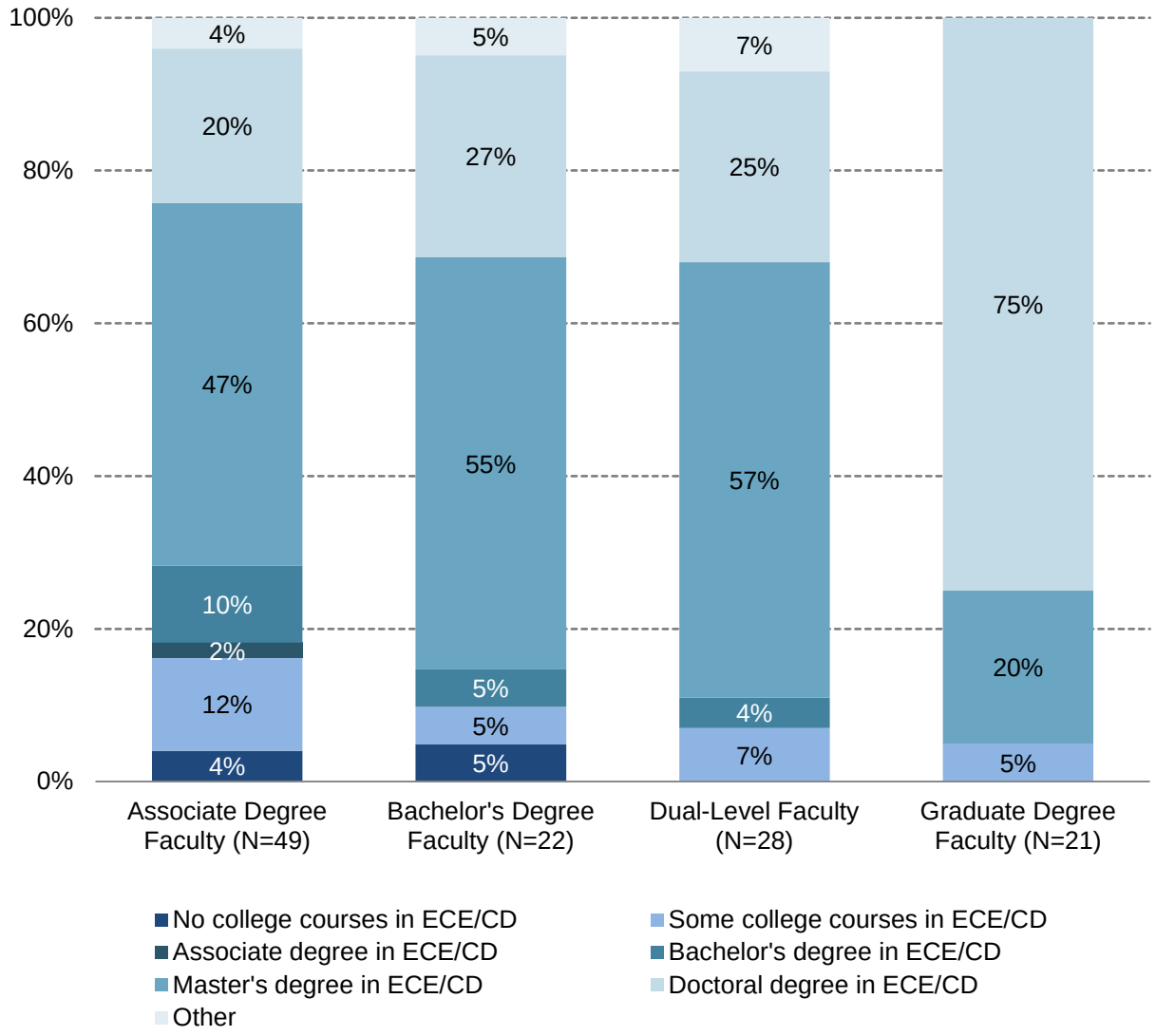


Figure 3.5: Early Childhood Education (ECE) or Child Development (CD) Degree Attainment by Faculty Participating in the Florida Inventory, by Degree Level



Professional Experiences and Current Employment Status of Faculty Members Participating in the Florida Inventory

Professional Experiences

- On average, associate degree program faculty members reported having taught at the college or university level for nine years, bachelor's degree program faculty members for six years, dual-level faculty for eight years, and graduate's degree program faculty members for 16 years.

  ⇒ Nearly three-quarters (70 percent) of graduate degree faculty reported having taught at the college level for more than 10 years, compared to less than one-half (43 percent) of associate degree program faculty, one-quarter (25 percent) of bachelor's degree faculty, and one-fifth (20 percent) of dual-level faculty. (See **Figure 3.6**.)

- On average, associate degree program faculty members reported having taught at their *current* college or university for eight years, bachelor's degree program faculty members for six years, dual-level faculty for seven years, and graduate degree program faculty members for nine years.

  ⇒ Less than one-half (40 percent) of graduate degree faculty members, approximately one-third (32 percent) of associate degree faculty members, and less than one-quarter of bachelor's degree faculty and dual-level faculty (15 percent and 8 percent, respectively) reported having taught at their college or university for more than 10 years. (See **Figure 3.7**.)

- Approximately three-quarters (79 percent) of dual-level faculty members, two-thirds of associate and bachelor's degree faculty members (69 percent and 64 percent, respectively), and one-half (52 percent) of graduate degree faculty members reported having worked in roles other than college-level teaching or administration in the past 10 years.

  ⇒ "Early childhood professional development provider" was the role most frequently reported by faculty at all degree levels. (See **Figure 3.8**.)

  ⇒ Forty-one percent of dual-level faculty members and 36 percent of bachelor's degree faculty members reported working as special education teachers in the past 10 years.

  ⇒ The roles reported by fewer than one-third of faculty members at all degree levels included:
  - Teacher assistant/aide;
  - Early Intervention specialist; and
  - School principal/other school administrator.

  ⇒ At all degree levels, adjunct faculty members were more likely to report having worked in other roles than tenure-track faculty. Approximately 83 percent of adjunct faculty members worked in roles other than college-level teaching or administration in the past 10 years, compared to one-half of full-time, non-tenured or tenured/tenure-track faculty members (50 percent and 46 percent, respectively).

Figure 3.6: Number of Years Teaching at the College or University Level for Faculty Members Participating in the Florida Inventory, by Degree Level

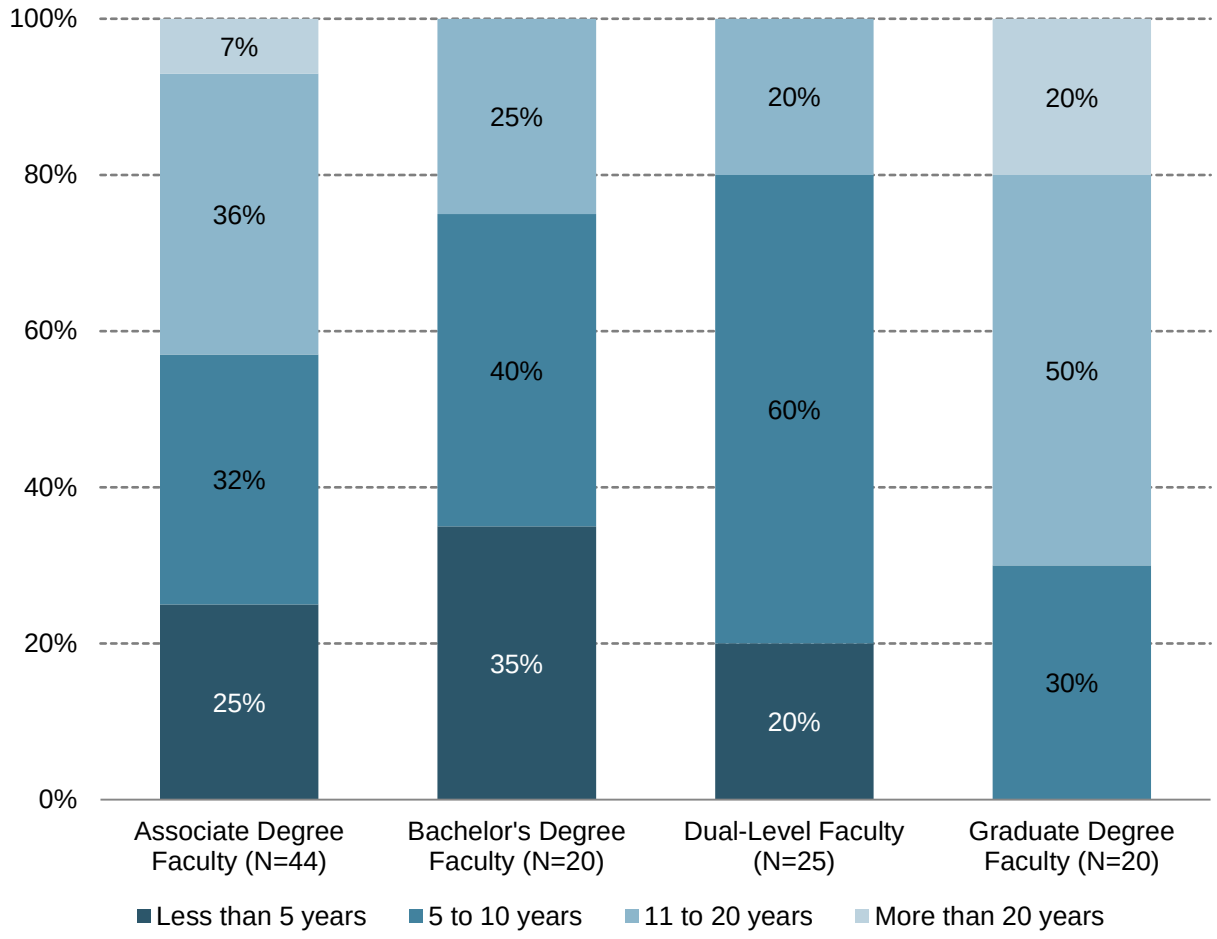


Figure 3.7: Number of Years Teaching at Current College or University for Faculty Participating in the Florida Inventory, by Degree Level

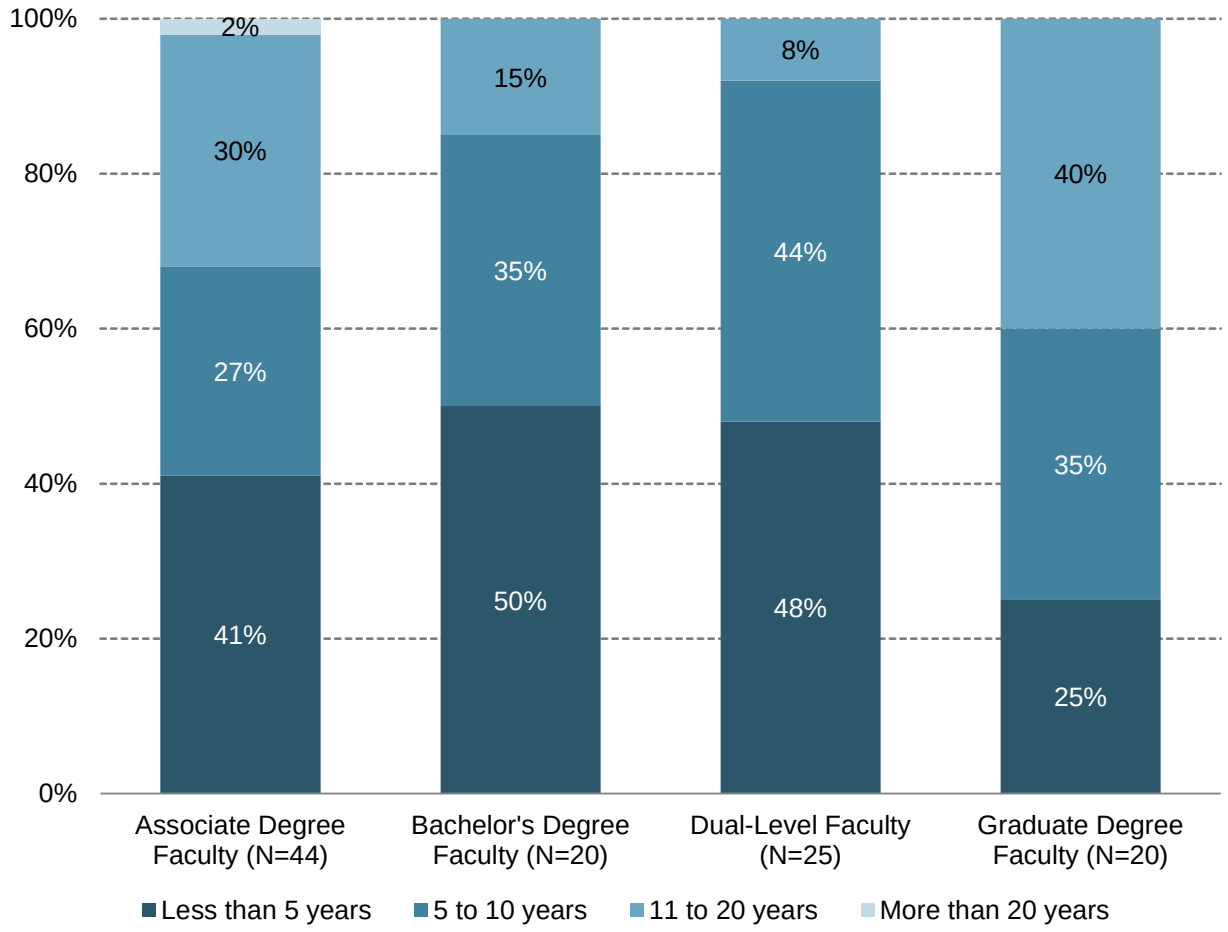
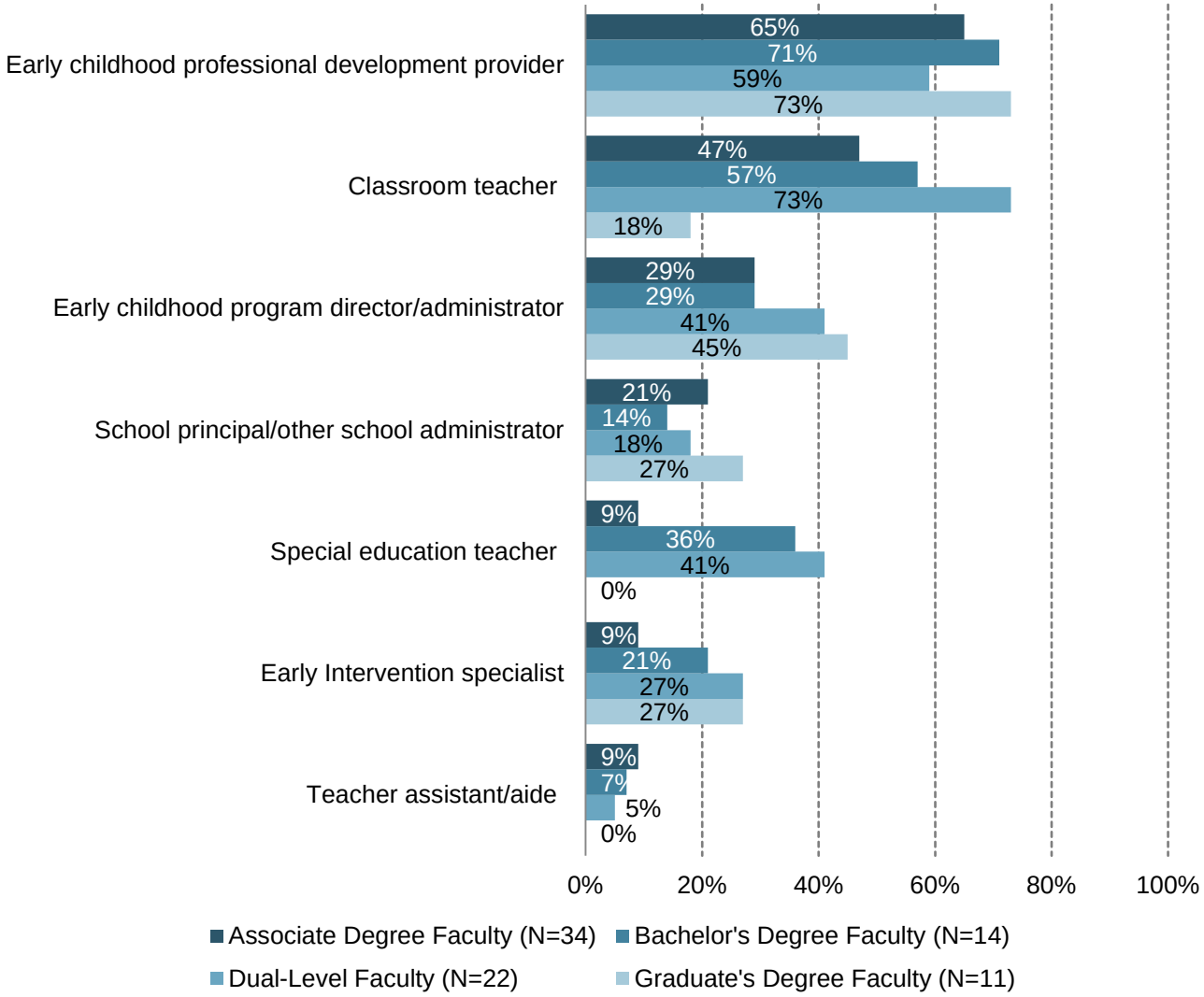


Figure 3.8: Job Roles in the Past 10 Years Reported by Faculty Members, by Degree Level



Current Employment

- Approximately two-thirds of associate degree, bachelor's degree, and dual-level faculty members and one-quarter of graduate degree faculty members identified themselves as adjunct faculty or part-time lecturers. (See **Figure 3.9**.)

- Although most faculty reported that they had responsibilities in addition to teaching, graduate degree faculty were the most likely to report additional responsibilities. (See **Figure 3.10**.)

- On average, associate degree and dual-level faculty members reported teaching seven courses, bachelor's degree faculty members reported teaching four courses, and graduate degree faculty members reported teaching five courses in a typical academic year. (See **Figure 3.11**.)

⇒ Less than one-half of associate degree (48 percent), dual-level (42 percent), graduate degree (28 percent), and bachelor's degree (22 percent) faculty members reported teaching six or more courses in a typical academic year.

Figure 3.9: Employment Status of Faculty Members Participating in the Florida Inventory, by Degree Level

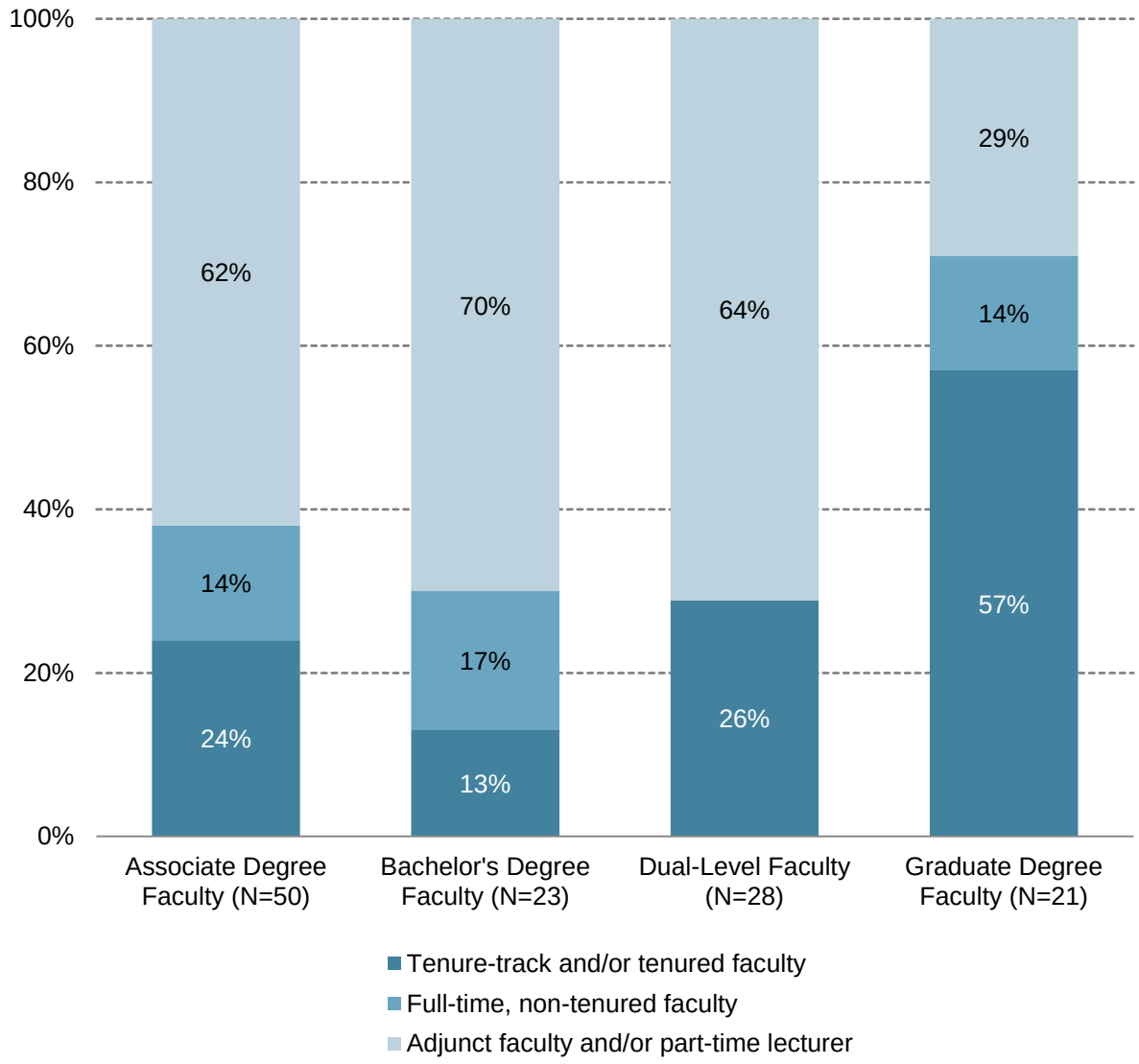


Figure 3.10: Additional Responsibilities of Teaching Faculty Members Participating in the Florida Inventory, by Degree Level

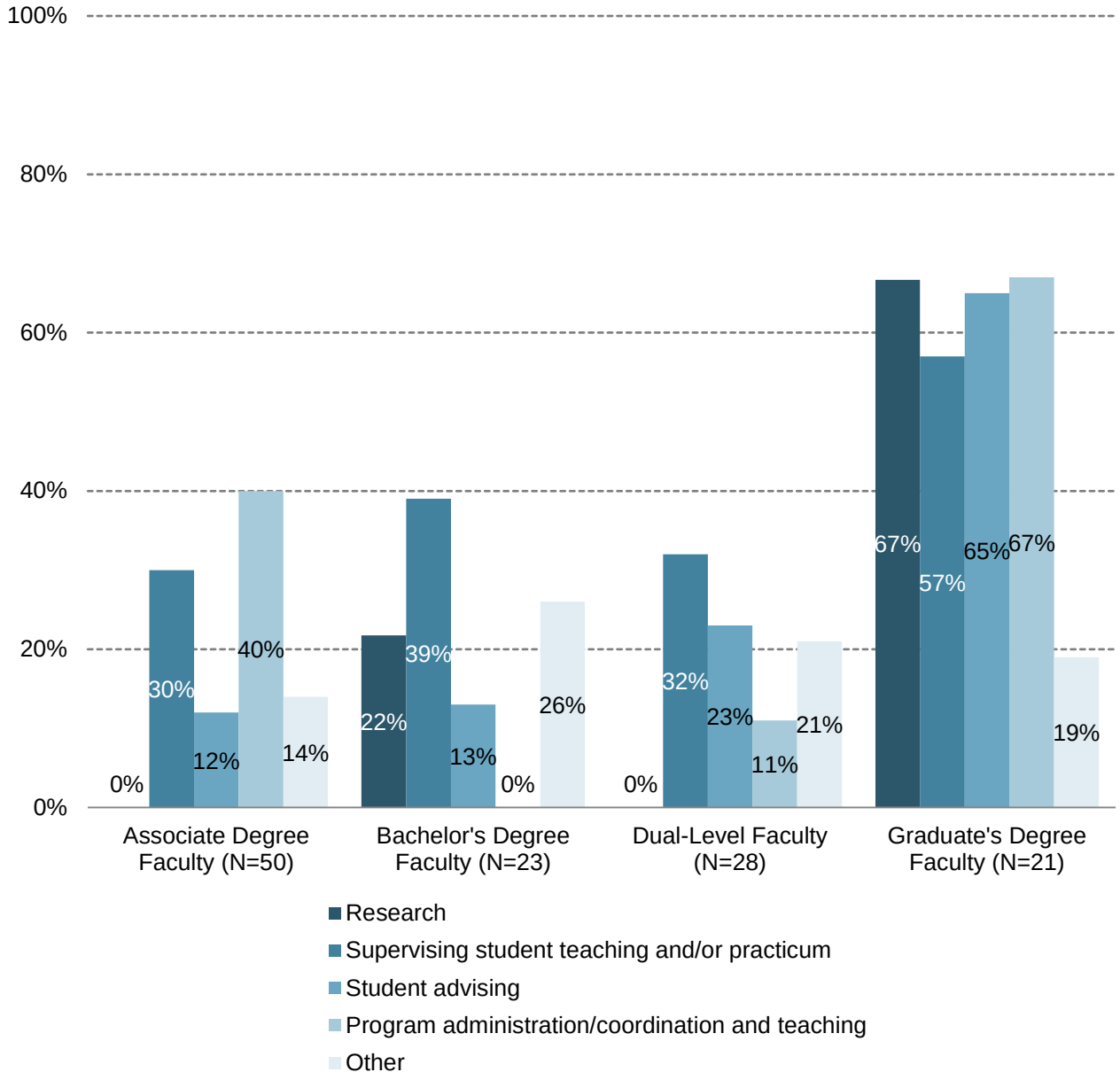
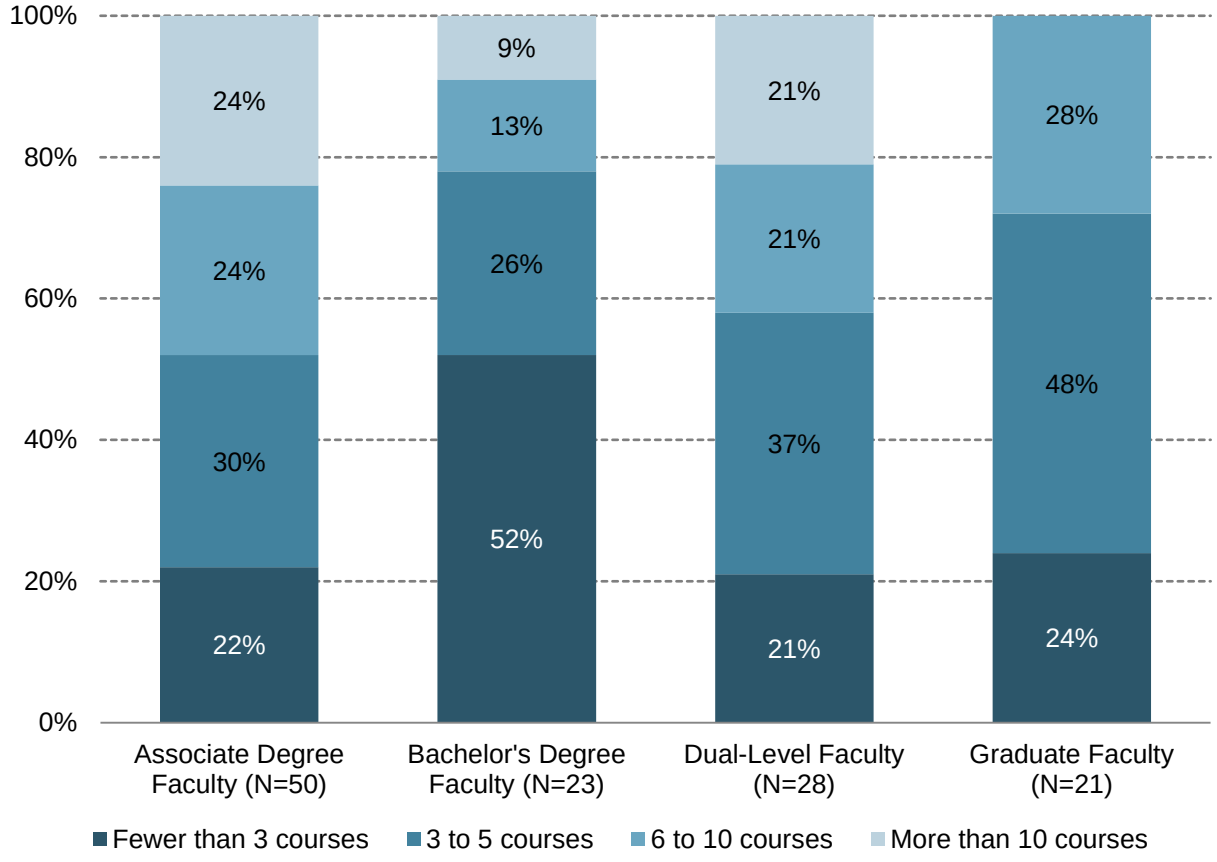


Figure 3.11: Number of Courses Taught in a Typical Academic Year by Faculty Members Participating in the Florida Inventory, by Degree Level



Teaching Focus and Age-Group Expertise of Faculty Members Participating in the Florida Inventory

- Associate degree and dual-level faculty members were the most likely among faculty to emphasize "child development and learning," either exclusively or equally with "curriculum and teaching methods," with slightly more than 80 percent reporting this focus compared to 69 percent of bachelor's degree and 76 percent of graduate degree faculty members. (See **Figure 3.12**.)

- Bachelor's and graduate degree faculty members were the most likely to emphasize "curriculum and teaching methods," either exclusively or equally with "child development and learning," with more than 80 percent reporting this focus, compared to 72 percent of associate degree and 68 percent of dual-level faculty members. (See **Figure 3.12**.)

- Less than one-fifth of faculty members at each degree level reported focusing exclusively on "child development and learning." Less than one-quarter of faculty members at each program degree level reported focusing exclusively on "curriculum and teaching methods." (See **Figure 3.12**.)

- Nearly three-quarters or more of faculty members at all degree levels reported expertise related to preschool-age children, either exclusively or in addition to expertise related to older and younger children. (See **Figure 3.13**.)

- Bachelor's degree faculty members (39 percent) were less likely to report expertise related to infants and toddlers (either exclusively or in addition to expertise related to older age groups) than associate degree (58 percent), dual-level (65 percent), or graduate degree (58 percent) faculty members. (See **Figure 3.13**.)

- Associate degree faculty members (57 percent) were less likely to report expertise related to children in the early elementary grades (either exclusively or in addition to younger age groups) than bachelor's degree (79 percent), dual-level (61 percent), or graduate degree (68 percent) faculty members. (See **Figure 3.13**.)

Figure 3.12: Primary Teaching Focus of Faculty Members Participating in the Florida Inventory, by Degree Level

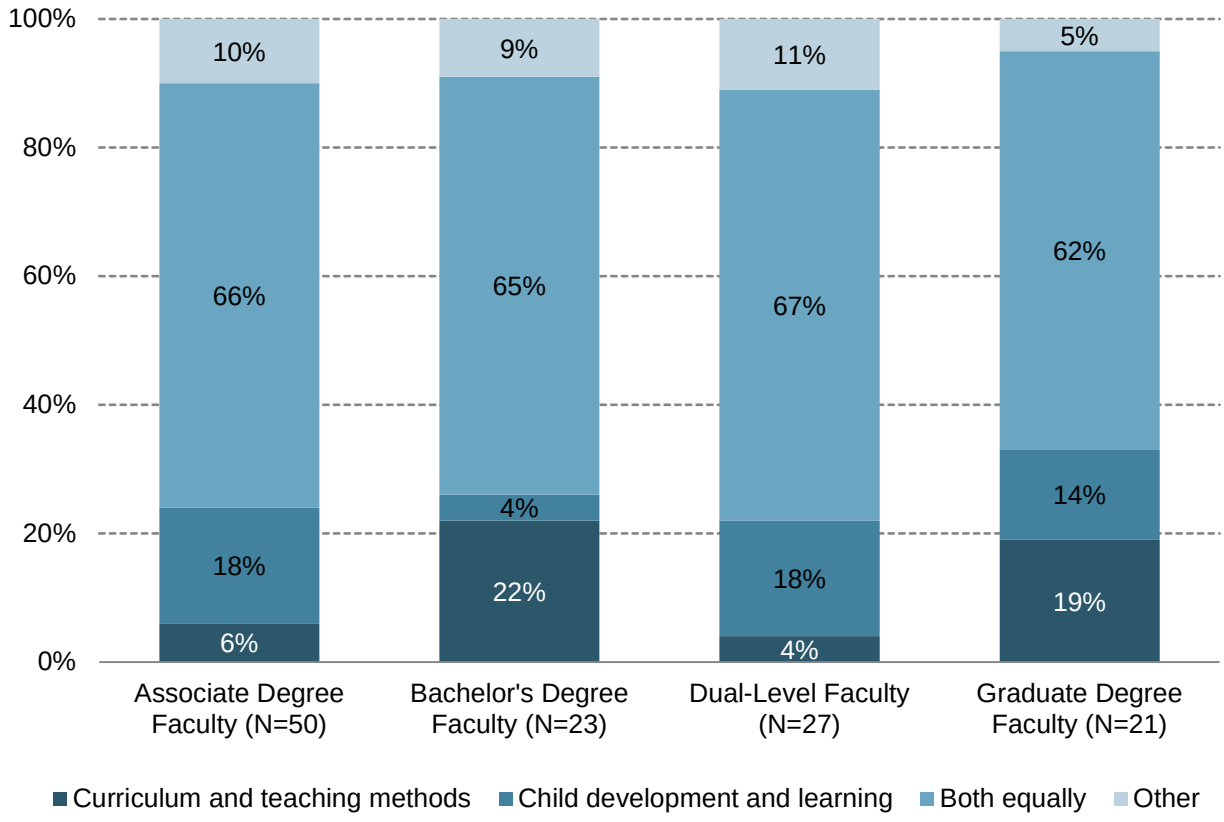
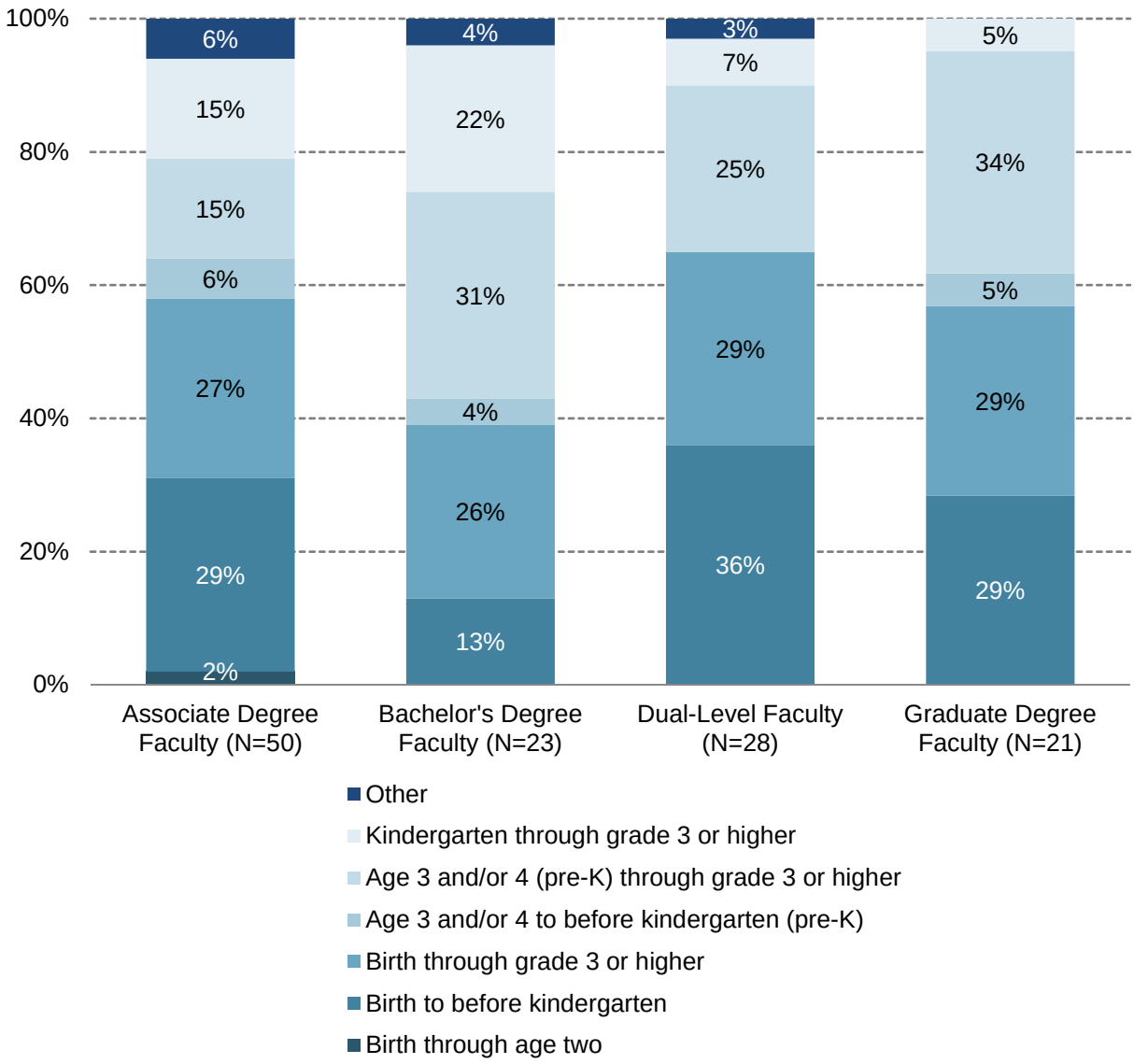


Figure 3.13: Primary Age-Group Expertise of Faculty Members Participating in the Florida Inventory, by Degree Level



Faculty Perspectives on the Importance of Learning Domains

The *Inventory* asked faculty members their opinions about the importance of including particular domains of development and learning in early childhood degree programs for teachers working with children birth through age two, children age three and/or four (pre-K), and children in kindergarten through third grade or higher. (See **Appendix A3-1** for the lists of topics.)

What we asked about the importance of learning domains:

Faculty members were asked to use a Likert scale of 1 to 4, with 1 meaning "not important" and 4 meaning "very important," to indicate the importance of including the following domains in early childhood degree programs:

- **Family engagement**: Understanding and implementing an integrated strategy to engage families in ongoing and reciprocal partnerships and the relationship of such partnerships to outcomes for children;
- **Early mathematics**: Understanding the domains and sequence of mathematical knowledge in young children and how to promote their mathematical understanding and ability to solve problems;
- **Literacy**: Understanding the components and sequence of literacy development in young children and how to promote their skills related to oral and written language;
- **Socioemotional development**: Understanding socioemotional development, its relationship to learning, and how to support children's socioemotional skills;
- **Motor development**: Understanding normal and atypical motor development in young children, its relationship to learning, and how to support the development of children's motor skills;
- **Assessment**: Utilizing assessment effectively to inform and individualize instruction;
- **Collaboration**: Collaborating with community organizations to support children and families;
- **Dual language learners**: Supporting the cognitive and social development of young dual language learners; and
- **Diverse families**: Working with families of various ethnic, racial, and cultural backgrounds.

- "Understanding socioemotional development, its relationship to learning, and how to support children's socioemotional skills" was rated as "very important" by 82 percent or more of faculty members at all program degree levels. In addition, this topic was rated as "very important" for teachers working with children across the birth to third grade or higher age span.

- Similarly, "working with families of various ethnic, racial, and cultural backgrounds" was rated as "very important" by the vast majority of faculty members at all program degree levels, and for teachers working with children across the birth to third grade or higher age span.

- Understanding the components and sequence of literacy development and of mathematical knowledge in young children was rated as more important for teachers working with older children.

- "Collaborating with community organizations to support children and families" and "utilizing assessment effectively to inform and individualize instruction" were consistently rated by faculty members across program degree levels as less important for teachers working with infants and toddlers.

See **Appendix Table A3-1**.

Teaching Capacity of Faculty Members Participating in the Florida Inventory

What we asked about teaching capacity of faculty members:

The *Inventory* asked faculty members to describe their own knowledge and skill related to preparing teachers to promote young children's development. For each topic below, respondents were also asked to indicate whether they had limited familiarity, whether they were knowledgeable but not prepared to teach, or whether they were capable of preparing teachers working with children birth through age two, children age three and/or four (pre-K), and/or children in kindergarten through third grade or higher:

- Children's literacy development;
- Children's socioemotional development;
- Facilitating motor development in young children;
- Utilizing assessment;
- Collaborating with community organizations to support children and families;
- Working with families of various ethnic, racial, and cultural backgrounds;
- Integrating families in partnerships to support children's learning;*
- Children's mathematical development;* and
- Supporting the cognitive and social development of young dual language learners.*

**Findings related to family engagement, early mathematics, and teaching young dual language learners are reported in Chapter 5.*

- For each topic listed above, 90 percent or more of faculty members participating in the *Inventory* reported being capable of preparing teachers working with at least one age group, with a few notable exceptions.

  ⇒ Only 88 percent of faculty members reported feeling capable of preparing teachers to "facilitate motor development."
  ⇒ In general, a higher percentage of faculty reported feeling capable of preparing teachers to work with preschool-age or older children than with infants and toddlers.
  ⇒ Across degree programs, faculty members teaching in bachelor's degree programs were less likely to report being capable, compared to faculty teaching in other degree programs.

(See **Figures 3.14**, **3.15,** and **3.16** and **Appendix Table A3-2** for the percentage of faculty who feel capable of preparing teachers working with each individual age group for each topic.)

Figure 3.14: Capacity to Prepare Teachers to Work With Infants and Toddlers, as Reported by Faculty Members, by Degree Level

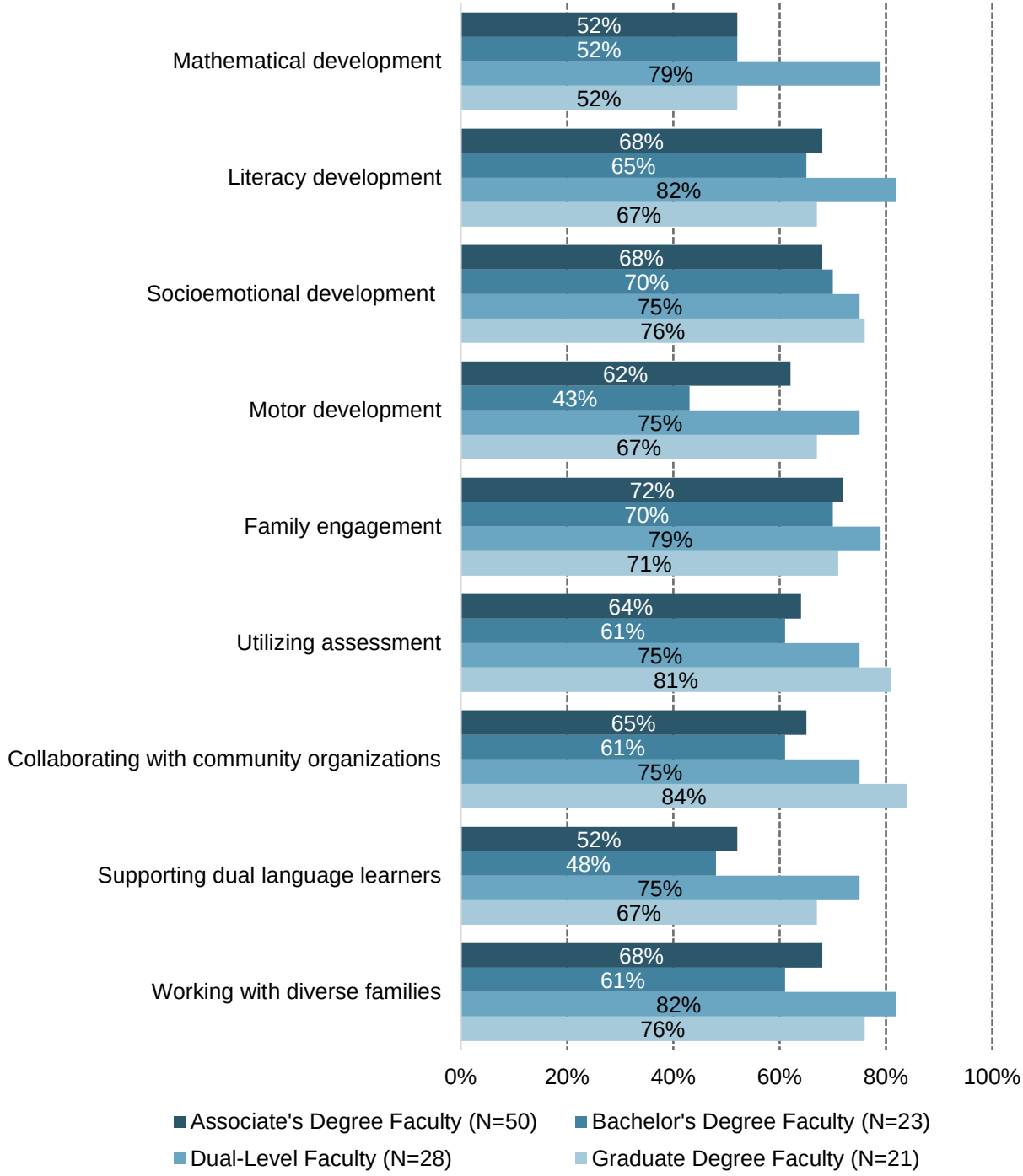


Figure 3.15: Capacity to Prepare Teachers to Work With Preschool-Age Children, as Reported by Faculty Members, by Degree Level

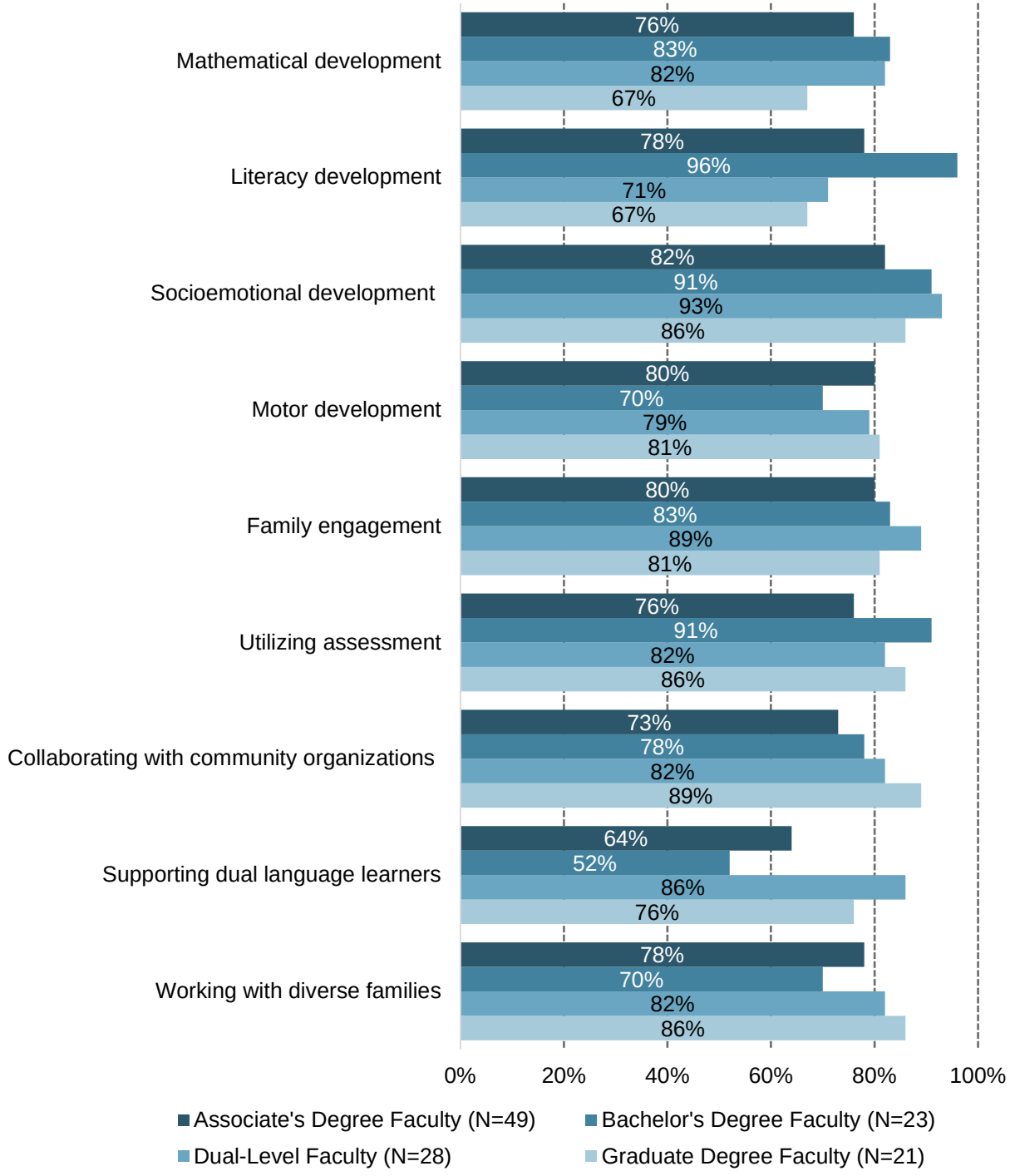
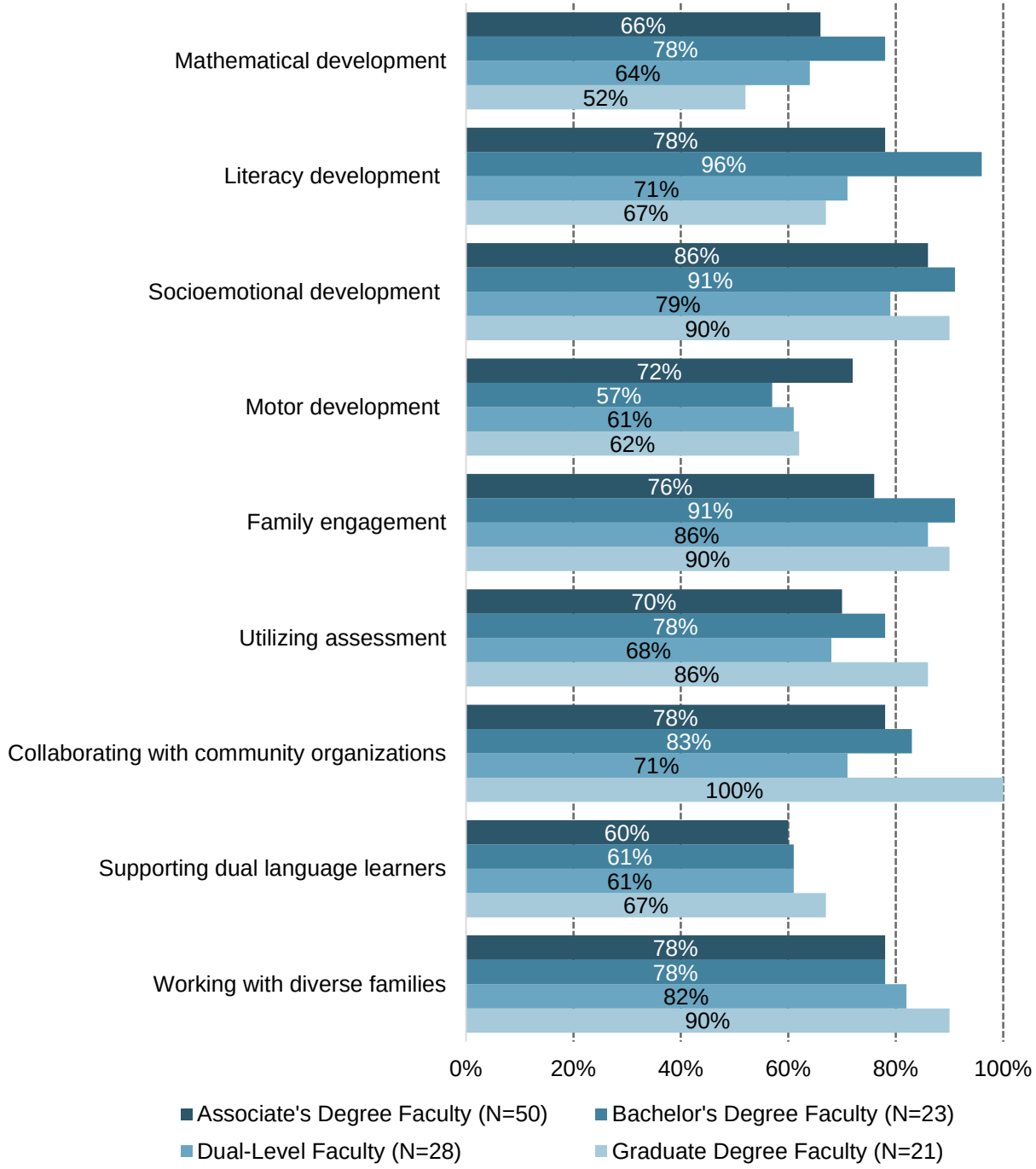


Figure 3.16: Capacity to Prepare Teachers to Work With Children in Grades K-3 and Higher, as Reported by Faculty Members, by Degree Level



Teaching Experience of Faculty Members Participating in the Florida Inventory

What we asked about recent teaching experience of faculty members:

The *Inventory* asked faculty to indicate whether in the past two years, they taught the following content areas either as a separate course, embedded within a broader course, or both:

- Child development;
- Mathematical understanding;*
- Language development;
- Teaching strategies for STEM (science, technology, engineering, mathematics);
- Teaching children with special needs;
- Observation, assessment, and documentation;
- Adult supervision and learning styles;
- Fiscal procedures and program management; and
- Partnering with families to enhance children's learning.*

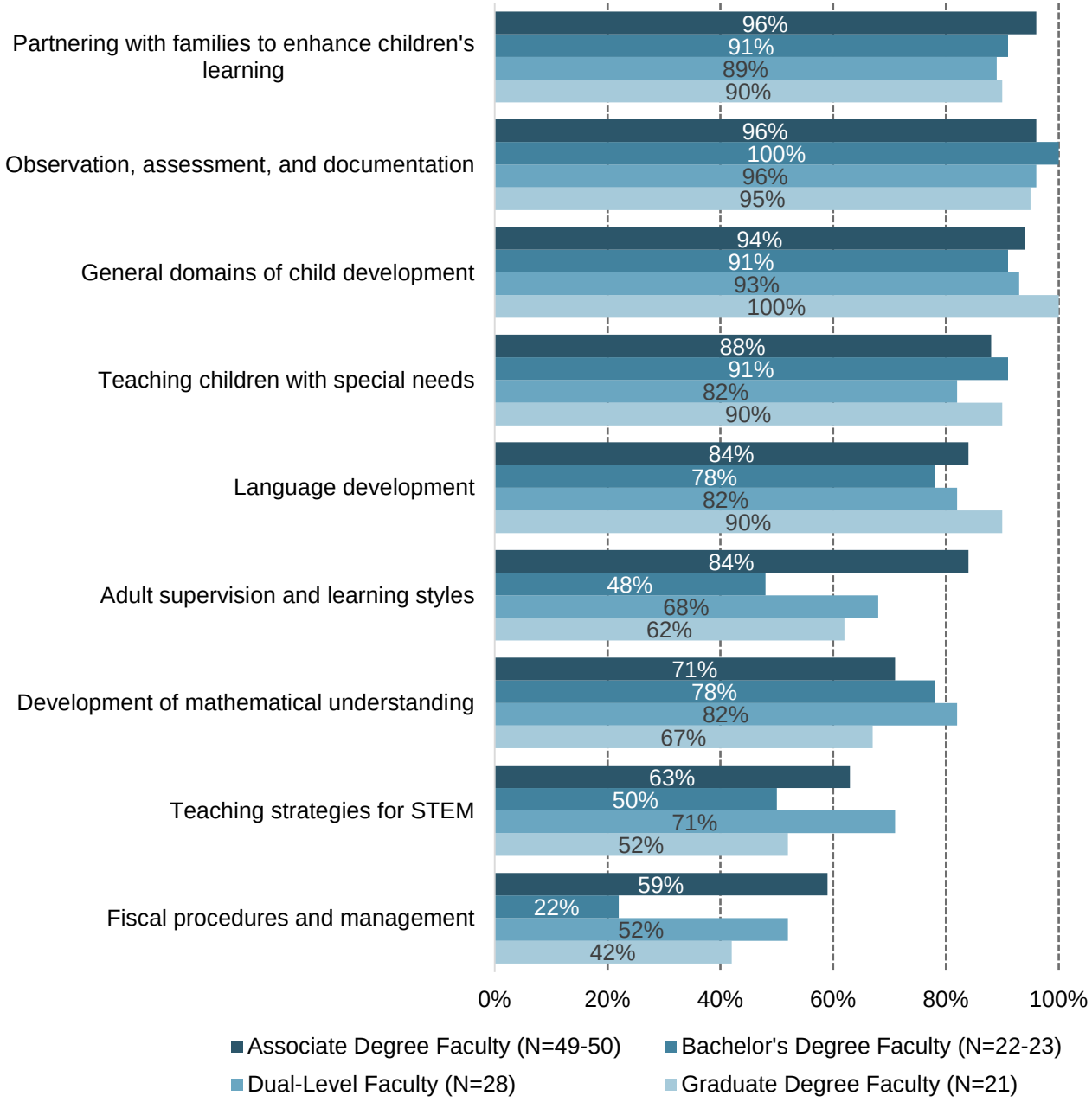
**Findings related to early mathematics and family engagement are reported in Chapter 5.*

- More than three-quarters of faculty participating in the *Inventory* reported teaching content related to "observation, assessment, and documentation to inform teaching and learning," "general domains of child development," "teaching children with special needs," and "language development." Faculty were less likely to report having taught courses related to program management (e.g., "adult supervision and learning styles" and "fiscal procedures and management") and teaching strategies for science, technology, engineering, and math (STEM) content. (See **Figure 3.17** and **Appendix Table 3-3**.)

  ⇒ Faculty members reported that topics listed in the *Inventory* were most likely taught within a broader course or within a broader course *and* as a separate course (rather than *only* as a separate course).
  ⇒ More than 90 percent of faculty members across program degree levels reported teaching "general domains of child development," primarily within a broader course.
  ⇒ More than 89 percent of faculty members across program degree levels reported teaching "partnering with families to enhance children's learning in school and at home," primarily embedded within a broader course.
  ⇒ The topics mentioned least by faculty members included:
    - Adult supervision and learning styles; and,
    - Fiscal procedures and management.

*The following figure displays the percentages of faculty members at each degree level who reported teaching the topic within the past two years. See **Appendix Table 3-3** for the structure of coursework taught.*

Figure 3.17: Recent Teaching Experience: Percentage of Faculty Reporting Having Taught Content Area in Past Two Years, by Degree Level



Professional Development Participation and Interest

What we asked about professional development:

The *Inventory* asked faculty members if they had participated in professional development opportunities in the past three years. The *Inventory* then listed 36 topics and asked faculty members to indicate the opportunities in which they had participated. The list included multiple topics related to:

- Diverse child populations;
- Adult learners;
- Teaching skills and assessment; and
- Early childhood administration and leadership.

See **Figure 3.21** and **Appendix Table A3-5** for lists of topics.

The list also included topics related to the three areas of special interest, which are reported in Chapter 5:

- Family engagement;
- Early mathematical development; and
- Working with dual language learners.

The next series of questions asked faculty members to indicate areas in which they would be interested in gaining additional knowledge or training. Faculty members were provided with a list of 17 topics and asked to rate their interest in obtaining additional knowledge or training on these topics using a scale of 1 to 5 with 1 being "not at all interested" and 5 being "very interested." The list included multiple topics related to:

- Diverse child populations;
- Adult learners;
- Teaching skills and assessment; and
- Early childhood administration and leadership.

The list also included topics related to family engagement, early mathematics, and dual language learners, which will be reported in Chapter 5.

Professional Development Participation

- The vast majority of faculty members at all degree levels reported having participated in professional development experiences during the past three years (96 percent of associate degree, 91 percent of bachelor's degree, 96 percent of dual-level, and 95 percent of graduate degree faculty members). (See **Figures 3.18, 3.19, 3.20,** and **3.21** for the lists of topics.)

- The most frequently reported professional development experience, participated in by at least 60 percent of faculty members at all program degree levels, was:

  ⇒ Teaching practitioners to work with children from diverse cultural backgrounds

- The professional development experiences participated in by less than one-third of faculty members at all program degree levels included:

  ⇒ Teaching adult students who are English-language learners;
  ⇒ Teaching economically diverse college students;
  ⇒ Organizational development; and
  ⇒ Theories of leadership.

See **Appendix Tables A3-4, A3-5, A3-6,** and **A3-7**.

Professional Development Interest

- Faculty members at all program degree levels indicated a number of areas in which they would be interested in gaining additional knowledge or training. At least 40 percent of faculty members at each program degree level indicated that they were "very interested" in the following:

  ⇒ Teaching practitioners to work with specific groups of children (e.g., children with special needs**,** children who have experienced trauma) and developmentally appropriate practice in infant and toddler settings;
  ⇒ Using technology to promote adult learning;
  ⇒ Strategies and techniques for mentoring/coaching adult students; and
  ⇒ Using child assessment effectively.

See **Figures 3.18, 3.19, 3.20,** and **3.21** and Appendix Tables **A3-8, A3-9, A3-10,** and **A3-11**.

Figure 3.18: Interest in Professional Development Related to Diverse Child Populations Reported by Faculty Members: Percentage Reporting "Very Interested," by Degree Level

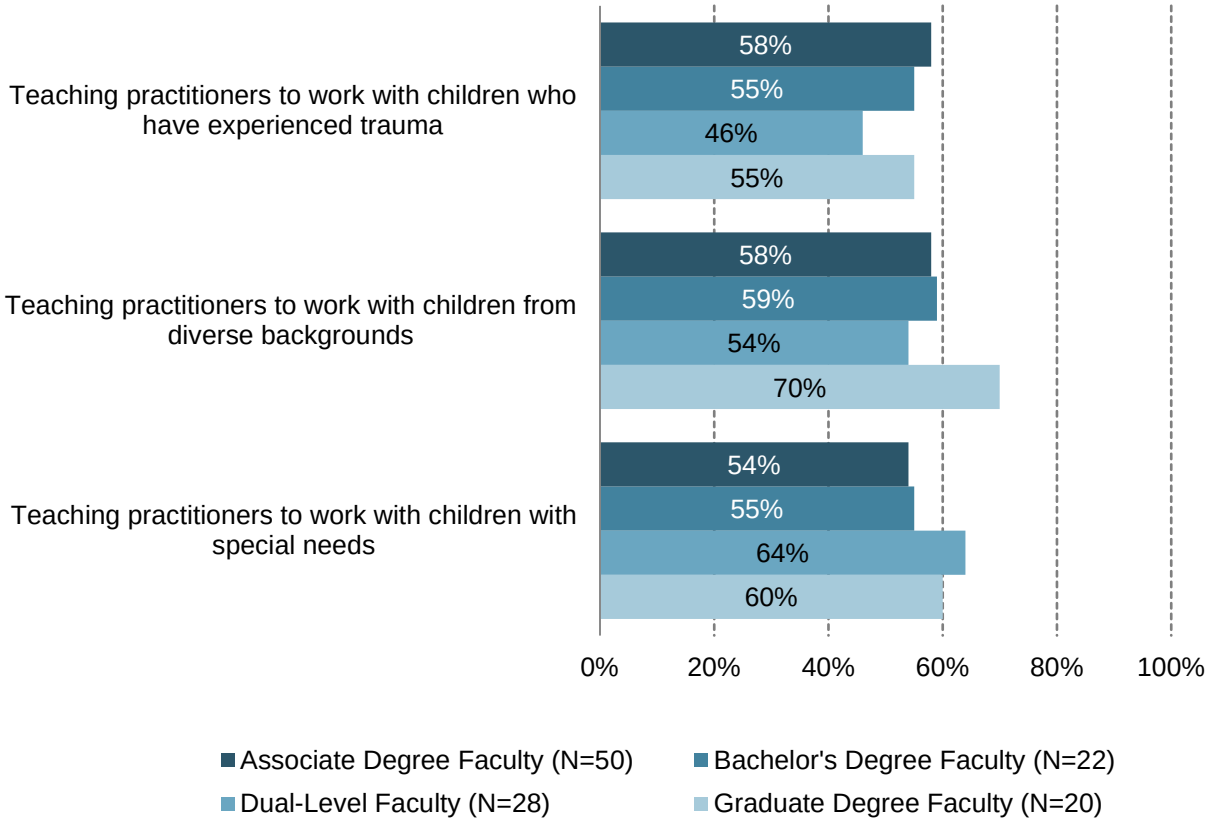


Figure 3.19: Interest in Professional Development Related to Adult Learners Reported by Faculty Members: Percentage Reporting "Very Interested," by Degree Level

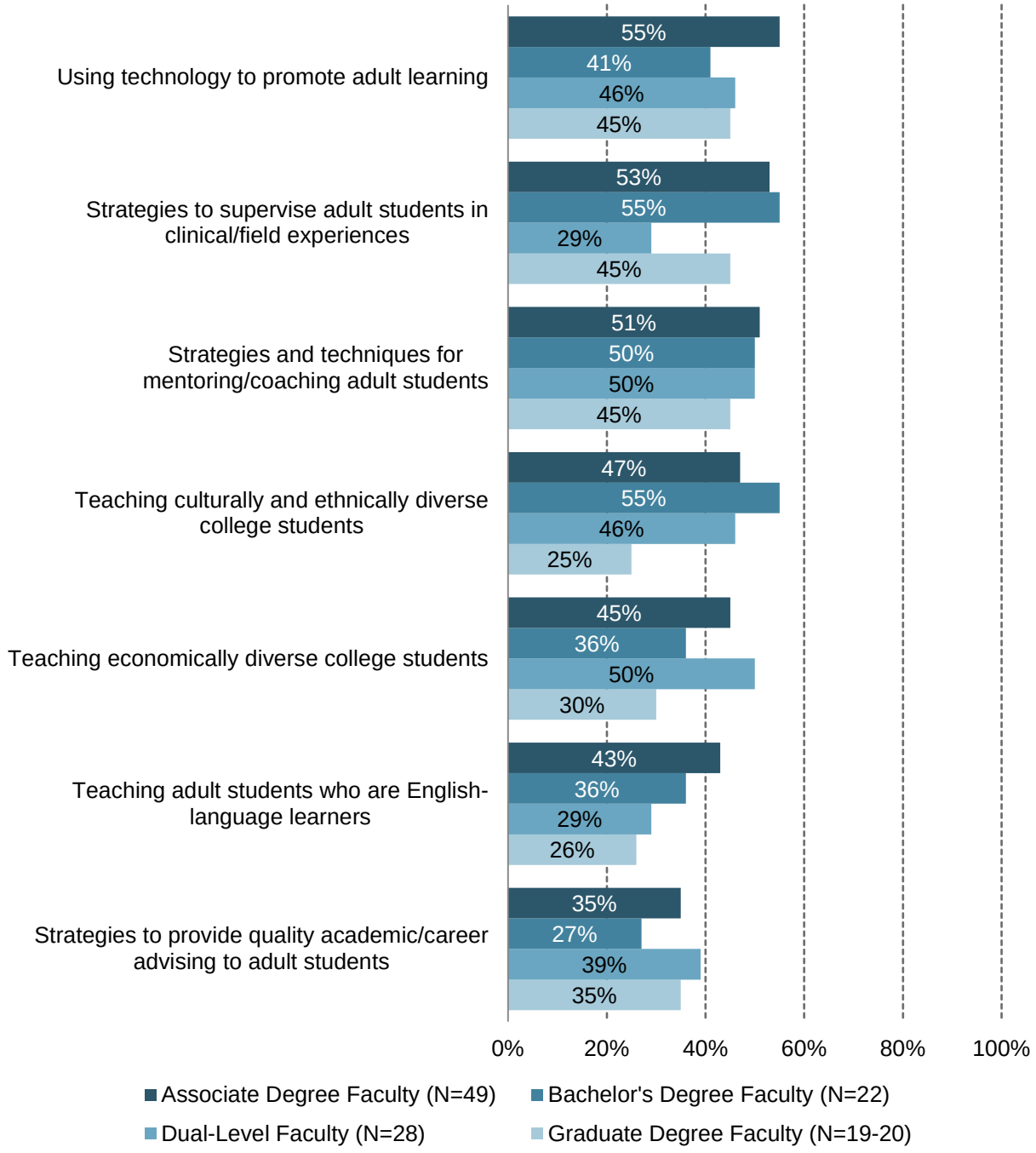


Figure 3.20: Interest in Professional Development Related to Teaching Skills and Assessment Reported by Faculty Members: Percentage Reporting "Very Interested," by Degree Level

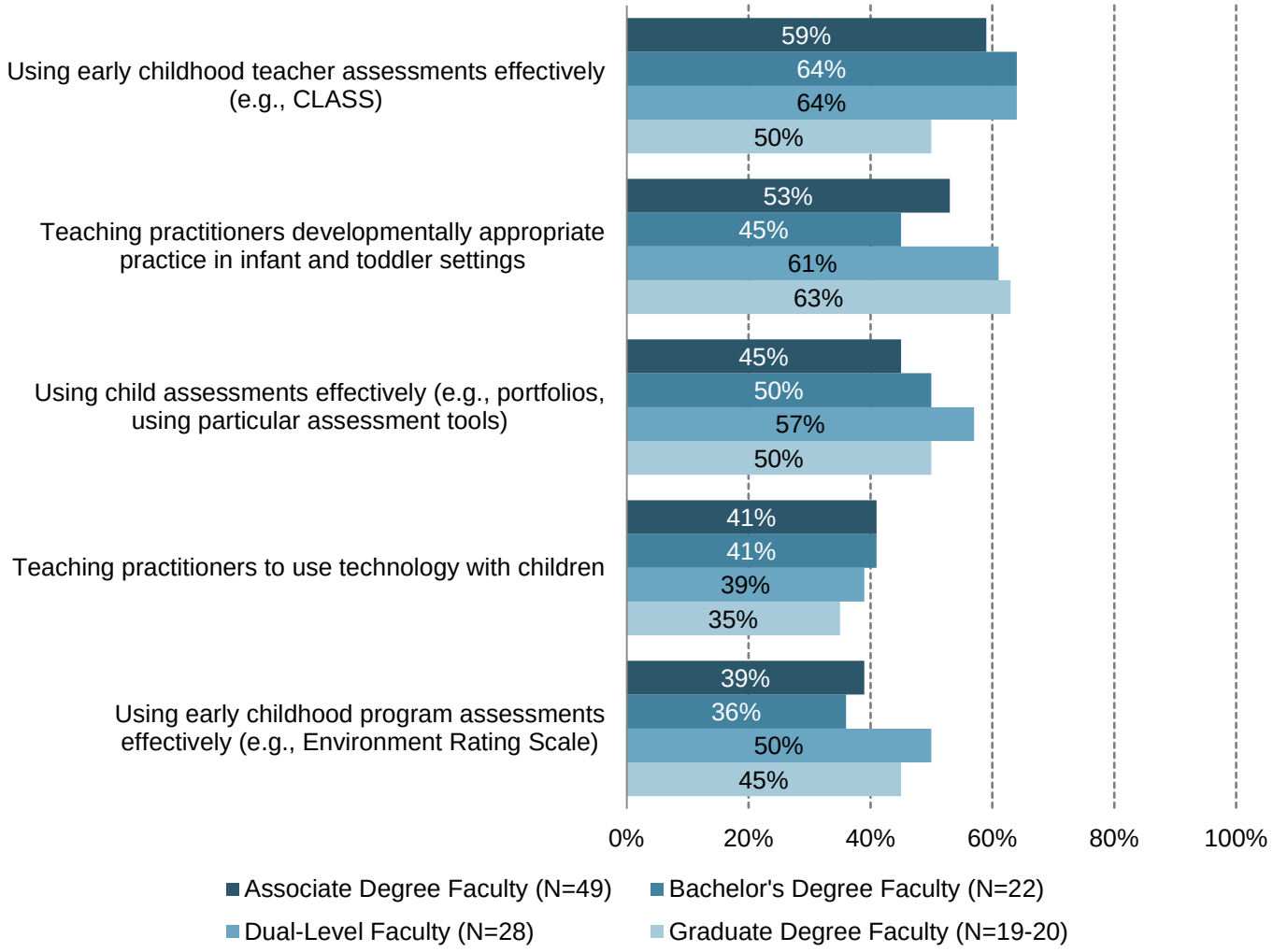
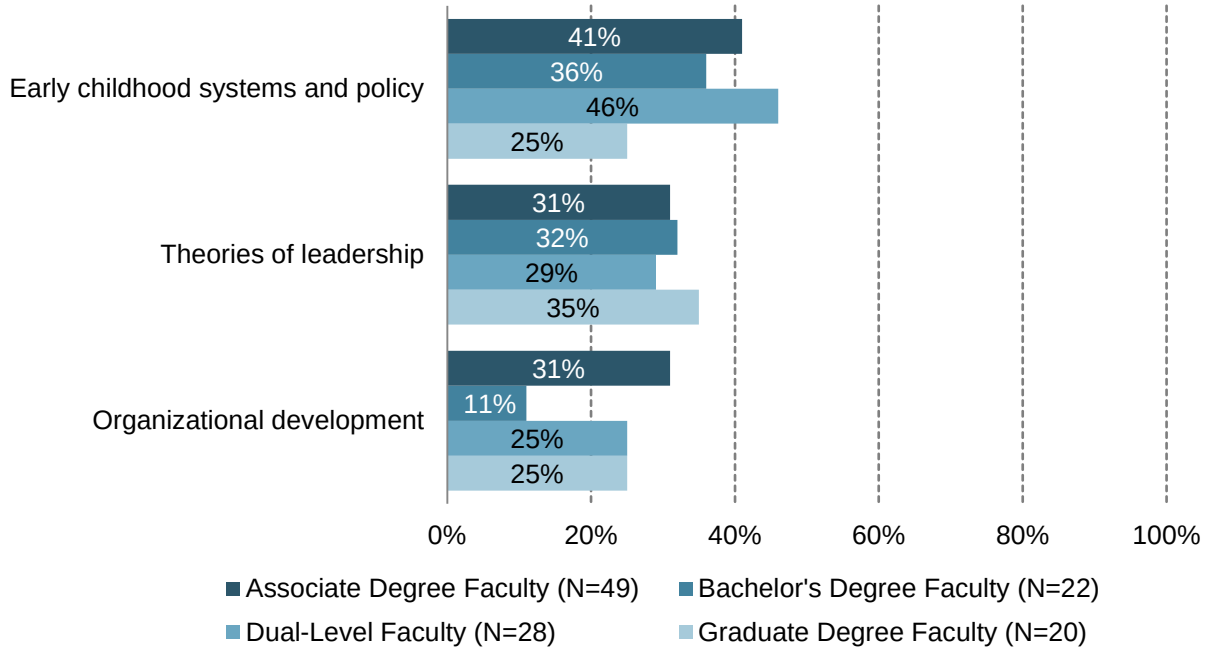


Figure 3.21: Interest in Professional Development Related to Administration and Leadership Reported by Faculty Members: Percentage Reporting "Very Interested," by Degree Level



Chapter 4:
Challenges Facing Early Childhood Degree Programs and Additional Resources Needed

Challenges Facing Early Childhood Degree Programs

What we asked about program challenges and resources needed for program improvement:

The *Inventory* asked program leads whether their degree programs were facing any challenges. Program leads who responded "yes" were then asked to identify the challenges from two broad lists: (1) challenges related to a lack of resources and support and (2) challenges related to a need for additional faculty expertise.

(See **Figure 4.1** and **Figure 4.2**. for the lists of challenges.)

The *Inventory* asked faculty members whether resources were needed to improve the early childhood degree program(s) at their college or university. Faculty members were asked to identify needed resources from two lists: (1) program-related resources and (2) faculty-related resources.

(See **Figure 4.3** and **Figure 4.4** for the lists of resources.)

- The four challenges most frequently reported by program leads at all degree levels were:

  ⇒ Difficulty recruiting or retaining students related to the low pay of the ECE field;
  ⇒ Faculty administrative responsibilities that interfere with time spent with students (e.g., lack of time for teaching, advising);
  ⇒ Insufficient number of full-time faculty; and
  ⇒ Lack of recognition of the value of early childhood from within the department or school.

- Some of the challenges varied by degree level:

  ⇒ Bachelor's degree programs were more likely to mention:
    - Inequitable distribution of resources compared to other programs in the institution; and
    - Insufficient number of full-time faculty.
  ⇒ Associate degree programs were more likely to mention "difficulty recruiting or retaining students related to the low pay of the ECE field."

Figure 4.1: Challenges Facing Florida Early Childhood Degree Programs, by Degree Level

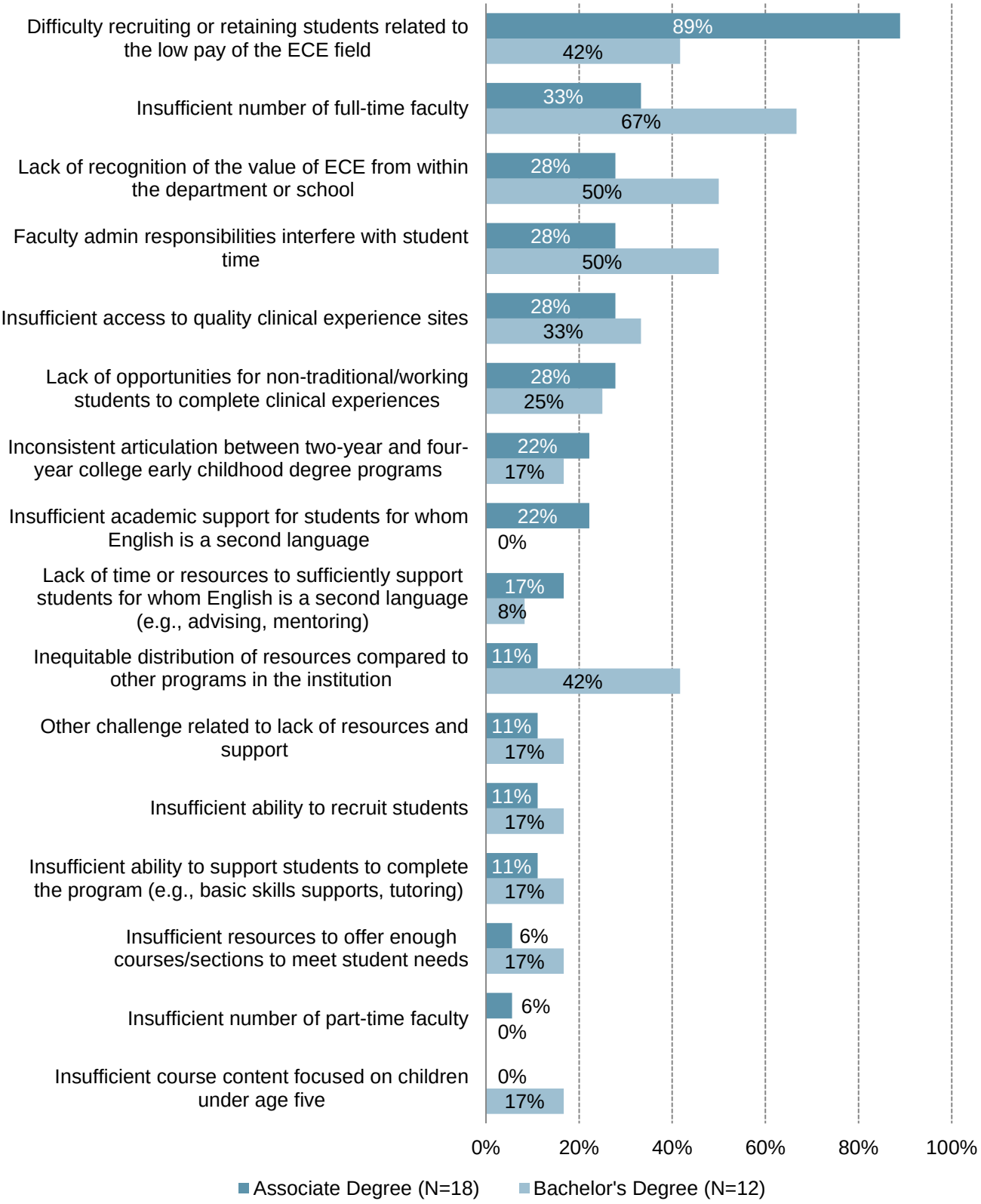
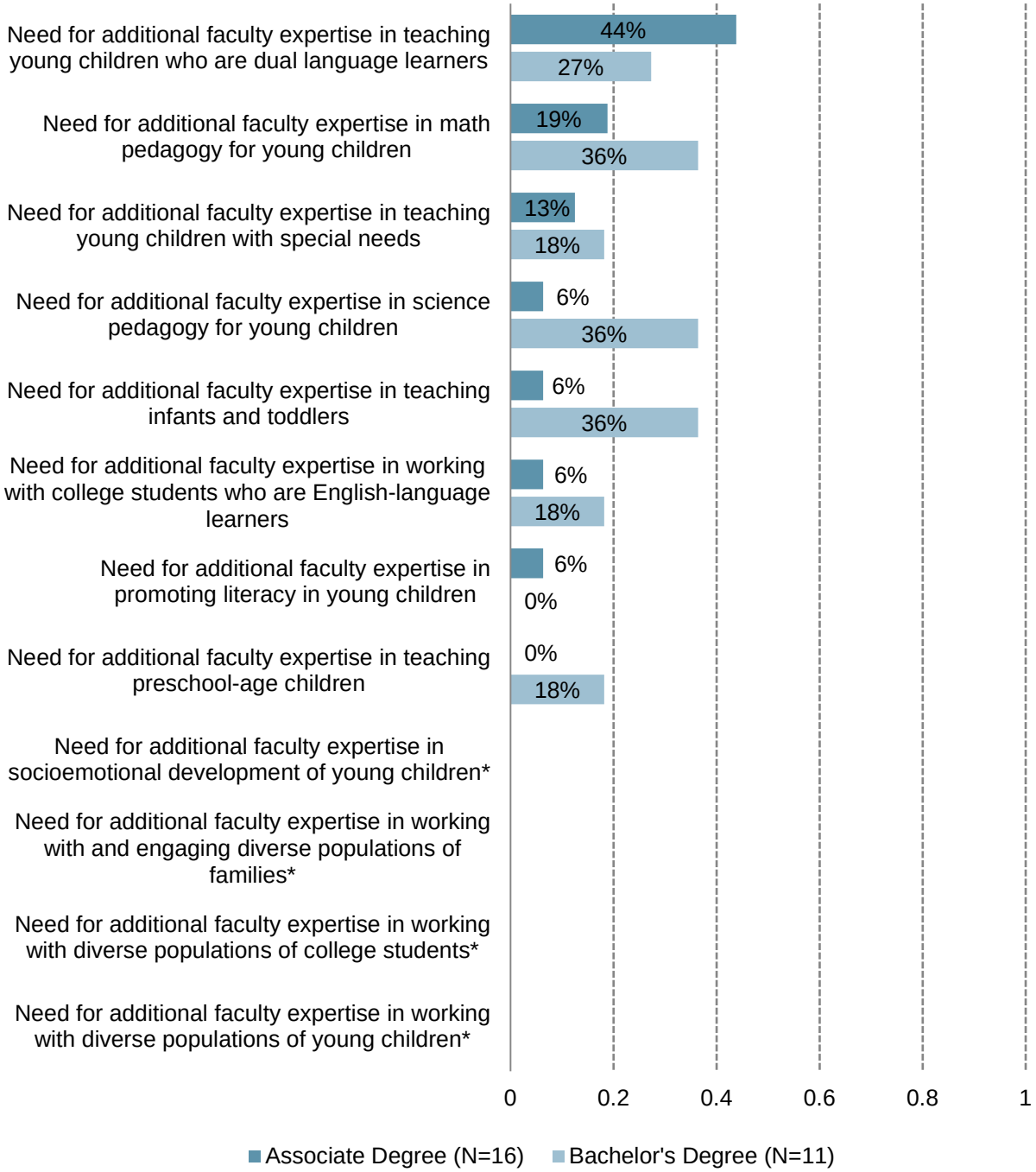


Figure 4.2: Challenges Facing Florida Early Childhood Degree Programs Related to a Need for Additional Faculty Expertise, by Degree Level



*Note: None of the program leads participating in the *Inventory* identified this need as a challenge for their program.

Additional Resources Needed to Improve Early Childhood Degree Programs

Faculty members responded to *Inventory* items about additional resources that were needed to help improve early childhood degree programs.

- The most frequently mentioned resources needed, cited by at least one-third of faculty members at all program degree levels, were:

  ⇒ Increased academic support for students;
  ⇒ Increased financial support for students;
  ⇒ Resources for program planning and improvement (e.g., new course development);
  ⇒ Additional full-time faculty;
  ⇒ Funding for travel; and
  ⇒ Resources for faculty professional development.

- Although the majority of faculty members identified as white/Caucasian and English-speaking only, just a small percentage mentioned the need for resources to increase faculty diversity.

  ⇒ Approximately one-third of bachelor's degree (33 percent) and graduate degree (29 percent) faculty members and less than one-fifth of associate degree (13 percent) and dual-level (19 percent) faculty members mentioned the need for "increased racial/ethnic diversity among faculty."
  ⇒ Slightly more than one-third (39 percent) of bachelor's degree program faculty members and less than one fifth of faculty members at all other program degree levels mentioned the need for "increased linguistic diversity among faculty."

- Some of the resources mentioned by faculty members varied by program degree levels. For example:

  ⇒ Graduate degree faculty members (75 percent) were more likely to mention a need for "additional full-time faculty" than were associate degree (33 percent), bachelor's degree (45 percent), or dual-level (33 percent) faculty members.
  ⇒ Graduate degree faculty members (70 percent) were also more likely to mention a need for "funding for travel" than were associate degree (43 percent), bachelor's degree (35 percent), or dual-level (41 percent) faculty members.
  ⇒ Graduate degree faculty members (40 percent) were more likely to mention a need for "additional faculty to assist with student advising load" than were associate degree (26 percent), bachelor's degree (10 percent), or dual-level (19 percent) faculty members.

Figure 4.3: Program-Related Resources Needed for Improving Early Childhood Degree Programs, as Reported by Faculty Members, by Degree Level

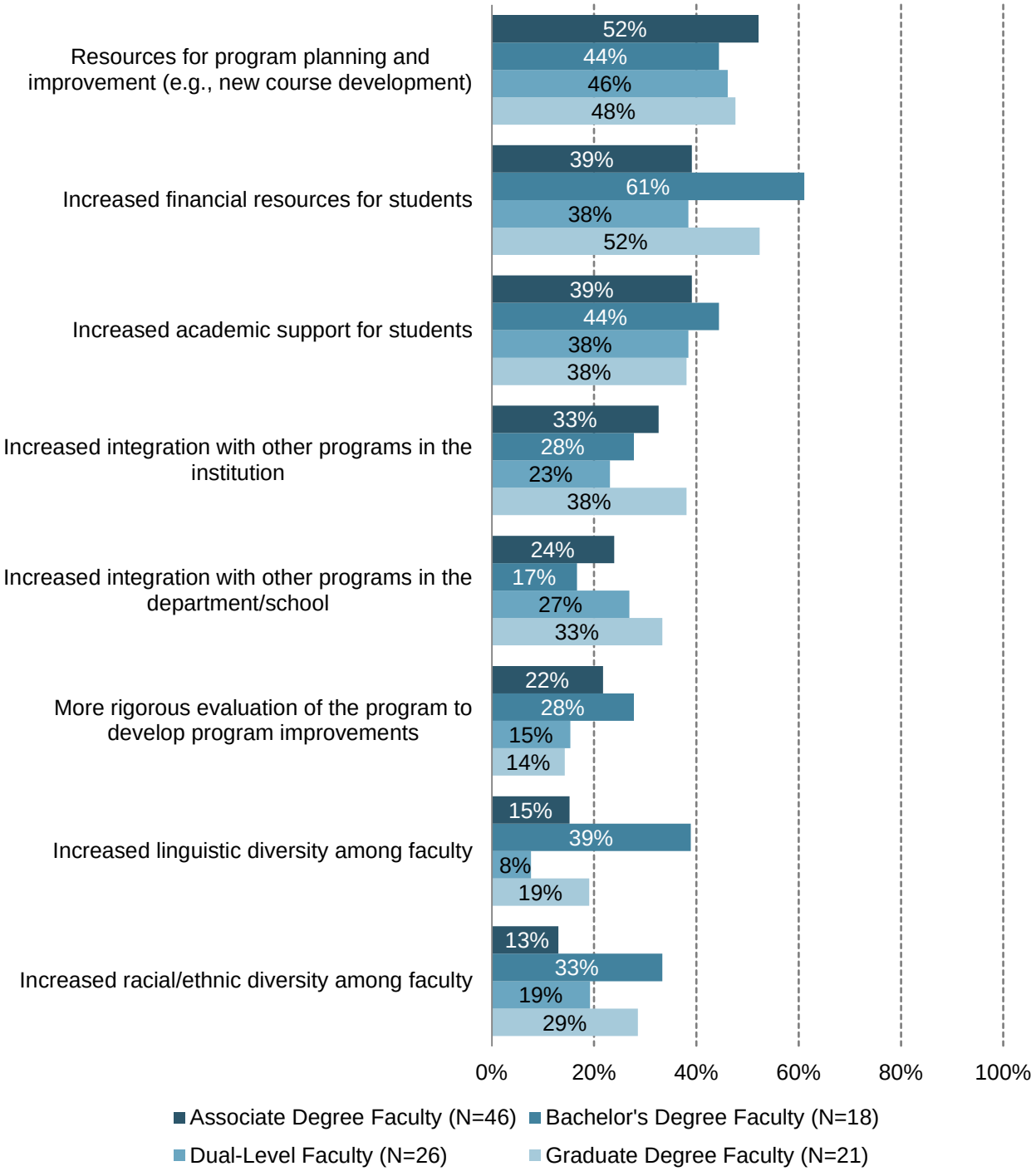
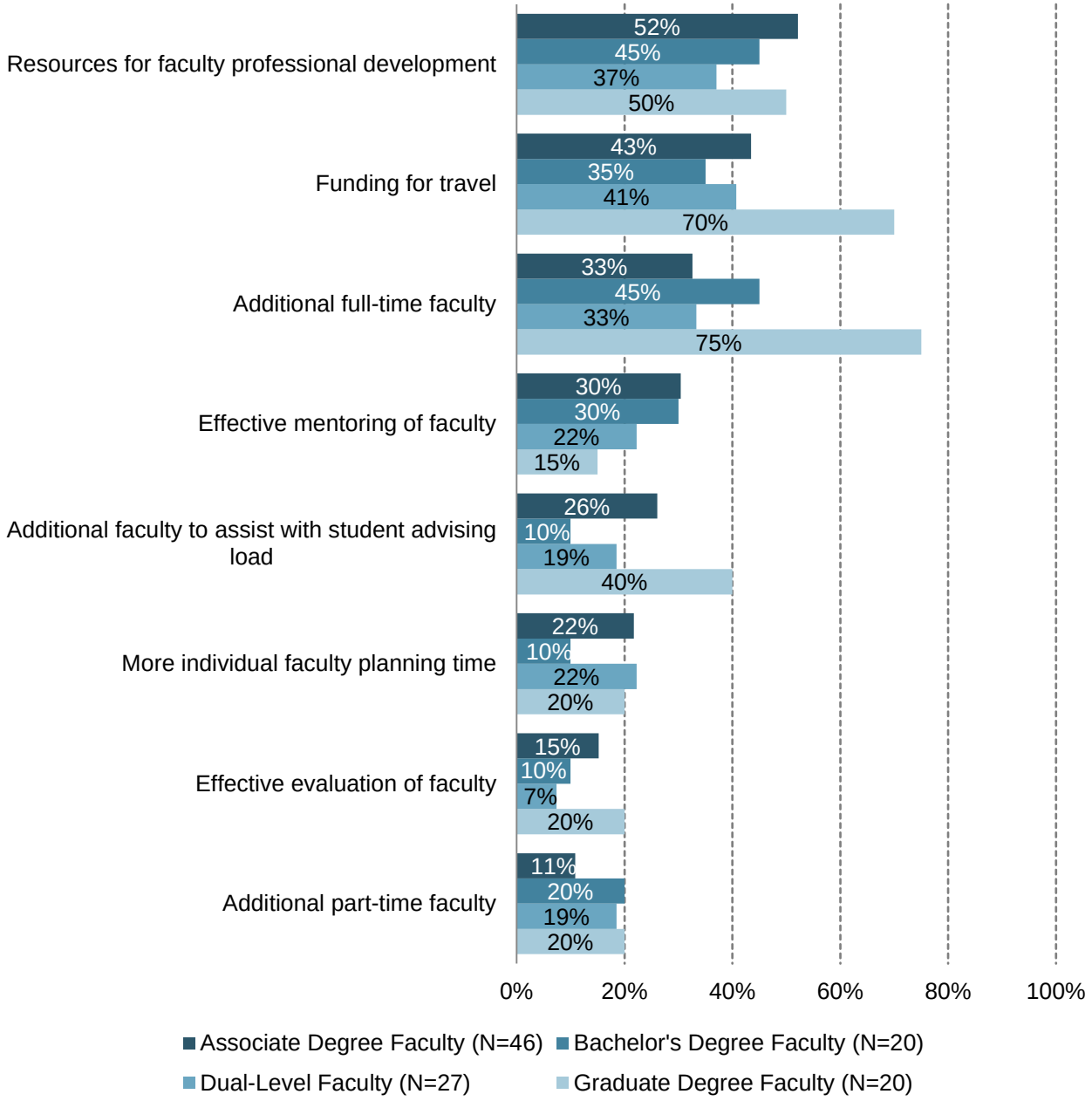


Figure 4.4: Faculty-Related Resources Needed for Improving Early Childhood Degree Programs, as Reported by Faculty Members, by Degree Level



Chapter 5:
Family Engagement, Early Mathematics, and Working With Dual Language Learners

Importance of Including Various Domains in Teacher Preparation Programs

Importance of Family Engagement

- About three-quarters or more of faculty members across program degree levels rated this topic as "very important" for teachers of all age groups of children.
- Nearly 90 percent of associate degree, bachelor's degree, and dual-level faculty members rated this topic as "very important" for teachers working with infants and toddlers compared to about three-quarters (74 percent) of graduate degree faculty members.
- Associate degree and bachelor's degree faculty members were less likely to consider this topic "very important" for teachers working with children in the early elementary grades than teachers working with infants and toddlers.
- The inclusion of family engagement content in higher education programs was rated as more important than literacy and mathematical development for teachers of very young children, but less important than socioemotional development.

Importance of Early Mathematics

- Faculty members at all program degree levels were less likely to consider it "very important" to include the early mathematics domain than other domains that form part of teacher preparation programs for practitioners working with infants and toddlers and preschool-age children.
  - ⇒ About one-quarter of bachelor's and graduate degree program faculty members and two-fifths of associate degree and dual-level faculty members considered it "very important" to include the math domain for practitioners working with infants and toddlers.
  - ⇒ Between one-half and three-quarters of faculty members across program degree levels considered it "very important" to include the math domain for practitioners working with preschool-age children.

- A greater percentage of faculty members at all degree levels considered it “very important” to include early mathematics in teacher preparation programs for practitioners working with children in kindergarten or early elementary grades.

  ⇒ Three-quarters or more of faculty members at all degree levels considered it “very important” to include the math domain for children in kindergarten through third grade or higher.
  ⇒ Faculty members at each degree level considered the importance of understanding early mathematics for practitioners working with children in kindergarten or early elementary grades on par with the domains of literacy and socioemotional development.

Importance of Supporting Dual Language Learners

- Faculty members across degree levels were more likely to rate the topic “supporting the cognitive and social development of young dual language learners” as “very important” for practitioners working with children preschool age or older than for those working with infants and toddlers.

  ⇒ Two-thirds or more of faculty members across program degree levels rated “supporting the cognitive and social development of young dual language learners” as “very important” for teachers working with infants and toddlers, and approximately three-quarters or more rated it as very important for teachers working with children preschool age or older.

- Supporting the development of young DLLs was rated less important than the domains of literacy and socioemotional development for teachers working with older children, but more important than understanding normal and atypical motor development or collaborating with community organizations to support children and families.

- For teachers working with children birth through age two, faculty members rated supporting young dual language learners as not as important as understanding socioemotional development, working with families of various ethnic, racial, and cultural backgrounds, or family engagement, but more important than promoting mathematical understanding or utilizing assessment to inform and individualize instruction.

See **Appendix A3-1** from **Chapter 3**.

Family Engagement

The *Inventory* explored the content area of family engagement in depth.

What we asked about family engagement:

The *Inventory* asked program leads about: the family engagement topics required for the degree; the age-group focus of the required coursework; and the alignment of family engagement coursework with state and national family engagement standards. Program leads were also asked whether strategies for working with families were taught as a separate course, embedded within a broader course, or both.

(See **Figures 5.1** and **5.2** and **Appendix Tables A2-5** and **A5-1**.)

The *Inventory* asked faculty members about: their capacity to teach family engagement topics to their students; their experience teaching coursework on family engagement in the past two years; and their level of participation and interest in professional development related to family engagement.

(See **Figures 3.14, 3.15, 3.16,** and **3.17** in **Chapter 3**, **Figures 5.3** and **5.4,** and **Appendix Tables A3-2** and **A5-2**.)

Required Family Engagement Course Content and Age-Group Focus (See **Figures 5.1** and **5.2** and **Appendix Table A5-1)**

- Seven of the eight "family engagement" topics listed in the *Inventory* were required by at least 70 percent of programs at all degree levels with one exception, described below.

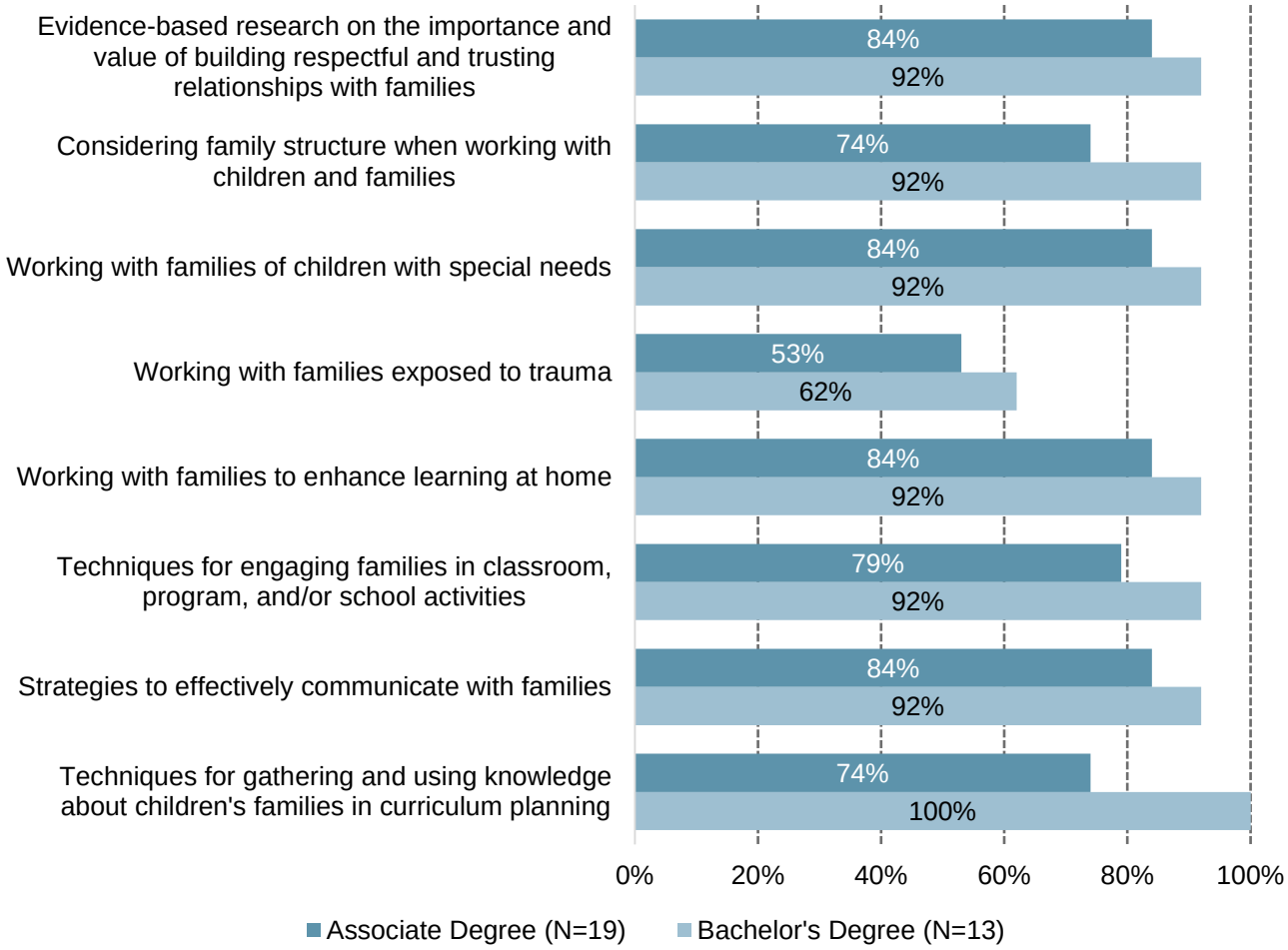
  ⇒ "Working with families of children exposed to trauma" was required by only 53 percent of associate degree programs and 62 percent of bachelor's degree programs.

- The age-group focus of family engagement content varied by topic and program degree level. However, overall:

  ⇒ Bachelor's degree programs were more likely to focus the topics on preschool-age children than on children in the other age groups;
  ⇒ Associate degree programs were equally likely to focus the topics on infants and toddlers as preschoolers; and
  ⇒ Associate degree programs were less likely to focus topics on children in kindergarten and the early elementary grades.

***Figure 5.1** displays the percentage of degree programs that require the content area of family engagement. See **Appendix Table A5-1** for the age-group focus of the required content.*

Figure 5.1: Coursework on Family Engagement Required by Florida Early Childhood Degree Programs, by Degree Level



Structure of Coursework on Family Engagement (See **Figure 3.17** and **Appendix Table A2-5)**

- We were interested in learning whether "strategies to engage families in partnerships" were taught as a separate course, within a broader course covering multiple topics, or both.

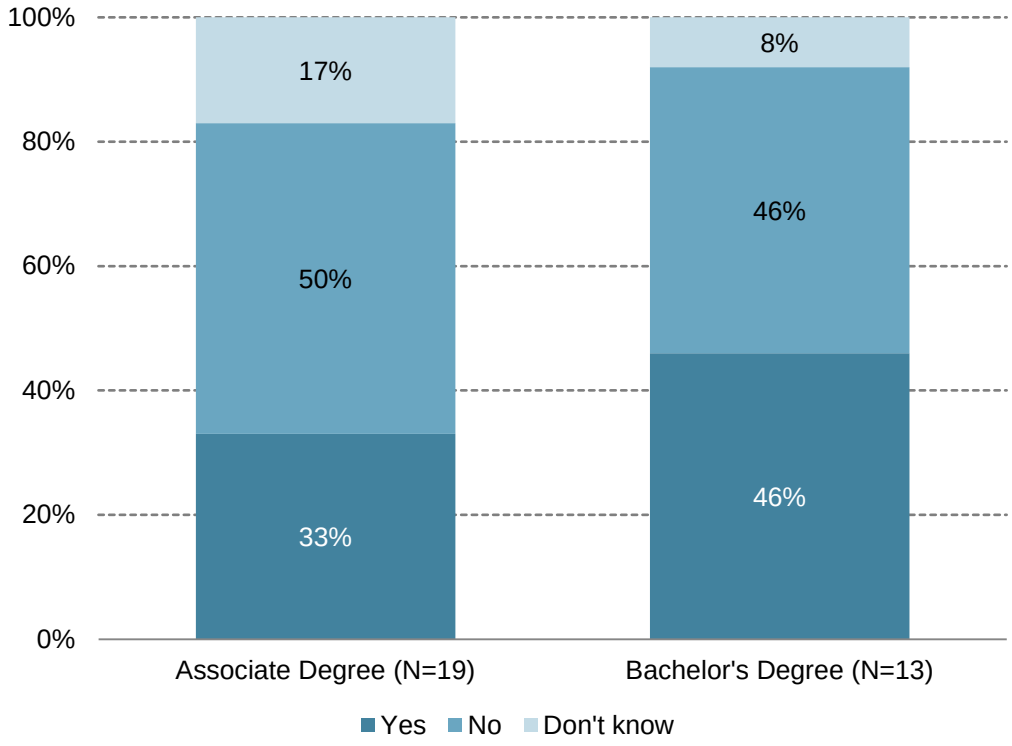
  ⇒ Forty-four percent of associate degree programs reported that "strategies to engage families in partnerships" were taught primarily within a broader course, and more than one-third (39 percent) reported that this topic was taught in both a separate course and within a broader course.

  ⇒ In contrast, more than one-half (54 percent) of bachelor's degree programs reported that this topic was taught as a separate course, and 38 percent reported that it was taught both as a separate course and within a broader course covering multiple topics.

Alignment of Family Engagement Coursework with State and National Standards (See **Figure 5.2)**

- One-third (33 percent) of associate degree and nearly one-half (46 percent) of bachelor's degree programs reported aligning their family engagement coursework with state and national family engagement standards.

Figure 5.2: State or National Family Engagement Standards Incorporated Into Family Engagement Course Content of Florida Early Childhood Degree Programs, by Degree Level



Faculty Members' Capacity to Teach Coursework on Family Engagement (See **Appendix Table A3-2)**

- Nearly every faculty member (96 percent) reported feeling capable of preparing teachers to integrate families in partnership to support children's learning.

  ⇒ Capacity was high across age levels, but associate degree faculty reported feeling most capable of preparing teachers to work with preschool-age children (80 percent), and bachelor's degree faculty reported feeling most capable of preparing teachers to work with children in grades K-3 (91 percent).

⇒ Associate and bachelor's degree faculty felt least capable of preparing teachers to work with infants and toddlers (72 percent and 70 percent, respectively).

Coursework on Family Engagement Taught in the Past Two Years (See Appendix Table A3-3)

- Nearly every faculty member (91 percent) reported that they had taught coursework related to partnering with families to enhance children's learning during the past two years.

  ⇒ Across all program degree levels, faculty members were more likely to have taught content related to family engagement embedded within a broader course than as a separate course or through both structures of instruction.
  ⇒ About one-third of associate degree, graduate degree, and dual-level faculty members reported having taught family engagement content in both a separate course and embedded within a broader course.

Faculty Participation and Interest in Professional Development Topics Related to Family Engagement (See Figures 5.3 and 5.4 and Appendix Table A5-2)

- About one in five (23 percent) of all faculty members participating in the study reported not participating in any of the eight family engagement topics listed in the *Inventory*.

  ⇒ This finding varied somewhat by program degree level. More than one-third (35 percent) of bachelor's degree faculty members reported that they had not participated in professional development focused on any of the family engagement topics, compared to 17 percent of associate degree faculty members.

- Faculty members who had participated in professional development focused on family engagement were most likely to report participating in "working with families of children with special needs."

  ⇒ This finding varied by program degree level. Bachelor's degree (35 percent), graduate degree (60 percent), and dual-level (52 percent) faculty members were more likely to have participated in professional development on this topic in the past three years than associate degree faculty members (40 percent).
  ⇒ Associate degree program faculty members were most likely to have participated in professional development on "evidence-based research on the importance and value of building respectful and trusting relationships with families."

- When asked to rate their interest among a list of family engagement topics for professional development, at least 35 percent of faculty members at each degree level reported that they would be "very interested" in these six topics:

  ⇒ Considering family structure when working with children and families;
  ⇒ Working with families to help them enhance their children's learning at home;
  ⇒ Working with families of children exposed to trauma;
  ⇒ Techniques for engaging families in classroom, program, and/or school activities;

⇒ Strategies to effectively communicate with families; and
⇒ Techniques for gathering and using knowledge about children's families in curriculum planning.

Figure 5.3: Participation in Family Engagement Professional Development Reported by Faculty Members, by Degree Level

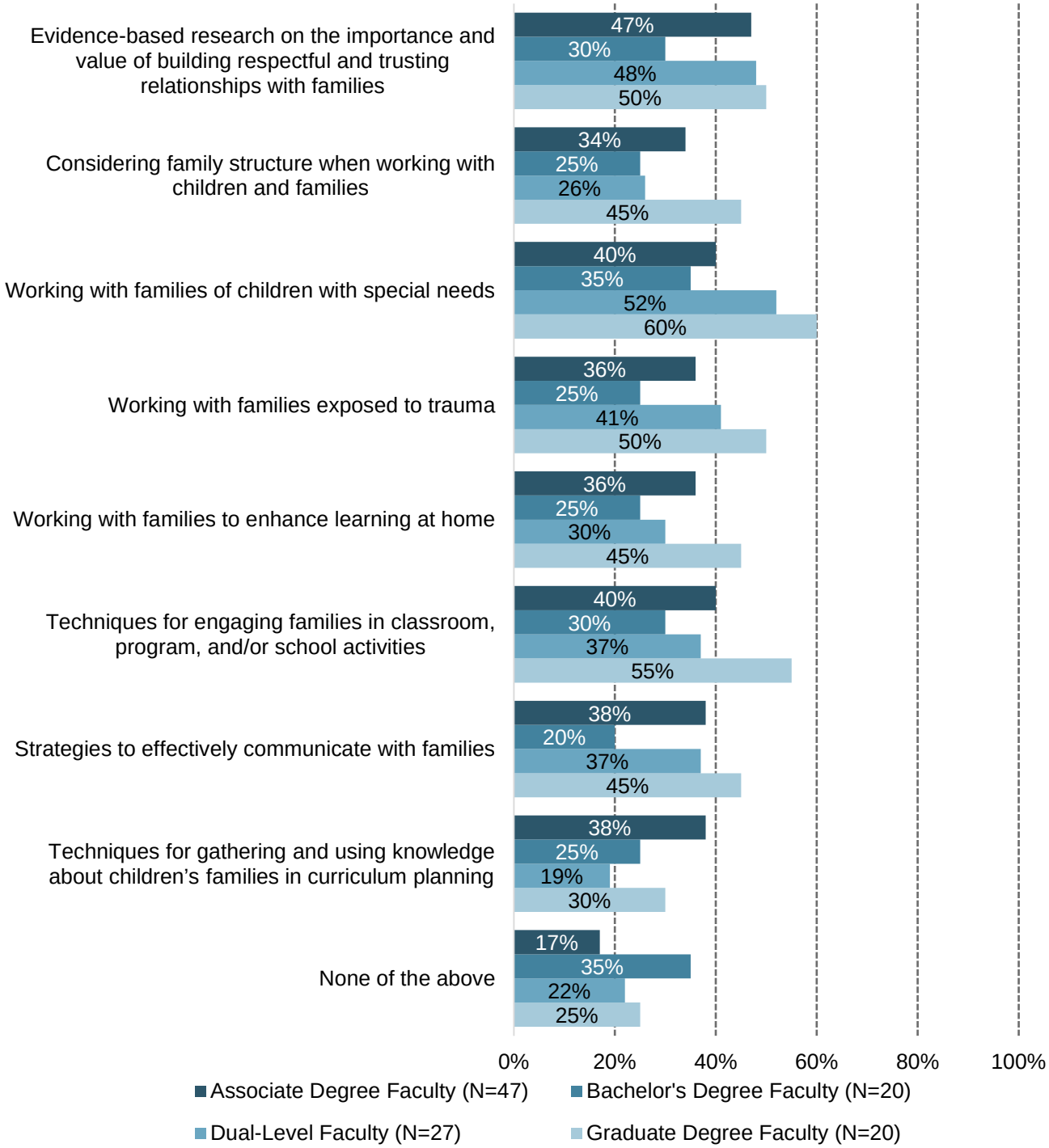
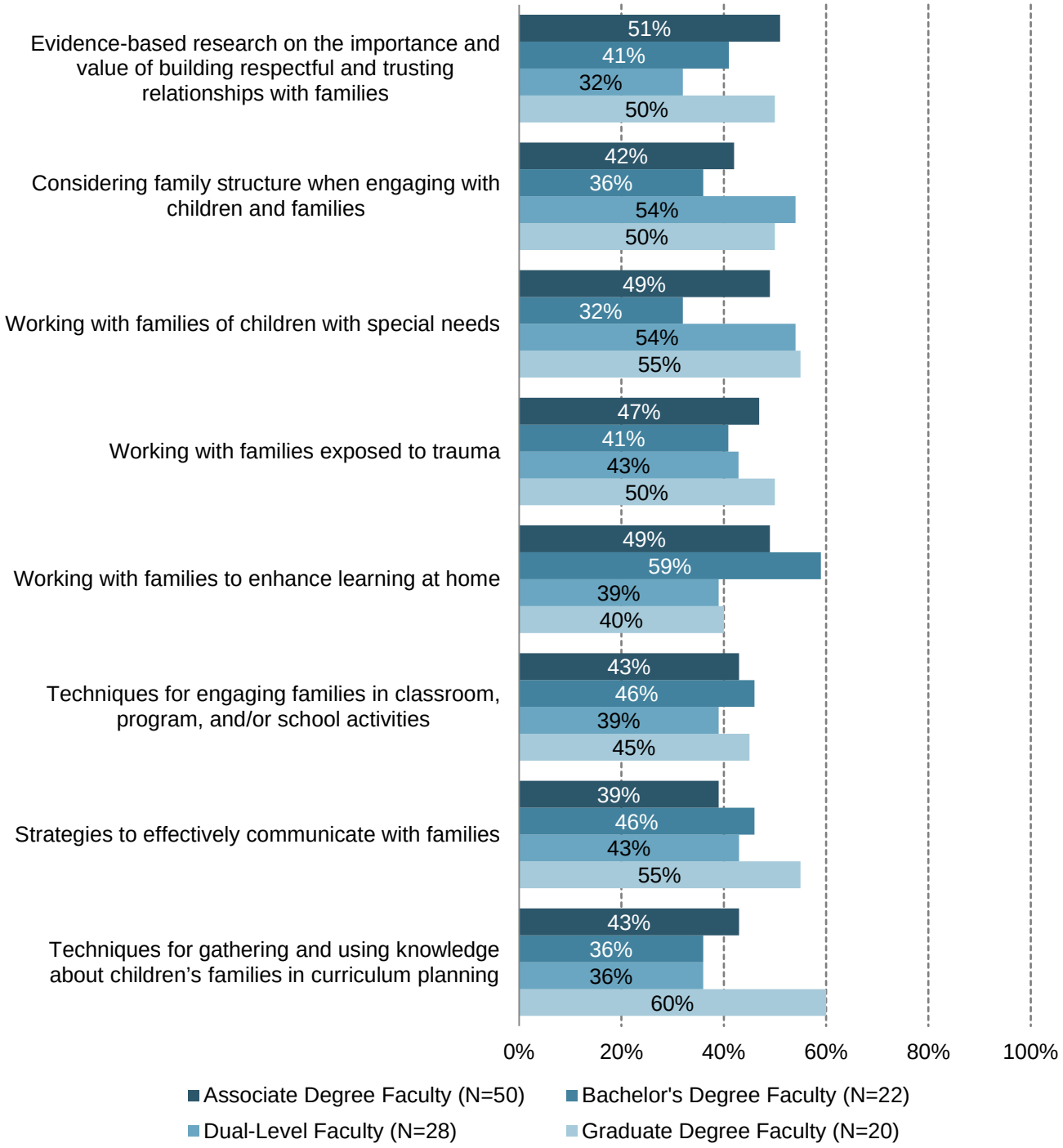


Figure 5.4: Interest in Family Engagement Professional Development Reported by Faculty Members: Percentage Reporting "Very Interested," by Degree Level



Early Mathematics

The *Inventory* explored the early mathematics content area in depth.

What we asked about early mathematics:

The *Inventory* asked program leads about the topics within two content areas: "development of children's general mathematical understanding" and "teaching children specific math skills." Program leads were asked about course content required for the degree in each of these areas and the age-group focus of the required coursework.

(See **Figures 5.5** and **5.6**, and **Appendix Tables A5-3** and **A5-4**.)

The *Inventory* also asked program leads whether early math content was taught as a separate course, embedded within a broader course, or both, and whether the math coursework aligned with state and national early math standards.

(See **Figure 5.7**.)

The *Inventory* asked faculty members to assess their capacity to prepare practitioners to promote children's mathematical understanding and to teach math skills for each of 11 topics. The *Inventory* also asked faculty members to identify the topics they had taught in the past two years related to children's mathematical understanding.

(See **Figures 5.8, 5.9,** and **5.10** and **Appendix Tables A3-3, A5-5,** and **A5-6**).

In addition, the *Inventory* asked about faculty members' participation and interest in professional development related to early math topics.

(See **Figures 5.11** and **5.12** and **Appendix Table A5-7**.)

Development of Children's General Mathematical Understanding (See **Figure 5.5** and **Appendix Table A5-3**)

- For each of the six topics in the "development of children's general mathematical understanding" subject area, 65 percent or more of associate degree programs reported requiring the topic.
- In comparison, for each of the six topic areas, 92 percent or more of bachelor's degree programs reported requiring the topic.

Teaching Children Specific Math Skills (See **Figure 5-6** and **Appendix Table A5-4)**

- For each of the five topics in the "teaching children specific math skills" subject area, approximately 60 percent or more of associate degree programs reported that the topic is required.

  ⇒ Seventy-eight percent of associate degree programs required the topic "teaching children number sense."

- For each of the five topics in the "teaching children specific math skills" subject area, 85 percent of bachelor's degree programs reported that the topic is required.

Age-Group Focus for Early Math

- The age-group focus of early math topics varied by topic and program degree level. Overall, however:

  ⇒ Programs at both associate and bachelor's degree levels were more likely to focus early math topics on preschool-age children than on children in the other age groups;
  ⇒ Associate degree programs were more likely than bachelor's degree programs to focus all 11 early math topics on infants and toddlers; and
  ⇒ Bachelor's degree programs were significantly more likely than associate degree programs to focus early math topics on children in kindergarten or in the early elementary grades.

__Figures 5.5__ and __5.6__ display the percentages of degree programs that reported requiring the topic for students to attain their degrees. See __Appendix Tables A5-3__ and __A5-4__ for additional detail about the age-group focus of each topic.

Figure 5.5: Coursework on Development of Children's Mathematical Understanding Required by Florida Early Childhood Degree Programs, by Degree Level

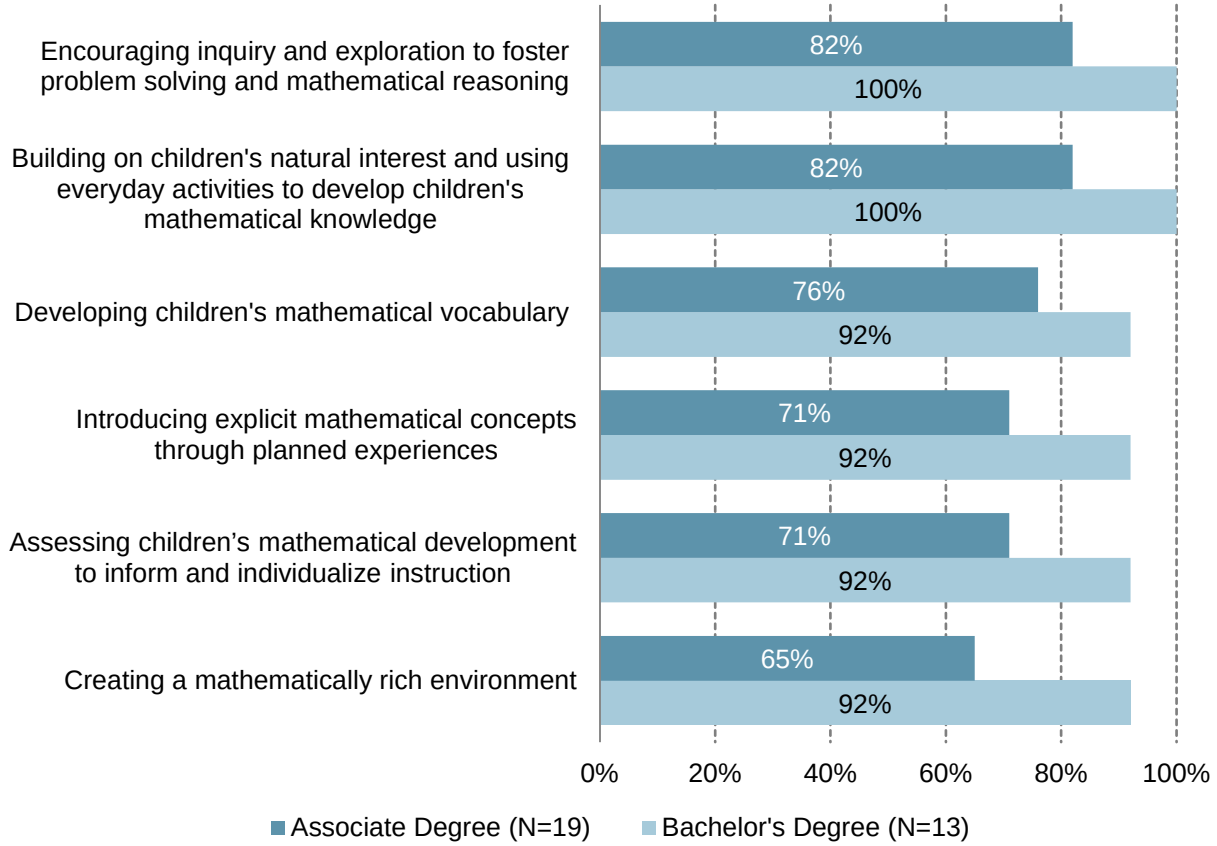
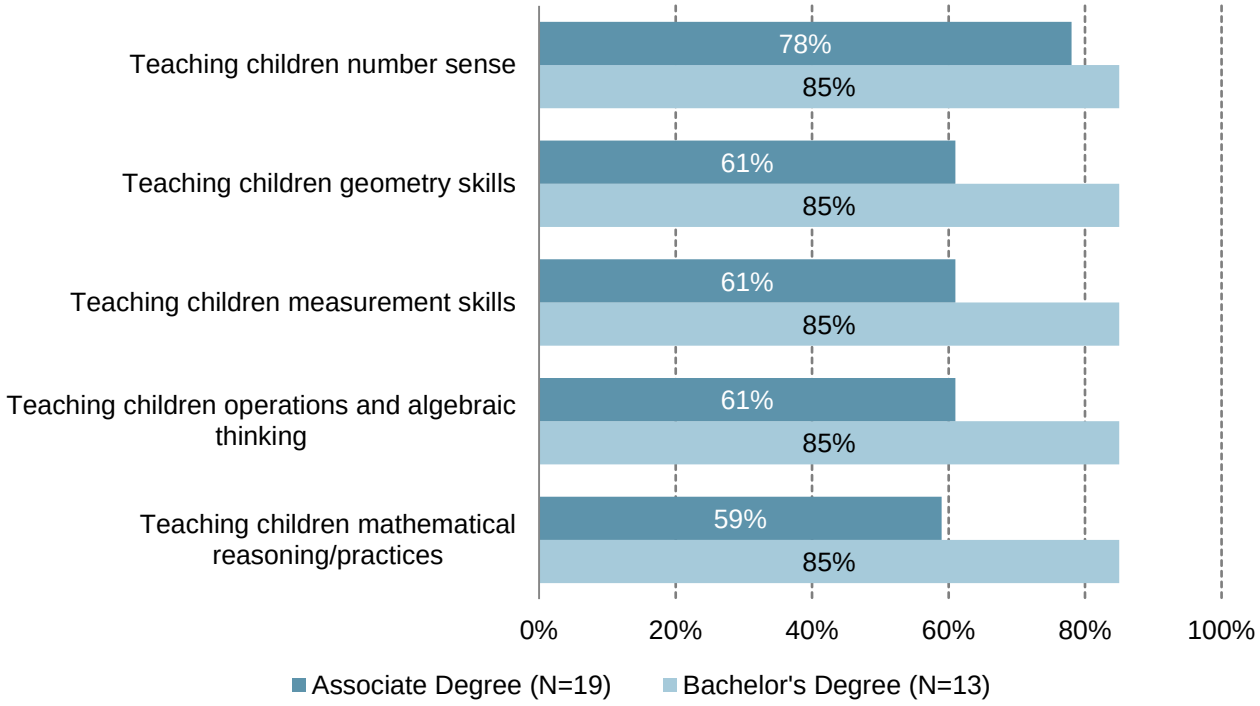


Figure 5.6: Coursework on Teaching Children Specific Math Skills Required by Florida Early Childhood Degree Programs, by Degree Level



Structure of Coursework on Early Math (See Appendix Table A2-5)

- The structure of early math courses varied by program degree level.

  ⇒ One-half (50 percent) of associate degree programs, compared to only 15 percent of bachelor's degree programs, reported that math topics were taught within a broader course, as opposed to being taught as separate courses.

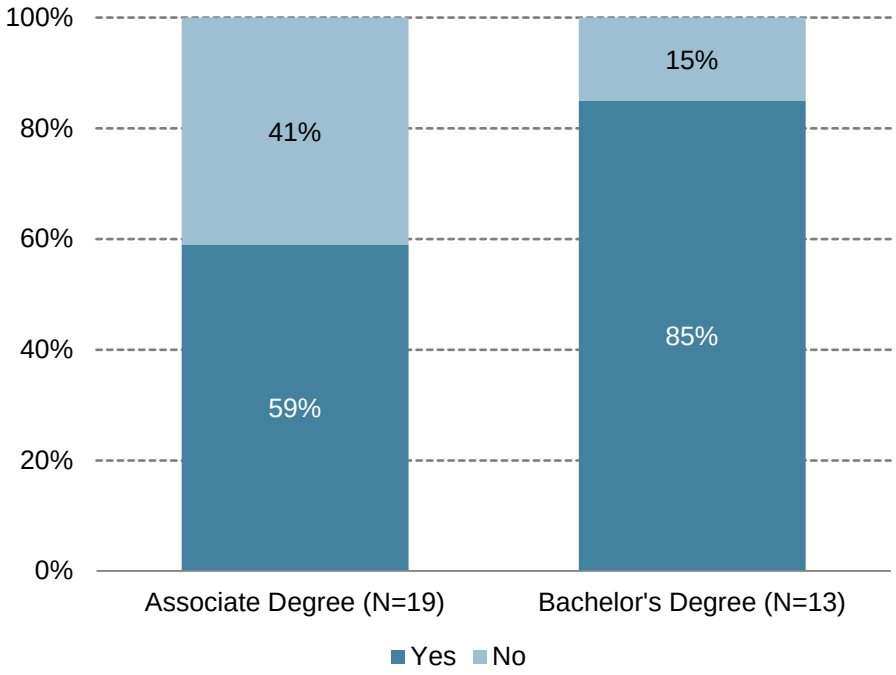
  ⇒ In contrast, more than three-fifths (62 percent) of bachelor's degree programs offered specific courses related to early math, compared to one-fifth (19 percent) of associate degree programs.

Alignment of Early Math Coursework With State and National Standards (See Figure 5.7 and Appendix Table A2-6)

- Approximately 60 percent of associate degree programs and approximately 85 percent of bachelor's degree programs reported aligning their math coursework with state and national math standards.

- In total, programs across degree levels were most likely to report aligning with the Florida Early Learning and Development Standards: Birth to Five.

Figure 5.7: State or National Math Standards Incorporated Into Early Math Course Content of Florida Early Childhood Degree Programs, by Degree Level



Faculty Members' Capacity to Teach Early Mathematics (See Figures 5.8, 5.9, and 5.10 and Appendix Tables A5-5 and A5-6)

- Faculty members teaching in both associate and bachelor's degree programs, as opposed to those teaching only in associate or bachelor's degree programs or in graduate degree programs, were the most likely among faculty to report being capable of preparing practitioners to work with infants and toddlers around promoting mathematical understanding and teaching math skills.

  ⇒ For four of the 12 topics listed in the *Inventory*, at least 60 percent of associate degree faculty members reported the capacity to teach the topic.
  ⇒ For eight of the 12 topics listed in the *Inventory*, at least 60 percent of bachelor's degree faculty members reported the capacity to teach the topic.
  ⇒ For each of the topics listed in the *Inventory*, at least 60 percent of faculty members teaching in both associate and bachelor's degree programs reported the capacity to teach the topic.
  ⇒ In none of the topics listed in the *Inventory* did at least 60 percent of graduate degree faculty members report the capacity to teach the topic.

- A larger percentage of faculty members at all program degree levels reported being capable of preparing practitioners to work with preschoolers as compared to children in the other age groups.

  ⇒ For six of the 12 topics listed in the *Inventory,* at least three-quarters of associate degree program faculty members reported the capacity to teach the topic.
  ⇒ For each topic listed in the *Inventory,* at least three-quarters of faculty teaching in bachelor's degree programs only and in both associate and bachelor's degree programs reported the capacity to teach the topic.
  ⇒ For four of the 12 topics listed in the *Inventory,* at least three-quarters of graduate degree program faculty members reported the capacity to teach the topic.

- The three topics for which faculty members (at all degree levels and across age groups of children) were least likely to report the capacity to teach practitioners were:

  ⇒ Teaching children operations and algebraic thinking;
  ⇒ Teaching children mathematical reasoning/practices; and
  ⇒ Assessing children's math development.

Figure 5.8: Capacity to Prepare Teachers to Work With Infants and Toddlers: Children's Mathematical Understanding and Math Skills, Reported by Faculty Members, by Degree Level

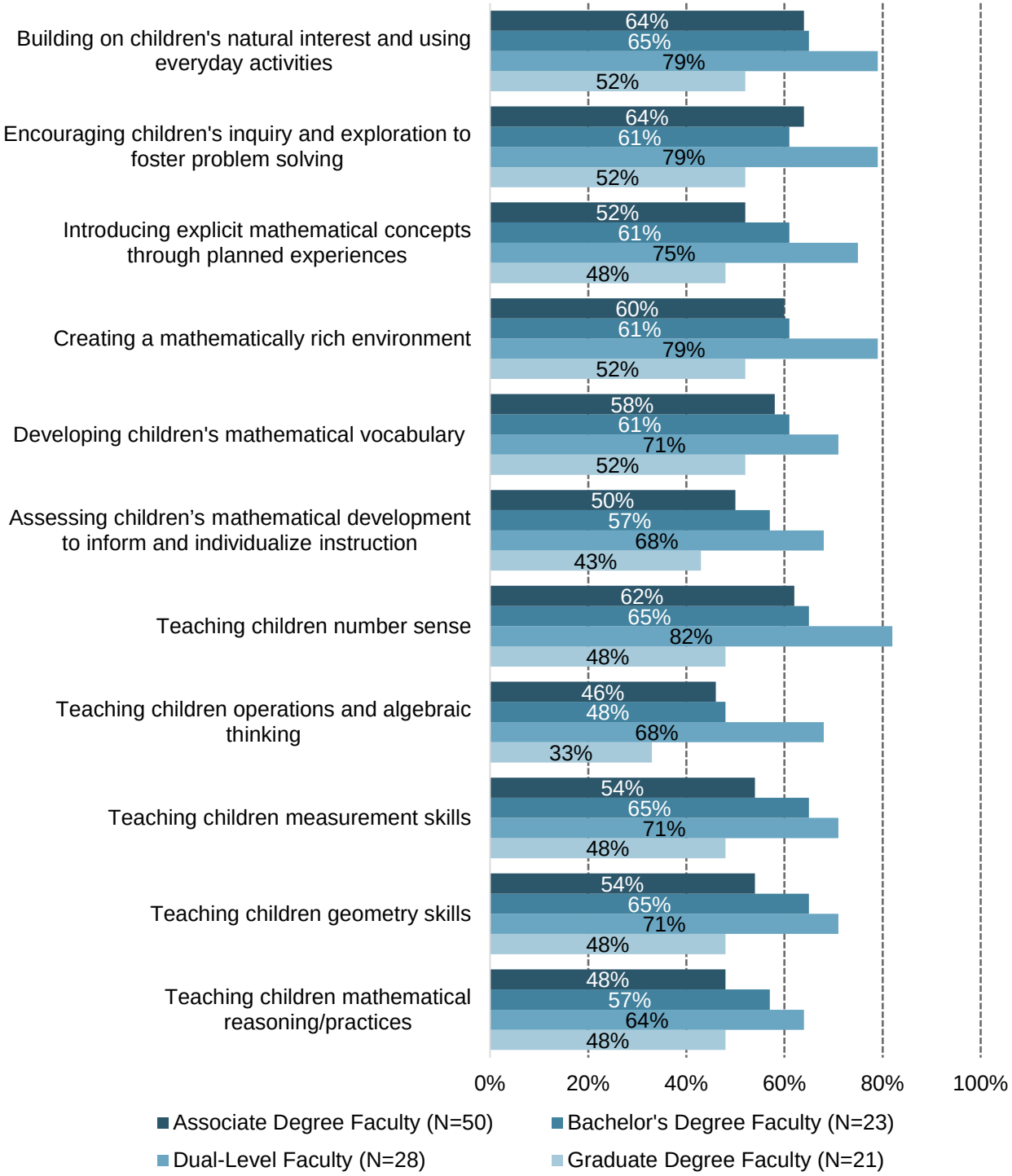


Figure 5.9: Capacity to Prepare Teachers to Work With Preschool-Age Children: Children's Mathematical Understanding and Math Skills, Reported by Faculty Members, by Degree Level

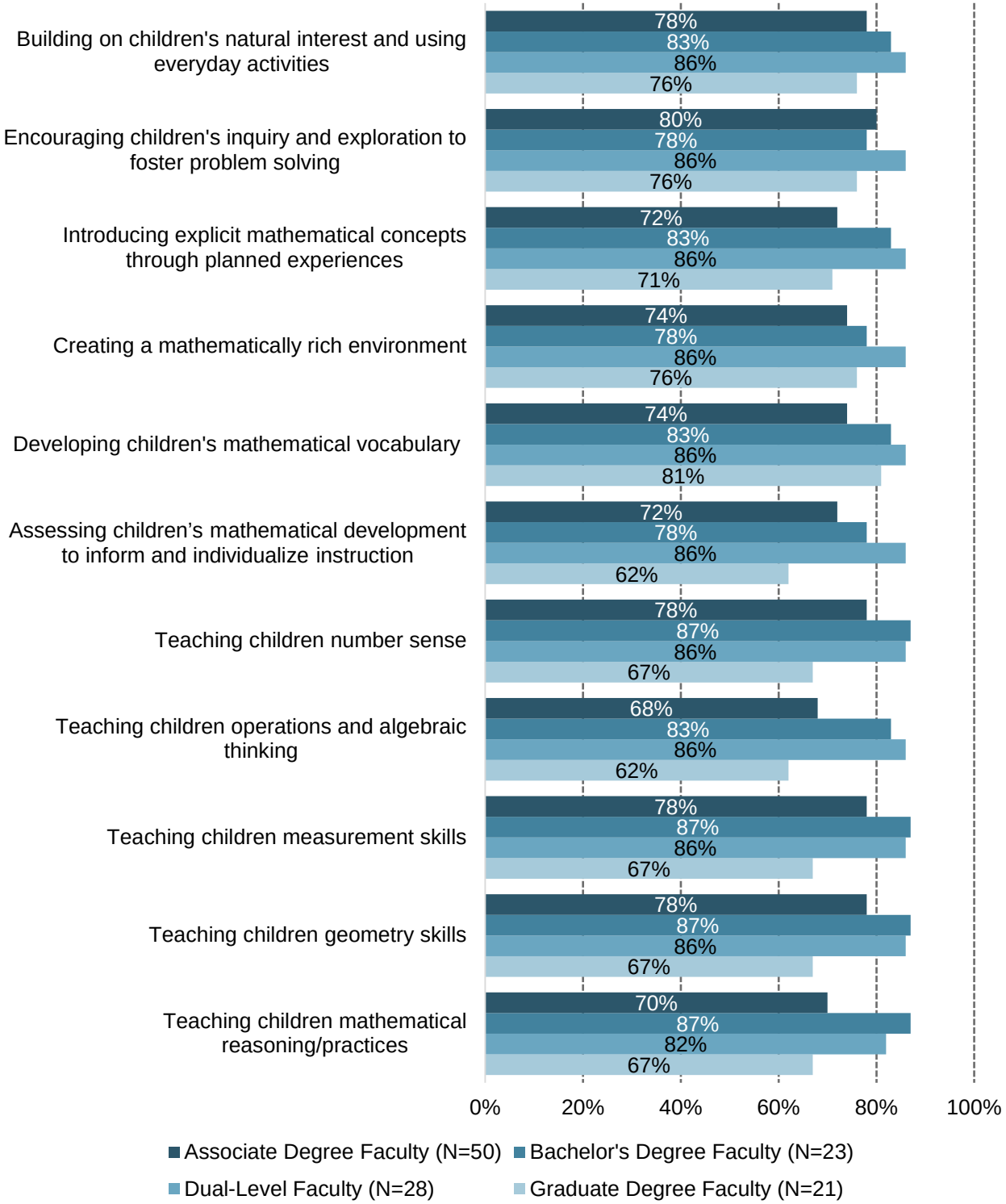
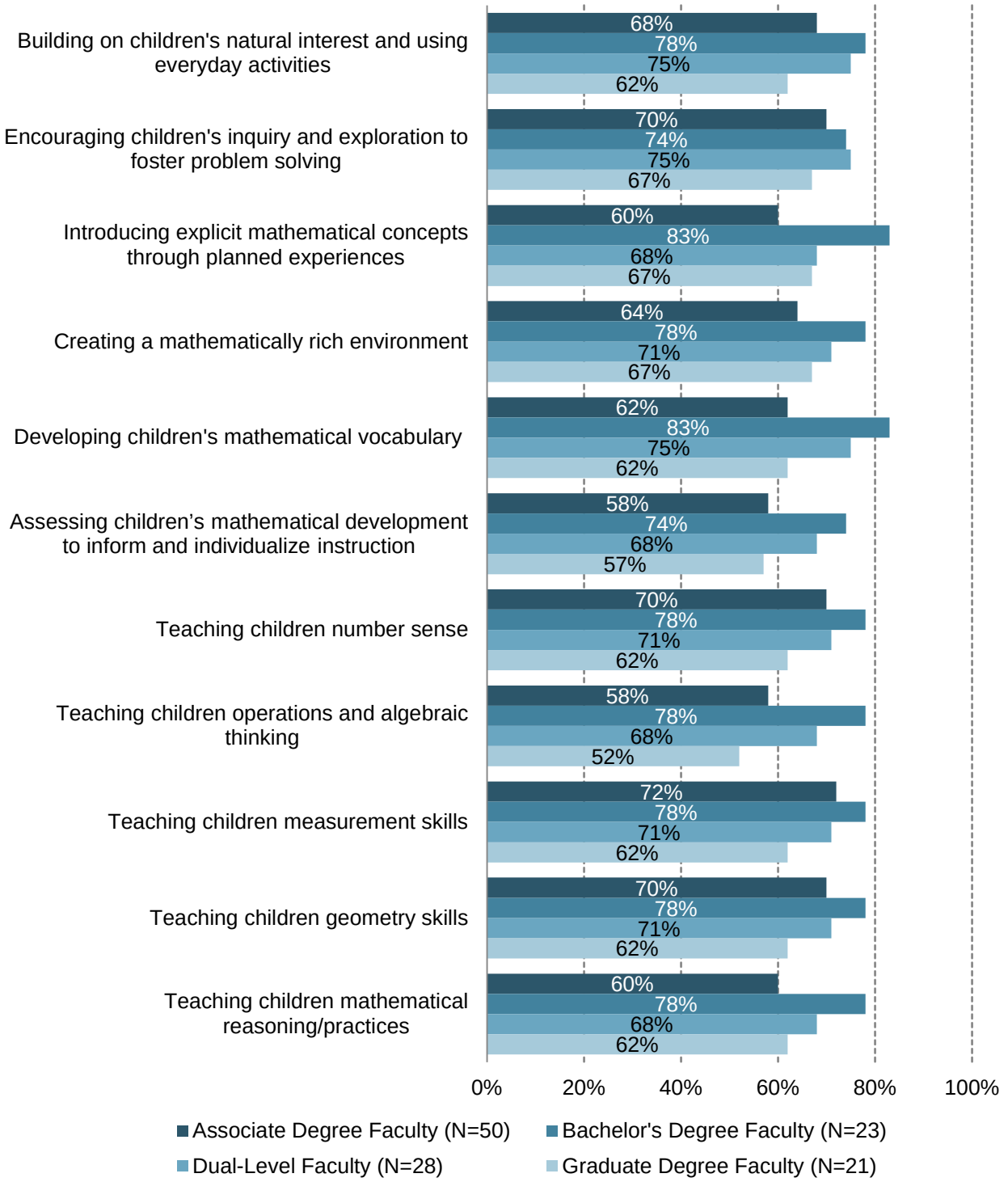


Figure 5.10: Capacity to Prepare Teachers to Work With Children in Grades K-3 and Higher: Children's Mathematical Understanding and Math Skills, Reported by Faculty Members, by Degree Level



Early Mathematics Course Content Taught in the Past Two Years (See Appendix Table A3-3)

- Faculty members teaching in both associate and bachelor's degree programs were more likely than faculty members teaching in *only* associate, bachelor's, or graduate degree programs to report having taught early math topics during the past two years at their college or university.

  ⇒ Faculty members only teaching in associate degree programs were the most likely to have taught mathematics concepts embedded within a broader course, while faculty members teaching in both associate and bachelor's degree programs were the most likely to have taught a separate course on early mathematics.
  ⇒ Across all program degree levels, faculty members were more likely to have taught math content embedded within a broader course than as a separate course or through both types of instruction.
  ⇒ Graduate degree program faculty members were the least likely to report having taught early math topics during the past two years at their college or university.

Faculty Participation and Interest in Professional Development Topics Related to Early Math (See Figures 5.11 and 5.12 and Appendix Table A5-7)

- While the vast majority of faculty at all program degree levels reported participating in professional development during the past three years, many did not participate in professional development related to early mathematics.

  ⇒ Fifty-one percent of all faculty members participating in the study reported *not* participating in any professional development related to early math.
  ⇒ This finding varied somewhat by program degree level. About one-half of faculty members teaching only in associate degree programs (51 percent) or only in bachelor's degree programs (50 percent) reported that they had not participated in professional development focused on any of the early math topics, while this same finding was only reported by 41 percent of faculty teaching in both associate and bachelor's degree programs. Sixty-five percent of graduate degree program faculty members participating in the study had not participated in early mathematical professional development in the past three years.

- Faculty members who had participated in professional development focused on early math were most likely to report participating in "teaching practitioners to implement instructional strategies that support mathematical understanding," although the age-group focus varied by program degree level.

  ⇒ Faculty members teaching in associate degree programs only or both associate and bachelor's degree programs were more likely to participate in early mathematics professional development concerning children ages three and four (pre-K), while faculty members teaching in only bachelor's degree programs were more likely to participate in professional development concerning children in kindergarten through third grade or higher.

- While interest in professional development related to early mathematics varied by program degree level and specific topic, graduate degree program faculty were less interested in all professional development early mathematics topics than faculty teaching in associate or bachelor's degree

programs (including dual-level faculty), with the exception of "teaching practitioners how to effectively use assessment to inform and individualize mathematical instruction."

- When asked to rate their interest in a list of math-related topics for professional development, the following two topics elicited a "very interested" response from at least 40 percent of faculty members at each program degree level:

  ⇒ Teaching practitioners how to effectively use assessment to inform and individualize their instruction; and
  ⇒ Strategies to help practitioners who struggle with mathematics build confidence in their ability to facilitate children's mathematical understanding and skill.

Figure 5.11 *displays the percentage of faculty members at all degree levels who reported participating in professional development related to specific early mathematics topics in the past three years.*

Figure 5.12 *displays the percentage of faculty members at all degree levels who reported that they would be "very interested" in an early math-related professional development opportunity.* ***Appendix Table A5-7*** *displays the responses for all interest levels.*

Figure 5.11: Participation in Professional Development on Early Mathematical Development Reported by Faculty Members, by Degree Level

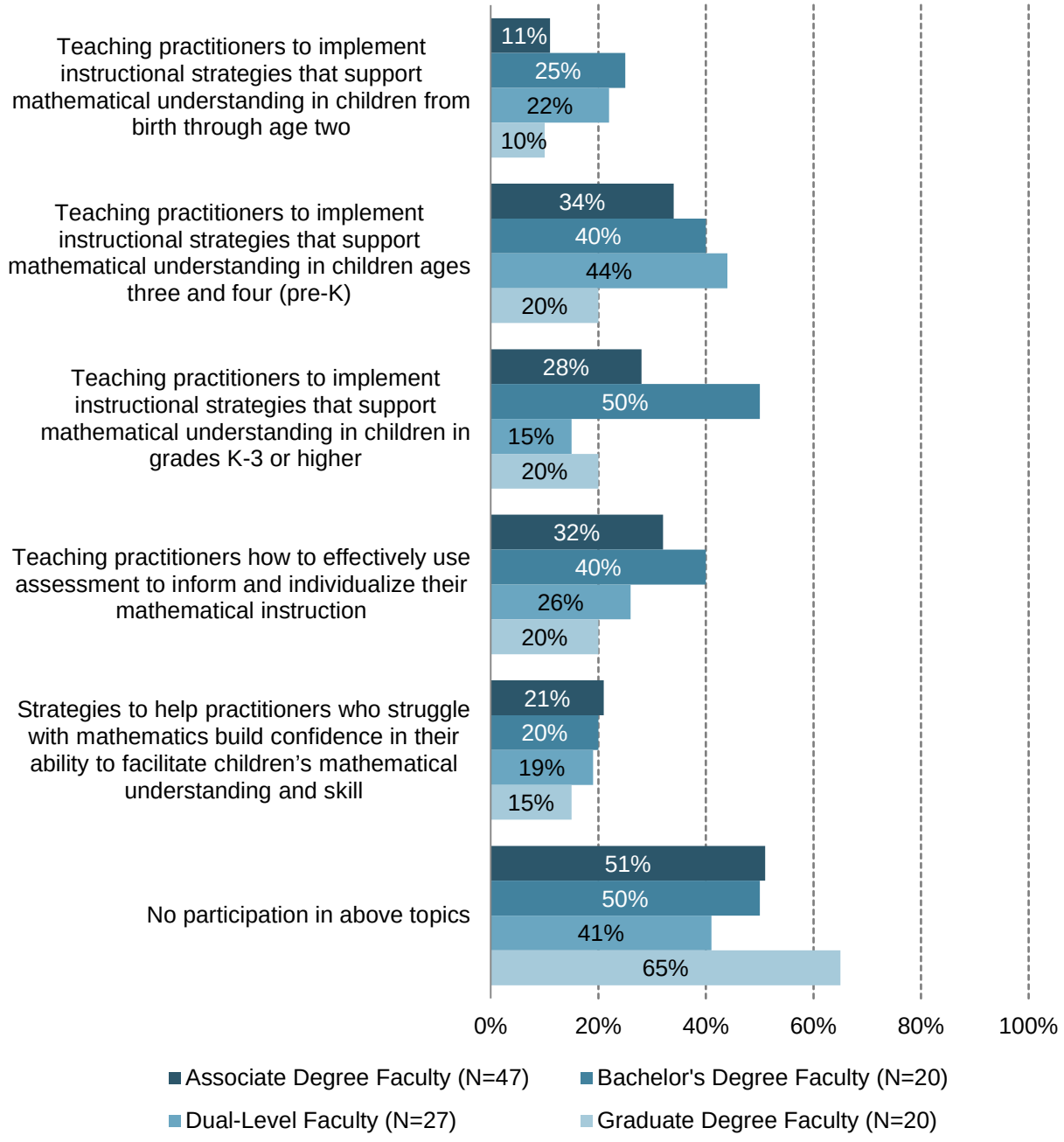
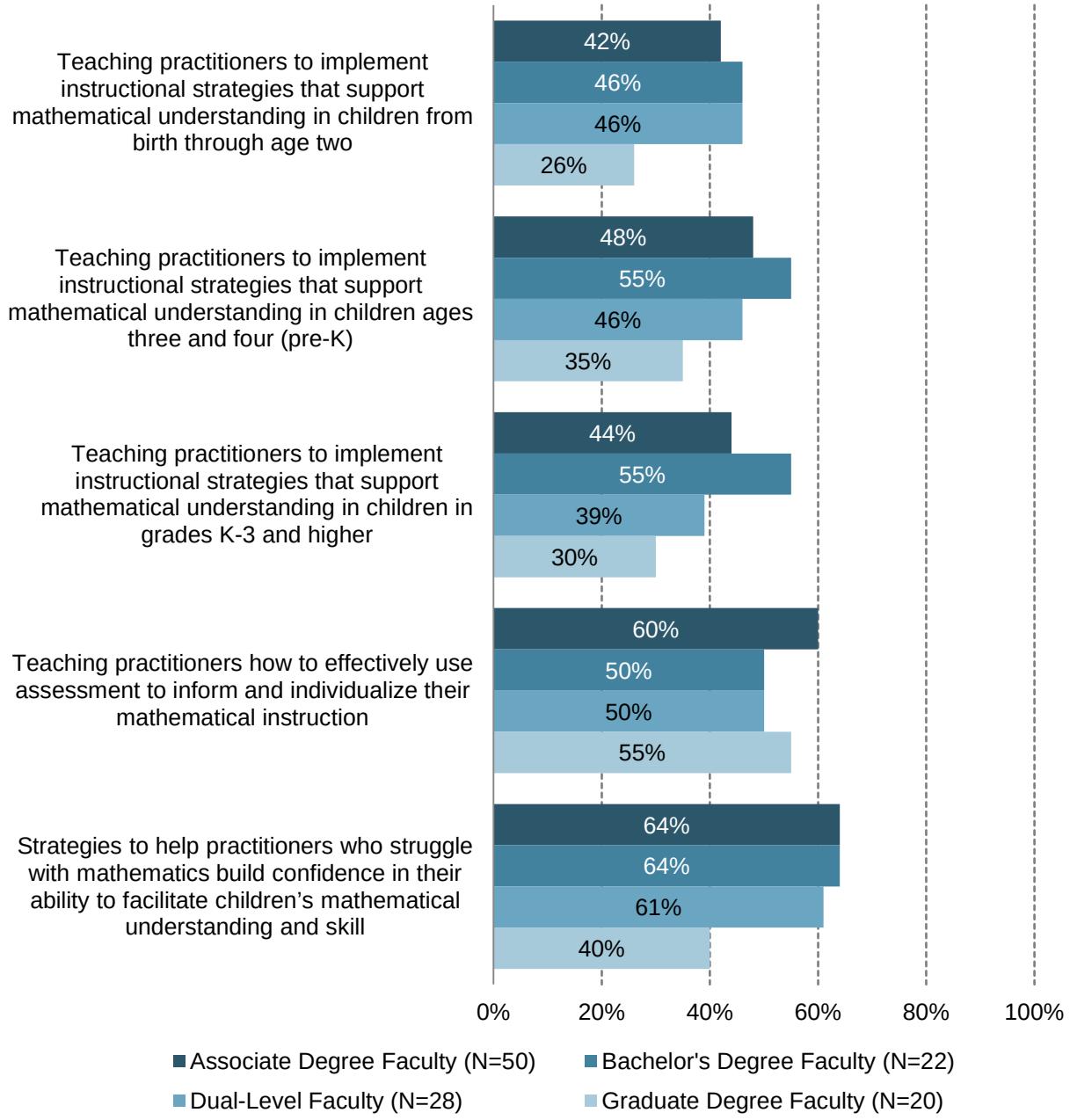


Figure 5.12: Interest in Early Math Professional Development Reported by Faculty Members: Percentage Reporting "Very Interested," by Degree Level



Dual Language Learners

The *Inventory* explored the content area of working with dual language learners (DLLs) in depth.[10]

What we asked about working with dual language learners:

The *Inventory* asked program leaders about: topics related to working with DLLs required for the degree; the age-group focus of the required coursework; and whether strategies for working with DLLs were taught as a separate course, within a broader course, or both.

(See **Figure 5.13** and **Appendix Tables A2-5** and **A5-4**.)

The *Inventory* asked faculty members assess their capacity to prepare practitioners to support the cognitive and social development of young DLLs and about their level of participation and interest in professional development related to working with DLLs.

(See **Figures 3.14, 3.15, 3.16, 5.14,** and **5.15**, and **Appendix Table A5-9**.)

Required Course Content and Age-Group Focus Related to Working With DLLs (See **Figure 5.13** and **Appendix Table A5-8)**

- Each of the 10 dual language learning topics[11] listed in the *Inventory* was required by two-thirds or more of associate and bachelor's degree programs.

  ⇒ Each of the topics related to dual language learning was required by 92 percent of bachelor's degree programs with one exception. "Importance and benefits of bilingualism for young children's development" was required by 85 percent of bachelor's degree programs.
  ⇒ The topic required by the largest number of associate degree programs (89 percent) was the "role of home language development in helping young children learn English."
  ⇒ The topic required by the fewest number of associate degree programs (68 percent) was "how to use observation, assessment, and documentation to inform strategies for teaching DLLs."

- The age-group focus in the DLL content area varied by topic and program degree level. In general:

  ⇒ Associate degree programs were more likely to require a focus on infants and toddlers and/or preschool-age children than on older children;
  ⇒ Bachelor's degree programs were more likely to require a focus on preschool-age or older children than on infants and toddlers;

[10] There are many terms used to describe children who are learning English in addition to another non-English home language (e.g., dual language learners, English-language learners, emergent bilinguals, etc.). The *Inventory* used the term "dual language learners" (or DLLs) to refer to these children.
[11] The topics included in the *Inventory* were adapted from recommended teacher competencies described in *State Early Learning and Development Standards/Guidelines, Policies & Related Practices*, BUILD Initiative, October, 2015; and *Dual Language Learner Teacher Competencies (DLLLTC) Report*, Alliance for a Better Community, 2012.

⇒ For each of the DLL topics, one-third or more of associate degree programs reported no age-group focus; and

⇒ Similarly, a sizeable percentage of bachelor's degree programs reported no age-group requirement, but this finding varied by topic.

Structure of Coursework on Working With DLLs (See Appendix Table A2-5)

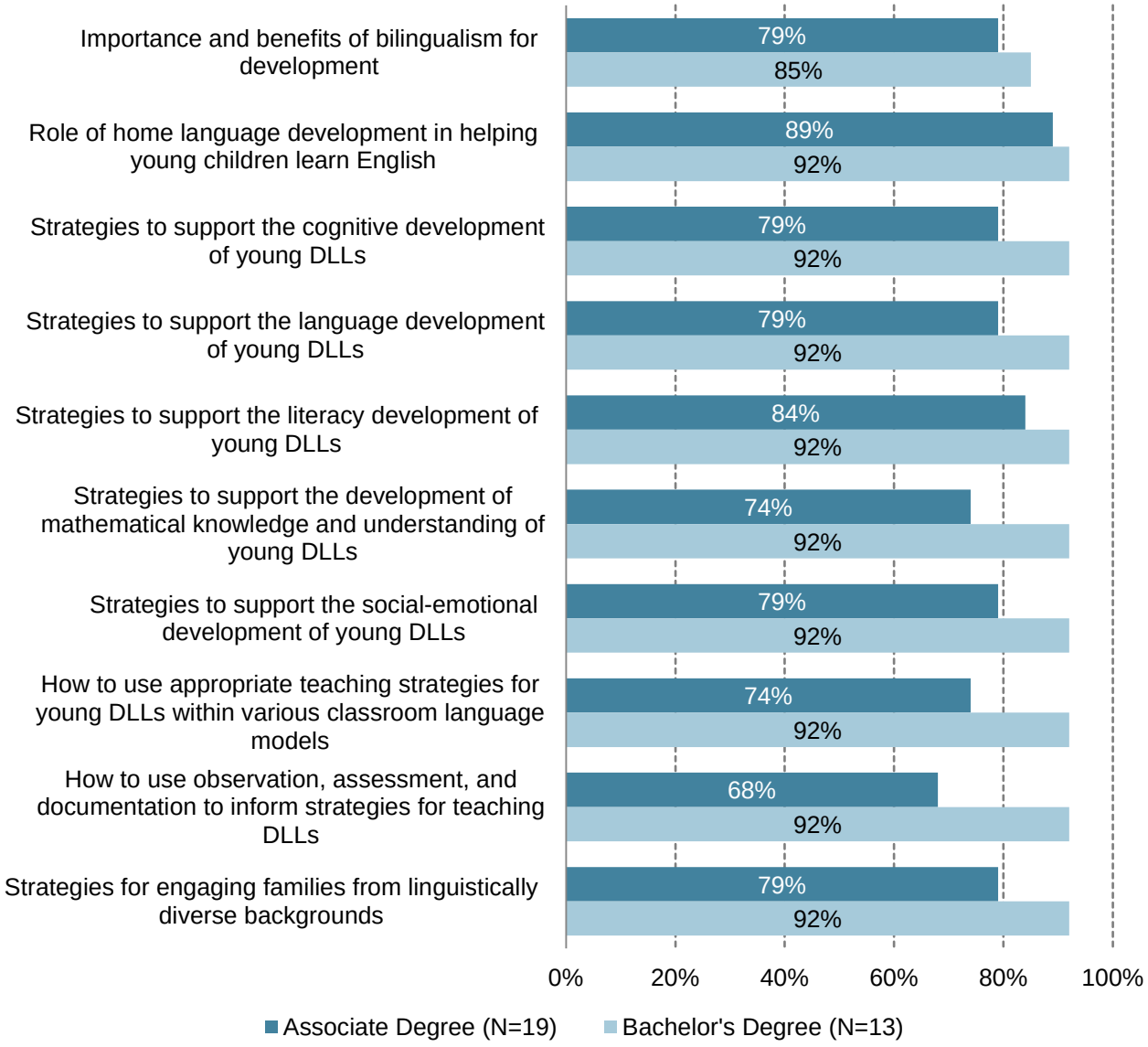
- We were interested in learning whether "strategies for working with children who are dual language learners" was taught as a separate course, within a broader course covering multiple topics, or both.

  ⇒ More than one-half (53 percent) of associate degree programs reported that "strategies for working with children who are dual language learners" were taught primarily within a broader course and about one-fifth (18 percent) reported that this topic was taught in both a separate course *and* within a broader course.

  ⇒ In contrast, more than one-half (54 percent) of bachelor's degree programs reported that this topic was taught in both a separate course and within a broader course covering multiple topics, and about one-quarter (23 percent) reported that it was taught as a separate course.

Figure 5.13 *displays the percentage of degree programs that require the content area of working with dual language learners. See* ***Appendix Table A5-8*** *for the age-group focus of the required content and* ***Appendix Table A2-5*** *for the structure of coursework related to DLLs*.

Figure 5.13: Coursework on Working With Dual Language Learners Required by Florida Early Childhood Degree Programs, by Degree Level



Faculty Participation and Interest in Professional Development Topics Related to Working With DLLs (See **Figures 5.14** and **5.15,** and **Appendix Table A5-9)**

- While the vast majority of faculty at all program degree levels reported participating in professional development during the past three years, many did not participate in professional development related to DLLs.

  ⇒ Forty-five percent of all faculty members participating in the study reported *not* participating in any of the 10 dual language learning topics listed in the *Inventory.*
  ⇒ This finding varied somewhat by program degree level. About one-half of associate degree (49 percent), bachelor's degree (45 percent), and dual-level (44 percent) faculty members and about one-third (35 percent) of graduate degree faculty members reported that they had not participated in professional development focused on any of the DLL topics.

- Faculty members at all program degree levels who had participated in professional development focused on DLLs were most likely to report participating in the "strategies for engaging families from linguistically diverse backgrounds."

  ⇒ This finding varied by program degree level. Dual-level (44 percent) and graduate (50 percent) degree faculty members were more likely to have participated in professional development on this topic in the past three years than associate or bachelor's degree faculty members (32 percent and 20 percent, respectively).

- When asked to rate their interest among a list of DLL-related topics for professional development, at least 40 percent of faculty members across all program degree levels reported that they would be "very interested" in four topics:

  ⇒ Strategies to support the literacy development of young DLLs;
  ⇒ Strategies to support the socioemotional development of young DLLs;
  ⇒ Strategies for engaging families from linguistically diverse backgrounds; and
  ⇒ How to use appropriate teaching strategies for young DLLs within various classroom language models (e.g., English only, dual language, English with home language support).

Figure 5.14: Participation in Professional Development Related to Dual Language Learners Reported by Faculty Members, by Degree Level

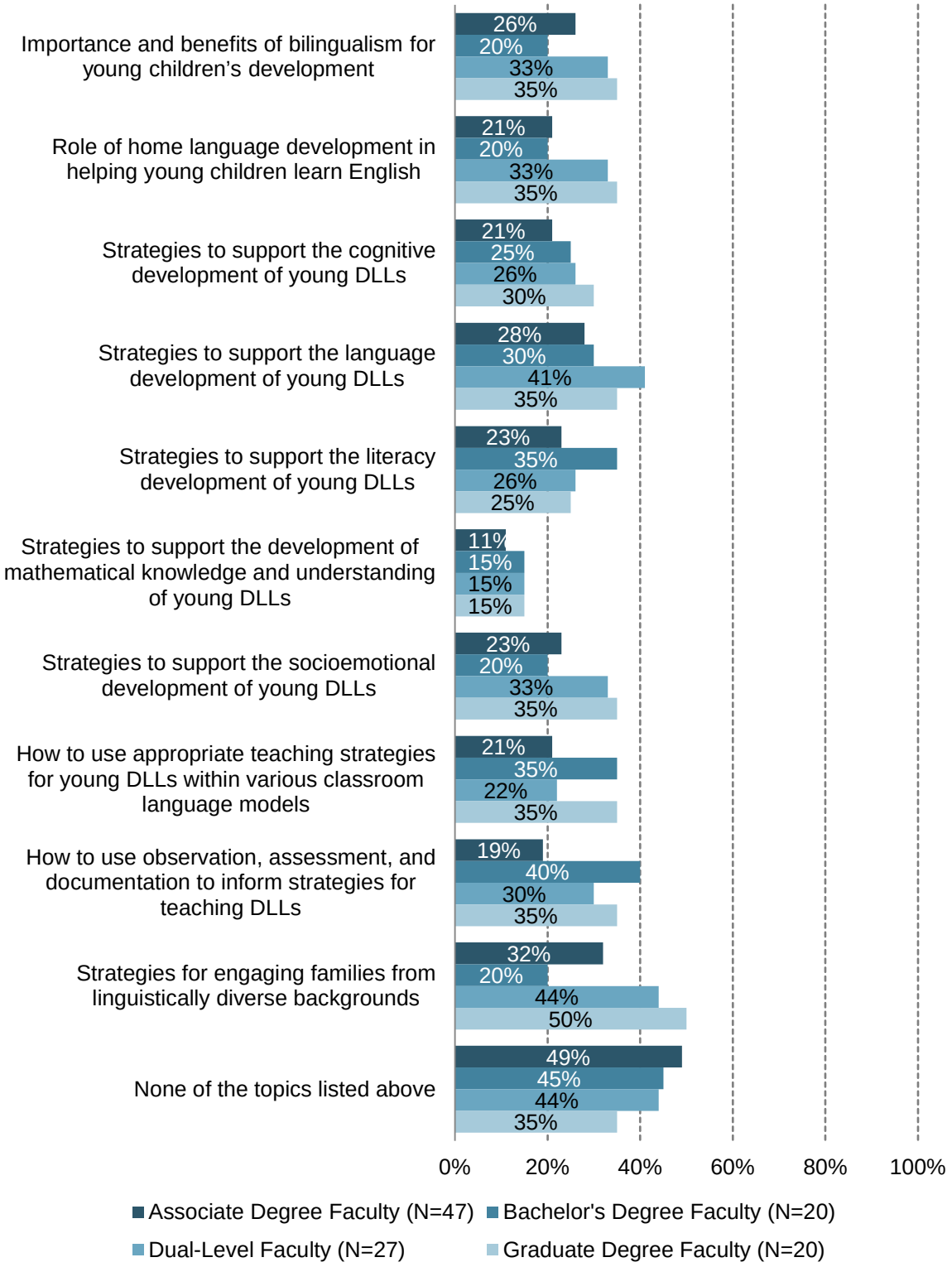
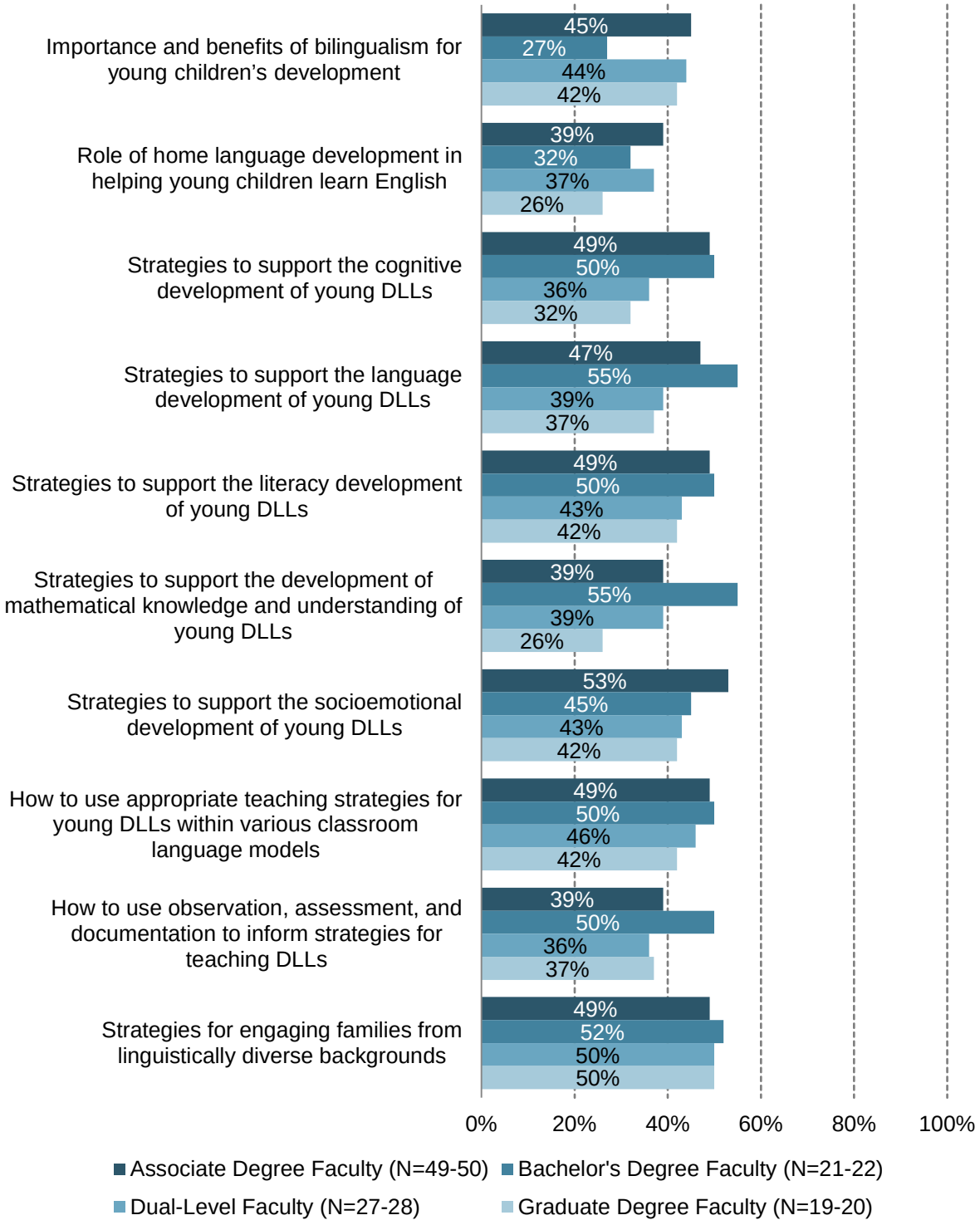


Figure 5.15: Interest in Professional Development Related to Dual Language Learners Reported by Faculty Members: Percentage Reporting "Very Interested," by Degree Level



Appendices

Appendix 1: Introduction

Table A1-1: Early Childhood Degree Programs Offered at State Colleges in Florida

Name of Institution	Associate Degree Program(s)	Bachelor's Degree Program(s)
Broward College	A.S. in Early Childhood Education A.A. in Early Childhood Education (transfer)	
Chipola College	A.S. in Early Childhood Education	
College of Central Florida	A.S. in Early Childhood Education A.A. in Early Childhood Education (transfer)	B.S. in Early Childhood Education
Daytona State College	A.S. in Early Childhood Education	
Eastern Florida State College	A.S. in Early Childhood Education	
Florida Gateway College	A.S. in Early Childhood Education	B.S. in Early Childhood Education
Florida Southwestern State College	A.S. in Early Childhood Education	
Florida State College at Jacksonville	A.S. in Early Childhood Education	B.S. in Early Childhood Education
Gulf Coast State College	A.A. in Early Childhood Education A.S. in Early Childhood Education	
Hillsborough Community College	A.S. in Early Childhood Management	
Indian River State College	A.S. in Early Childhood Education	
Miami Dade College	A.S. in Early Childhood Education	B.S. in Early Childhood Education

Table A1-1: Early Childhood Degree Programs Offered at State Colleges in Florida (Continued)

Name of Institution	Associate Degree Program(s)	Bachelor's Degree Program(s)
North Florida Community College	A.A. in Education, Emphasis in Early Childhood	
Northwest Florida State College	A.S. in Early Childhood Education A.A. with Specialization in Early Childhood Education	B.S. in Early Childhood Education
Palm Beach State College	A.S. in Early Childhood Education	
Pensacola State College	A.A. in Early Childhood Teacher, Pre-Primary A.S. in Early Childhood Education	
Polk State College	A.S. in Early Childhood Education and Management	B.S. in Early Childhood Education
Santa Fe College	A.S. in Early Childhood Education	B.S. in Early Childhood Education
Seminole State College of Florida	A.S. in Early Childhood Education A.A. in Early Childhood Education	
St. John's River State College		B.S. in Early Childhood Education
St. Petersburg College	A.S. in Early Childhood	B.S. in Educational Studies, Preschool Specialization B.S. in Educational Studies and Community Leadership, Subplan in Preschool Education (Birth to Age 4)
State College of Florida, Manatee/ Sarasota	A.S. in Early Childhood Education	B.S. in Early Childhood Education
Tallahassee Community College	A.S. in Early Childhood Development, Education, and Management	
Valencia College	A.A. with Premajor in Early Childhood Education	

Table A1-2: Early Childhood Degree Programs Offered at Universities in Florida

Name of Institution	Bachelor's Degree Program(s)	Graduate Degree Program(s)
Florida Agricultural and Mechanical University	B.S. in Pre-Kindergarten/Primary Education	
Florida Gulf Coast University	B.A. in Early Childhood Education	
Florida Atlantic University	Bachelor's in Early Care and Education (B.E.C.E.)	M.Ed. in Early Childhood Education, Specialization in Early Childhood Education
Florida International University	B.S. in Early Childhood Education B.S. in Early Childhood Development	M.S. in Early Childhood Education Ed.D. in Curriculum and Instruction, Specialization in Early Childhood Education
Florida State University		M.S. in Early Childhood Education Ph.D. in Early Childhood Education
University of Central Florida	B.S. in Early Childhood Development and Education	M.S. in Early Childhood Development and Education Ph.D. in Education, Early Childhood Track
University of Florida	B.A.E. in Education, Unified Early Childhood Education ProTeach, Pre-K – Grade 3	M.A.E. with Early Childhood Emphasis
University of North Florida	B.S. in Pre-K/Primary Education	
University of South Florida	B.S. in Early Childhood Education: Pre-Kindergarten/Primary	M.Ed. in Early Childhood Education Ph.D. in Curriculum and Instruction: Concentration in Early Childhood
Barry University	B.S. in Education, Specialization in Infancy Through Early Childhood Education	M.S. in Education, Specialization in Montessori Early Childhood Education M.S. in Curriculum and Instruction, Specialization in Early and Middle Childhood Education Ph.D. in Curriculum and Instruction, Specialization in Early and Middle Childhood Education
University of Miami		M.S.Ed. in Early Childhood Special Education

Appendix 2: Early Childhood Higher Education Programs: Detailed Tables*

Table A2-1: Required Coursework Related to Child Development and Learning: Age-Group Focus, by Degree Level

Age-Group Focus	Associate Degree	Bachelor's Degree
Knowledge about children's development in different domains (e.g., language development, cognitive development)		
Birth to 2 years	68%	64%
3 and/or 4 years (pre-K)	68%	86%
K-grade 3 or higher	37%	79%
Required, but no age-group focus	26%	7%
	N=19	N=14
Development of children's early literacy skills		
Birth to 2 years	68%	64%
3 and/or 4 years (pre-K)	68%	86%
K-grade 3 or higher	37%	79%
Required, but no age-group focus	26%	7%
	N=19	N=14
Development of children's scientific understanding		
Birth to 2 years	75%	43%
3 and/or 4 years (pre-K)	75%	85%
K-grade 3 or higher	25%	77%
Required, but no age-group focus	25%	8%
	N=16	N=13
Understanding the effects of culture, gender, class, and race on child development		
Birth to 2 years	77%	69%
3 and/or 4 years (pre-K)	77%	92%
K-grade 3 or higher	35%	85%
Required, but no age-group focus	24%	0%
	N=17	N=13
Child development theory and its relationship to teaching		
Birth to 2 years	68%	71%
3 and/or 4 years (pre-K)	68%	86%
K-grade 3 or higher	32%	79%
Required, but no age-group focus	32%	7%
	N=19	N=14
Understanding the effects of disability on child development		
Birth to 2 years	67%	57%
3 and/or 4 years (pre-K)	67%	86%
K-grade 3 or higher	39%	79%
Required, but no age-group focus	28%	7%
	N=18	N=14

* Percentages may not total 100% due to rounding.

Table A2-2: Required Coursework Related to Teaching Diverse Child Populations: Age-Group Focus, by Degree Level

Age-Group Focus	Associate Degree	Bachelor's Degree
Teaching children who are experiencing poverty		
Birth to 2 years	65%	62%
3 and/or 4 years (pre-K)	65%	85%
K-grade 3 or higher	35%	77%
Required, but no age-group focus	35%	8%
	N=17	N=13
Teaching children with challenging behaviors		
Birth to 2 years	61%	57%
3 and/or 4 years (pre-K)	61%	79%
K-grade 3 or higher	28%	71%
Required, but no age-group focus	39%	14%
	N=18	N=14
Teaching children with special needs		
Birth to 2 years	56%	50%
3 and/or 4 years (pre-K)	56%	71%
K-grade 3 or higher	22%	64%
Required, but no age-group focus	44%	21%
	N=18	N=14
Teaching children who have experienced trauma		
Birth to 2 years	67%	36%
3 and/or 4 years (pre-K)	67%	55%
K-grade 3 or higher	27%	46%
Required, but no age-group focus	33%	36%
	N=15	N=11

Table A2-3: Required Coursework Related to Teaching and Curriculum: Age-Group Focus, by Degree Level

Age-Group Focus	Associate Degree	Bachelor's Degree
Teaching children science skills		
Birth to 2 years	57%	50%
3 and/or 4 years (pre-K)	71%	92%
K-grade 3 or higher	29%	75%
Required, but no age-group focus	29%	8%
	N=14	N=12
Teaching children literacy skills		
Birth to 2 years	65%	62%
3 and/or 4 years (pre-K)	65%	92%
K-grade 3 or higher	29%	83%
Required, but no age-group focus	35%	8%
	N=17	N=13
Teaching children art		
Birth to 2 years	69%	73%
3 and/or 4 years (pre-K)	69%	82%
K-grade 3 or higher	31%	64%
Required, but no age-group focus	31%	18%
	N=16	N=11
Teaching children social studies		
Birth to 2 years	50%	70%
3 and/or 4 years (pre-K)	63%	100%
K-grade 3 or higher	25%	80%
Required, but no age-group focus	38%	0%
	N=16	N=10
Using play in the curriculum		
Birth to 2 years	67%	75%
3 and/or 4 years (pre-K)	67%	100%
K-grade 3 or higher	28%	75%
Required, but no age-group focus	33%	0%
	N=18	N=12
Supporting and extending children's physical skills		
Birth to 2 years	67%	80%
3 and/or 4 years (pre-K)	67%	90%
K-grade 3 or higher	28%	70%
Required, but no age-group focus	33%	10%
	N=18	N=10

Table A2-3: Required Coursework Related to Teaching and Curriculum: Age-Group Focus, by Degree Level (Continued)

Age-Group Focus	Associate Degree	Bachelor's Degree
Supporting children's social development		
Birth to 2 years	61%	69%
3 and/or 4 years (pre-K)	61%	92%
K-grade 3 or higher	28%	77%
Required, but no age-group focus	39%	8%
	N=18	N=13
Implementing integrated curriculum		
Birth to 2 years	56%	54%
3 and/or 4 years (pre-K)	63%	92%
K-grade 3 or higher	25%	77%
Required, but no age-group focus	38%	8%
	N=16	N=13
Implementing inclusion strategies for children of all abilities		
Birth to 2 years	53%	62%
3 and/or 4 years (pre-K)	53%	85%
K-grade 3 or higher	18%	69%
Required, but no age-group focus	47%	15%
	N=17	N=13

Table A2-4: Required Coursework Related to Teaching Skills in Early Childhood Settings: Age-Group Focus, by Degree Level

Age-Group Focus	Associate Degree	Bachelor's Degree
Observation, assessment, and documentation to inform teaching and learning		
Birth to 2 years	67%	69%
3 and/or 4 years (pre-K)	67%	92%
K-grade 3 or higher	28%	77%
Required, but no age-group focus	33%	8%
	N=18	N=13
Classroom management		
Birth to 2 years	53%	54%
3 and/or 4 years (pre-K)	58%	85%
K-grade 3 or higher	21%	69%
Required, but no age-group focus	42%	15%
	N=19	N=13
How to use different teaching strategies (e.g., planning, instructing, facilitating)		
Birth to 2 years	67%	54%
3 and/or 4 years (pre-K)	67%	92%
K-grade 3 or higher	26%	77%
Required, but no age-group focus	33%	8%
	N=18	N=13

Table A2-5 Structure of Course Content Instruction in Florida Early Childhood Degree Programs, by Degree Level

Course Content Structure	Associate Degree	Bachelor's Degree
Literacy development in young children and how to promote their skills related to oral and written language		
Taught as a separate course	28%	54%
Taught within a broader course	33%	8%
Taught both as a separate course and embedded within a broader course	33%	39%
Not taught	6%	0%
	N=18	N=13
Socioemotional development, its relationship to learning, and how to support children's socioemotional skills		
Taught as a separate course	11%	23%
Taught within a broader course	53%	31%
Taught both as a separate course and embedded within a broader course	32%	46%
Not taught	5%	0%
	N=19	N=13
Normal and atypical motor development in young children, the relationship of motor development to learning, and how to facilitate children's motor skills		
Taught as a separate course	6%	31%
Taught within a broader course	61%	54%
Taught both as a separate course and embedded within a broader course	28%	15%
Not taught	6%	0%
	N=18	N=13
Implementing assessments effectively to inform and individualize instruction with children		
Taught as a separate course	26%	39%
Taught within a broader course	47%	0%
Taught both as a separate course and embedded within a broader course	26%	62%
Not taught	0%	0%
	N=19	N=13
Strategies to engage families in ongoing and reciprocal partnerships, and the relationship between family-school engagement and outcomes for children		
Taught as a separate course	6%	54%
Taught within a broader course	44%	8%
Taught both as a separate course and embedded within a broader course	39%	38%
Not taught	11%	0%
	N=18	N=13

Table A2-5 Structure of Course Content Instruction in Florida Early Childhood Degree Programs, by Degree Level (Continued)

Course Content Structure	Associate Degree	Bachelor's Degree
Domains and sequence of mathematical knowledge in young children and how to promote their mathematical understanding and ability to solve problems.		
Taught as a separate course	19%	62%
Taught within a broader course	50%	15%
Taught both as a separate course and embedded within a broader course	13%	23%
Not taught	19%	0%
	N=16	N=13
Strategies for working with children who are dual language learners		
Taught as a separate course	12%	23%
Taught within a broader course	53%	15%
Taught both as a separate course and embedded within a broader course	18%	54%
Not taught	18%	8%
	N=17	N=13

Table A2-6: Integration of Standards and Competencies Into Coursework, by Degree Level

Standards	Associate Degree (N=17)	Bachelor's Degree (N=14)
Florida Early Learning and Developmental Standards	65%	57%
Quality Counts (QRIS)	24%	7%
Other Standards	12%	7%

Table A2-7: Required Age-Group Focus and Elements of Student Teaching Experiences in Florida Early Childhood Bachelor's Degree Programs**

Age Group Focus or Element	Required	Optional	Not Offered
Working with children birth to 2 years	25%	17%	58%
Working with children 3 or 4 years (pre-K)	42%	42%	17%
Working with children kindergarten to grade 3 or higher	67%	8%	25%
Working with children who are DLLs	50%	33%	17%
Working with children with disabilities	33%	50%	17%
Working with families	25%	33%	42%
Scaffolding math development and understanding	100%	0%	0%
Scaffolding literacy development	100%	0%	0%
Supporting socioemotional development	92%	8%	0%
Facilitating motor development	42%	50%	8%
Developing partnerships with families	42%	50%	8%
Using assessment to inform instruction	92%	8%	0%
Collaborating with community organizations	25%	50%	25%
	N = 12		

** Percentages not reported for associate degree programs due to small sample size.

Table A2-8: Required Age-Group Focus and Elements of Practicum Experiences in Florida Early Childhood Degree Programs

Age Group Focus or Element	Required	Optional	Not Offered
Associate Degree (N=13)			
Working with children birth to 2 years	38%	62%	0%
Working with children 3 or 4 years (pre-K)	54%	46%	0%
Working with children kindergarten to grade 3 or higher	8%	46%	46%
Working with children who are DLLs	8%	69%	15%
Working with children with disabilities	8%	83%	8%
Working with families	23%	38%	38%
Scaffolding math development and understanding	67%	33%	0%
Scaffolding literacy development	85%	15%	0%
Supporting socioemotional development	77%	23%	0%
Facilitating motor development	75%	17%	8%
Developing partnerships with families	42%	25%	33%
Using assessment to inform instruction	83%	0%	17%
Collaborating with community organizations	33%	42%	25%
Bachelor's Degree (N=13)			
Working with children birth to 2 years	23%	38%	38%
Working with children 3 or 4 years (pre-K)	54%	38%	8%
Working with children kindergarten to grade 3 or higher	62%	15%	23%
Working with children who are DLLs	54%	31%	15%
Working with children with disabilities	54%	38%	8%
Working with families	38%	31%	31%
Scaffolding math development and understanding	77%	23%	0%
Scaffolding literacy development	85%	15%	0%
Supporting socioemotional development	77%	23%	0%
Facilitating motor development	38%	38%	23%
Developing partnerships with families	46%	23%	31%
Using assessment to inform instruction	100%	0%	0%
Collaborating with community organizations	23%	46%	31%

Appendix 3: Early Childhood Degree Program Faculty Members: Detailed Tables*

Table A3-1: Importance of Inclusion of Selected Topics in Early Childhood Degree Programs, Percentage of Faculty Reporting as "Very Important," by Age Group and Degree Level

Topic and Age-Group Focus	1- Not Important	2	3	4 - Very Important
Associate Degree Faculty (N=49-50)				
Understanding the domains and sequence of mathematical knowledge in young children and how to promote mathematical understanding and ability to solve problems				
Birth to 2 years	2%	25%	33%	41%
3 and/or 4 years (pre-K)	2%	2%	22%	74%
K-grade 3 or higher	0%	2%	4%	94%
Understanding the components and sequence of literacy development in young children and how to promote their skills related to oral and written language				
Birth to 2 years	0%	10%	14%	76%
3 and/or 4 years (pre-K)	0%	4%	14%	82%
K-grade 3 or higher	0%	0%	6%	94%
Understanding socioemotional development, its relationship to learning, and how to support children's socioemotional skills				
Birth to 2 years	0%	0%	6%	94%
3 and/or 4 years (pre-K)	0%	0%	4%	96%
K-grade 3 or higher	0%	2%	8%	90%
Understanding typical and atypical motor development in young children, its relationship to learning, and how to facilitate motor skills				
Birth to 2 years	0%	2%	10%	88%
3 and/or 4 years (pre-K)	0%	0%	16%	84%
K-grade 3 or higher	0%	8%	20%	72%
Understanding and implementing an integrated strategy to engage families in ongoing and reciprocal partnerships and its relationship to outcomes for children				
Birth to 2 years	2%	2%	8%	88%
3 and/or 4 years (pre-K)	2%	0%	10%	88%
K-grade 3 or higher	0%	0%	22%	78%

* Percentages may not total 100% due to rounding.

Table A3-1: Importance of Inclusion of Selected Topics in Early Childhood Degree Programs, Percentage of Faculty Reporting as "Very Important," by Age Group and Degree Level (Continued)

Topic and Age-Group Focus	1- Not Important	2	3	4 - Very Important
Associate Degree Faculty (Continued) (N=49-50)				
Utilizing assessment effectively to inform and individualize instruction				
Birth to 2 years	2%	16%	20%	61%
3 and/or 4 years (pre-K)	0%	6%	20%	74%
K-grade 3 or higher	0%	2%	18%	80%
Collaborating with community organizations to support children and families				
Birth to 2 years	0%	6%	34%	60%
3 and/or 4 years (pre-K)	0%	6%	28%	66%
K-grade 3 or higher	0%	8%	24%	68%
Supporting the cognitive and social development of young dual language learners				
Birth to 2 years	0%	8%	22%	70%
3 and/or 4 years (pre-K)	0%	4%	22%	74%
K-grade 3 or higher	0%	4%	18%	78%
Working with families of various ethnic, racial, and cultural backgrounds				
Birth to 2 years	0%	4%	12%	84%
3 and/or 4 years (pre-K)	0%	4%	12%	84%
K-grade 3 or higher	0%	2%	14%	84%
Bachelor's Degree Faculty (N=23)				
Understanding the domains and sequence of mathematical knowledge in young children and how to promote mathematical understanding and ability to solve problems				
Birth to 2 years	4%	35%	35%	26%
3 and/or 4 years (pre-K)	0%	4%	39%	57%
K-grade 3 or higher	0%	0%	17%	83%
Understanding the components and sequence of literacy development in young children and how to promote their skills related to oral and written language				
Birth to 2 years	0%	17%	26%	57%
3 and/or 4 years (pre-K)	0%	0%	30%	70%
K-grade 3 or higher	0%	0%	13%	87%
Understanding socioemotional development, its relationship to learning, and how to support children's socioemotional skills				
Birth to 2 years	0%	0%	4%	96%
3 and/or 4 years (pre-K)	0%	0%	13%	87%
K-grade 3 or higher	0%	0%	13%	87%

Table A3-1: Importance of Inclusion of Selected Topics in Early Childhood Degree Programs, Percentage of Faculty Reporting as "Very Important," by Age Group and Degree Level (Continued)

Topic and Age-Group Focus	1- Not Important	2	3	4 - Very Important
Bachelor's Degree Faculty (Continued) (N=23)				
Understanding typical and atypical motor development in young children, its relationship to learning, and how to facilitate motor skills				
Birth to 2 years	0%	0%	26%	74%
3 and/or 4 years (pre-K)	0%	0%	26%	74%
K-grade 3 or higher	0%	4%	44%	52%
Understanding and implementing an integrated strategy to engage families in ongoing and reciprocal partnerships and its relationship to outcomes for children				
Birth to 2 years	0%	0%	13%	87%
3 and/or 4 years (pre-K)	0%	0%	17%	83%
K-grade 3 or higher	0%	0%	22%	78%
Utilizing assessment effectively to inform and individualize instruction				
Birth to 2 years	4%	26%	30%	39%
3 and/or 4 years (pre-K)	0%	4%	35%	61%
K-grade 3 or higher	0%	0%	30%	70%
Collaborating with community organizations to support children and families				
Birth to 2 years	0%	4%	30%	65%
3 and/or 4 years (pre-K)	0%	4%	22%	74%
K-grade 3 or higher	0%	4%	22%	74%
Supporting the cognitive and social development of young dual language learners				
Birth to 2 years	0%	0%	26%	74%
3 and/or 4 years (pre-K)	0%	0%	17%	83%
K-grade 3 or higher	0%	0%	17%	83%
Working with families of various ethnic, racial, and cultural backgrounds				
Birth to 2 years	0%	0%	13%	87%
3 and/or 4 years (pre-K)	0%	0%	13%	87%
K-grade 3 or higher	0%	0%	13%	87%

Table A3-1: Importance of Inclusion of Selected Topics in Early Childhood Degree Programs, Percentage of Faculty Reporting as "Very Important," by Age Group and Degree Level (Continued)

Topic and Age-Group Focus	1- Not Important	2	3	4 - Very Important
Dual-Level Faculty (N=28)				
Understanding the domains and sequence of mathematical knowledge in young children and how to promote mathematical understanding and ability to solve problems				
Birth to 2 years	14%	21%	25%	39%
3 and/or 4 years (pre-K)	0%	4%	21%	75%
K-grade 3 or higher	0%	0%	7%	93%
Understanding the components and sequence of literacy development in young children and how to promote their skills related to oral and written language				
Birth to 2 years	7%	7%	25%	61%
3 and/or 4 years (pre-K)	0%	0%	7%	93%
K-grade 3 or higher	0%	0%	7%	93%
Understanding socioemotional development, its relationship to learning, and how to support children's socioemotional skills				
Birth to 2 years	0%	7%	11%	82%
3 and/or 4 years (pre-K)	0%	0%	7%	93%
K-grade 3 or higher	0%	0%	4%	96%
Understanding typical and atypical motor development in young children, its relationship to learning, and how to facilitate motor skills				
Birth to 2 years	0%	4%	7%	89%
3 and/or 4 years (pre-K)	0%	4%	11%	86%
K-grade 3 or higher	0%	4%	18%	79%
Understanding and implementing an integrated strategy to engage families in ongoing and reciprocal partnerships and its relationship to outcomes for children				
Birth to 2 years	0%	4%	7%	89%
3 and/or 4 years (pre-K)	0%	4%	7%	89%
K-grade 3 or higher	0%	0%	11%	89%

Table A3-1: Importance of Inclusion of Selected Topics in Early Childhood Degree Programs, Percentage of Faculty Reporting as "Very Important," by Age Group and Degree Level (Continued)

Topic and Age-Group Focus	1- Not Important	2	3	4 - Very Important
Dual-Level Faculty (continued) (N=28)				
Utilizing assessment effectively to inform and individualize instruction				
Birth to 2 years	4%	14%	25%	57%
3 and/or 4 years (pre-K)	0%	7%	7%	86%
K-grade 3 or higher	0%	0%	4%	96%
Collaborating with community organizations to support children and families				
Birth to 2 years	4%	11%	25%	61%
3 and/or 4 years (pre-K)	0%	11%	25%	64%
K-grade 3 or higher	0%	14%	25%	61%
Supporting the cognitive and social development of young dual language learners				
Birth to 2 years	4%	7%	21%	68%
3 and/or 4 years (pre-K)	0%	0%	14%	86%
K-grade 3 or higher	0%	0%	7%	93%
Working with families of various ethnic, racial, and cultural backgrounds				
Birth to 2 years	0%	4%	0%	96%
3 and/or 4 years (pre-K)	0%	0%	4%	96%
K-grade 3 or higher	0%	0%	0%	100%
Graduate Degree Faculty (N=19-21)				
Understanding the domains and sequence of mathematical knowledge in young children and how to promote mathematical understanding and ability to solve problems				
Birth to 2 years	0%	47%	32%	21%
3 and/or 4 years (pre-K)	0%	0%	33%	67%
K-grade 3 or higher	0%	0%	5%	95%
Understanding the components and sequence of literacy development in young children and how to promote their skills related to oral and written language				
Birth to 2 years	5%	5%	16%	74%
3 and/or 4 years (pre-K)	0%	0%	9%	91%
K-grade 3 or higher	0%	0%	14%	86%
Understanding socioemotional development, its relationship to learning, and how to support children's socioemotional skills				
Birth to 2 years	0%	5%	5%	90%
3 and/or 4 years (pre-K)	0%	0%	9%	91%
K-grade 3 or higher	0%	0%	14%	86%

Table A3-1: Importance of Inclusion of Selected Topics in Early Childhood Degree Programs, Percentage of Faculty Reporting as "Very Important," by Age Group and Degree Level (Continued)

Topic and Age-Group Focus	1- Not Important	2	3	4 - Very Important
Graduate Degree Faculty (continued) (N=19-21)				
Understanding typical and atypical motor development in young children, its relationship to learning, and how to facilitate motor skills				
Birth to 2 years	0%	5%	26%	68%
3 and/or 4 years (pre-K)	0%	0%	43%	57%
K-grade 3 or higher	0%	5%	43%	52%
Understanding and implementing an integrated strategy to engage families in ongoing and reciprocal partnerships and its relationship to outcomes for children				
Birth to 2 years	0%	5%	21%	74%
3 and/or 4 years (pre-K)	0%	0%	19%	81%
K-grade 3 or higher	0%	5%	24%	71%
Utilizing assessment effectively to inform and individualize instruction				
Birth to 2 years	0%	21%	26%	53%
3 and/or 4 years (pre-K)	0%	5%	19%	76%
K-grade 3 or higher	0%	5%	19%	76%
Collaborating with community organizations to support children and families				
Birth to 2 years	5%	11%	26%	58%
3 and/or 4 years (pre-K)	0%	9%	29%	62%
K-grade 3 or higher	0%	19%	24%	57%
Supporting the cognitive and social development of young dual language learners				
Birth to 2 years	0%	5%	21%	74%
3 and/or 4 years (pre-K)	0%	0%	19%	81%
K-grade 3 or higher	0%	0%	19%	81%
Working with families of various ethnic, racial, and cultural backgrounds				
Birth to 2 years	0%	0%	21%	79%
3 and/or 4 years (pre-K)	0%	0%	14%	86%
K-grade 3 or higher	0%	0%	14%	86%

Table A3-2: Faculty Capacity to Teach, by Age Group and Degree Level

Age-Group Focus	Associate Degree Faculty (N=50)	Bachelor's Degree Faculty (N=23)	Dual-Level Faculty (N=28)	Graduate Degree Faculty (N=21)
Scaffolding children's mathematical development and promoting their ability to solve problems				
Birth to 2 years	52%	52%	79%	52%
3 and/or 4 years (pre-K)	76%	83%	82%	67%
K-grade 3 or higher	66%	78%	64%	52%
Scaffolding children's literacy development and promoting their oral and written skills				
Birth to 2 years	68%	65%	82%	67%
3 and/or 4 years (pre-K)	78%	91%	93%	76%
K-grade 3 or higher	78%	96%	71%	67%
Supporting children's socioemotional development and skills				
Birth to 2 years	68%	70%	75%	76%
3 and/or 4 years (pre-K)	82%	91%	93%	86%
K-grade 3 or higher	86%	91%	79%	90%
Facilitating the developmental course of motor development in young children				
Birth to 2 years	62%	43%	75%	67%
3 and/or 4 years (pre-K)	80%	70%	79%	81%
K-grade 3 or higher	72%	57%	61%	62%
Integrating families in partnerships to support children's learning				
Birth to 2 years	72%	70%	79%	71%
3 and/or 4 years (pre-K)	80%	83%	89%	81%
K-grade 3 or higher	76%	91%	86%	90%
Utilizing assessment effectively to inform and individualize instruction				
Birth to 2 years	64%	61%	75%	81%
3 and/or 4 years (pre-K)	76%	91%	82%	86%
K-grade 3 or higher	70%	78%	68%	86%
Collaborating with community organizations to support children and families				
Birth to 2 years	65%	61%	75%	84%
3 and/or 4 years (pre-K)	73%	78%	82%	89%
K-grade 3 or higher	78%	83%	71%	100%
Supporting the cognitive and social development of young dual language learners				
Birth to 2 years	52%	48%	75%	67%
3 and/or 4 years (pre-K)	64%	52%	86%	76%
K-grade 3 or higher	60%	61%	61%	67%
Working with families of various ethnic, racial, and cultural backgrounds				
Birth to 2 years	68%	61%	82%	76%
3 and/or 4 years (pre-K)	78%	70%	82%	86%
K-grade 3 or higher	78%	78%	82%	90%

Table A3-3: Structure of Recent Teaching Experience, Percentage of Faculty Reporting Having Taught Content Area in Each Format in the Past Two Years, by Degree Level

Course Content Structure	Associate Degree Faculty	Bachelor's Degree Faculty	Dual-Level Faculty	Graduate Degree Faculty
General domains of child development (e.g., cognitive development, socioemotional development, physical development)				
Taught as a separate course	10%	17%	14%	19%
Taught within a broader course	52%	61%	50%	52%
Taught both as a separate course and embedded within a broader course	32%	13%	29%	29%
Not taught	6%	9%	7%	0%
	N=50	N=23	N=28	N=21
Development of mathematical understanding				
Taught as a separate course	8%	17%	25%	5%
Taught within a broader course	51%	43%	43%	62%
Taught both as a separate course and embedded within a broader course	12%	17%	14%	0%
Not taught	29%	22%	18%	33%
	N=49	N=23	N=28	N=21
Language development (e.g. first and second language acquisition)				
Taught as a separate course	16%	17%	7%	0%
Taught within a broader course	49%	48%	43%	52%
Taught both as a separate course and embedded within a broader course	18%	13%	32%	38%
Not taught	16%	22%	18%	10%
	N=49	N=23	N=28	N=21
Teaching strategies for STEM (science, technology, engineering, math)				
Taught as a separate course	6%	14%	32%	0%
Taught within a broader course	49%	32%	21%	43%
Taught both as a separate course and embedded within a broader course	8%	5%	18%	10%
Not taught	37%	50%	29%	48%
	N=49	N=22	N=28	N=21
Teaching children with special needs				
Taught as a separate course	12%	9%	21%	5%
Taught within a broader course	52%	74%	32%	52%
Taught both as a separate course and embedded within a broader course	24%	9%	29%	33%
Not taught	12%	9%	18%	10%
	N=50	N=23	N=28	N=21

Table A3-3: Structure of Recent Teaching Experience, Percentage of Faculty Reporting Having Taught Content Area in Past Two Years, by Degree Level (Continued)

Course Content Structure	Associate Degree Faculty	Bachelor's Degree Faculty	Dual-Level Faculty	Graduate Degree Faculty
Observation, assessment, and documentation to inform teaching and learning				
Taught as a separate course	20%	17%	32%	14%
Taught within a broader course	54%	70%	29%	43%
Taught both as a separate course and embedded within a broader course	22%	13%	36%	38%
Not taught	4%	0%	4%	5%
	N=50	N=23	N=28	N=21
Adult supervision and learning styles				
Taught as a separate course	10%	0%	14%	5%
Taught within a broader course	59%	39%	39%	38%
Taught both as a separate course and embedded within a broader course	14%	9%	14%	19%
Not taught	16%	52%	32%	38%
	N=49	N=23	N=28	N=21
Fiscal procedures and program management				
Taught as a separate course	22%	0%	26%	5%
Taught within a broader course	29%	13%	26%	37%
Taught both as a separate course and embedded within a broader course	8%	9%	0%	0%
Not taught	41%	78%	48%	58%
	N=49	N=23	N=27	N=19
Partnering with families to enhance children's learning in school and at home				
Taught as a separate course	6%	26%	18%	10%
Taught within a broader course	57%	52%	39%	45%
Taught both as a separate course and embedded within a broader course	32%	13%	32%	35%
Not taught	4%	9%	11%	10%
	N=50	N=23	N=28	N=20

Table A3-4: Professional Development Experiences Related to Diverse Child Populations in Past Three Years, by Degree Level

Professional Development Topic	Associate Degree Faculty (N=46)	Bachelor's Degree Faculty (N=20)	Dual-Level Faculty (N=27)	Graduate Degree Faculty (N=19)
Teaching practitioners to work with children from diverse backgrounds	61%	65%	74%	79%
Teaching practitioners to work with children with special needs	54%	60%	63%	47%
Teaching practitioners to work with children who have experienced trauma	41%	35%	19%	32%
None of the above	22%	25%	15%	21%

Table A3-5: Professional Development Experiences Related to Adult Learners in Past Three Years, by Degree Level

Professional Development Topic	Associate Degree Faculty (N=47)	Bachelor's Degree Faculty (N=20)	Dual-Level Faculty (N=27)	Graduate Degree Faculty (N=19)
Strategies and techniques for mentoring/coaching of adult students	62%	50%	44%	47%
Strategies to supervise adult students in clinical/field experiences	36%	25%	41%	47%
Strategies to provide quality academic/career advising to adult students	34%	15%	19%	16%
Using technology to promote adult learning	53%	40%	56%	47%
Teaching adult students who are English language learners	11%	20%	11%	11%
Teaching culturally and ethnically diverse college students	45%	30%	44%	26%
Teaching economically diverse college students	26%	20%	26%	26%
None of the above	17%	40%	22%	26%

Table A3-6: Professional Development Experiences Related to Teaching Skills and Assessment in Past Three Years, by Degree Level

Professional Development Topic	Associate Degree Faculty (N=46)	Bachelor's Degree Faculty (N=19)	Dual-Level Faculty (N=27)	Graduate Degree Faculty (N=19)
Teaching practitioners to use technology with children	46%	26%	41%	32%
Child assessment (e.g., portfolios, using particular assessment tools)	50%	42%	59%	68%
Early childhood program assessment (e.g., Environment Rating Scale)	26%	32%	44%	26%
Early childhood teacher assessment (e.g., CLASS)	37%	58%	48%	53%
Teaching practitioners developmentally appropriate practice in infant and toddler settings	39%	32%	37%	26%
None of the above	17%	32%	26%	16%

Table A3-7: Professional Development Experiences Related to Administration and Leadership in Past Three Years, by Degree Level

Professional Development Topic	Associate Degree Faculty (N=46)	Bachelor's Degree Faculty (N=19)	Dual-Level Faculty (N=27)	Graduate Degree Faculty (N=19)
Early childhood systems and policy	2%	47%	36%	47%
Organizational development	20%	32%	32%	16%
Theories of leadership	20%	21%	24%	26%
None of the above	78%	53%	56%	47%

Table A3-8: Interest in Professional Development Topics Related to Diverse Child Populations, by Degree Level

Professional Development Topic	1- Not interested	2	3	4	5- Very Interested
Associate Degree Faculty (N=50)					
Teaching practitioners to work with children from diverse backgrounds	4%	0%	14%	24%	58%
Teaching practitioners to work with children with special needs	4%	2%	18%	22%	54%
Teaching practitioners to work with children who have experienced trauma	4%	4%	18%	16%	58%
Bachelor's Degree Faculty (N=22)					
Teaching practitioners to work with children from diverse backgrounds	0%	9%	18%	14%	59%
Teaching practitioners to work with children with special needs	0%	14%	27%	5%	55%
Teaching practitioners to work with children who have experienced trauma	0%	13%	27%	5%	55%
Dual-Level Faculty (N=28)					
Teaching practitioners to work with children from diverse backgrounds	0%	4%	25%	18%	54%
Teaching practitioners to work with children with special needs	0%	0%	18%	18%	64%
Teaching practitioners to work with children who have experienced trauma	4%	4%	25%	21%	46%
Graduate Degree Faculty (N=20)					
Teaching practitioners to work with children from diverse backgrounds	0%	5%	20%	5%	70%
Teaching practitioners to work with children with special needs	0%	0%	30%	10%	60%
Teaching practitioners to work with children who have experienced trauma	5%	0%	20%	20%	55%

Table A3-9: Interest in Professional Development Topics Related to Adult Learners, by Degree Level

Professional Development Topic	1- Not interested	2	3	4	5- Very Interested
Associate Degree Faculty (N=49)					
Strategies and techniques for mentoring/coaching adult students	0%	0%	25%	24%	51%
Strategies to supervise adult students in clinical/field experiences	2%	8%	12%	24%	53%
Strategies to provide quality academic/career advising to adult students	8%	23%	20%	14%	35%
Using technology to promote adult learning	4%	4%	18%	18%	55%
Teaching adult students who are English-language learners	4%	12%	20%	20%	43%
Teaching culturally and ethnically diverse college students	4%	4%	22%	22%	47%
Teaching economically diverse college students	2%	6%	22%	24%	45%
Bachelor's Degree Faculty (N=22)					
Strategies and techniques for mentoring/coaching adult students	0%	9%	27%	14%	50%
Strategies to supervise adult students in clinical/field experiences	5%	9%	14%	18%	55%
Strategies to provide quality academic/career advising to adult students	9%	5%	41%	18%	27%
Using technology to promote adult learning	9%	9%	32%	9%	41%
Teaching adult students who are English-language learners	5%	9%	32%	18%	36%
Teaching culturally and ethnically diverse college students	0%	9%	18%	18%	55%
Teaching economically diverse college students	0%	9%	27%	27%	36%

Table A3-9: Interest in Professional Development Topics Related to Adult Learners, by Degree Level (Continued)

Professional Development Topic	1- Not interested	2	3	4	5- Very Interested
Dual-Level Faculty (N=28)					
Strategies and techniques for mentoring/coaching adult students	0%	4%	32%	14%	50%
Strategies to supervise adult students in clinical/field experiences	0%	14%	25%	32%	29%
Strategies to provide quality academic/career advising to adult students	0%	14%	36%	11%	39%
Using technology to promote adult learning	0%	11%	18%	25%	46%
Teaching adult students who are English-language learners	4%	4%	43%	21%	29%
Teaching culturally and ethnically diverse college students	0%	7%	25%	21%	46%
Teaching economically diverse college students	0%	7%	21%	21%	50%
Graduate Degree Faculty (N=19-20)					
Strategies and techniques for mentoring/coaching adult students	5%	20%	15%	15%	45%
Strategies to supervise adult students in clinical/field experiences	5%	20%	25%	5%	45%
Strategies to provide quality academic/career advising to adult students	20%	15%	20%	10%	35%
Using technology to promote adult learning	10%	5%	30%	10%	45%
Teaching adult students who are English-language learners	5%	11%	42%	16%	26%
Teaching culturally and ethnically diverse college students	5%	15%	30%	25%	25%
Teaching economically diverse college students	5%	10%	35%	20%	30%

Table A3-10: Interest in Professional Development Topics Related to Teaching Skills and Assessment, by Degree Level

Professional Development Topic	1- Not interested	2	3	4	5- Very Interested
Associate Degree Faculty (N=49)					
Teaching practitioners to use technology with children	0%	4%	37%	18%	41%
Using child assessment effectively (e.g., portfolios, using particular assessment tools)	0%	4%	27%	24%	45%
Using early childhood program assessment effectively (e.g., Environment Rating Scale)	4%	12%	29%	16%	39%
Using early childhood teacher assessment effectively (e.g., CLASS)	2%	6%	16%	16%	59%
Teaching practitioners developmentally appropriate practice in infant and toddler settings	2%	12%	16%	16%	53%
Bachelor's Degree Faculty (N=22)					
Teaching practitioners to use technology with children	14%	5%	32%	9%	41%
Using child assessment effectively (e.g., portfolios, using particular assessment tools)	5%	5%	27%	14%	50%
Using early childhood program assessment effectively (e.g., Environment Rating Scale)	5%	5%	36%	18%	36%
Using early childhood teacher assessment effectively (e.g., CLASS)	5%	5%	27%	18%	45%
Teaching practitioners developmentally appropriate practice in infant and toddler settings	5%	14%	27%	9%	45%

Table A3-10: Interest in Professional Development Topics Related to Teaching Skills and Assessment, by Degree Level (Continued)

Professional Development Topic	1- Not interested	2	3	4	5- Very Interested
Dual-Level Faculty (N=28)					
Teaching practitioners to use technology with children	0%	4%	18%	39%	39%
Using child assessment effectively (e.g., portfolios, using particular assessment tools)	0%	11%	11%	21%	57%
Using early childhood program assessment effectively (e.g., Environment Rating Scale)	4%	4%	25%	18%	50%
Using early childhood teacher assessment effectively (e.g., CLASS)	0%	4%	14%	18%	64%
Teaching practitioners developmentally appropriate practice in infant and toddler settings	0%	7%	14%	18%	61%
Graduate Degree Faculty (N=20)					
Teaching practitioners to use technology with children	5%	0%	45%	15%	35%
Using child assessment effectively (e.g., portfolios, using particular assessment tools)	5%	0%	20%	25%	50%
Using early childhood program assessment effectively (e.g., Environment Rating Scale)	10%	5%	25%	15%	45%
Using early childhood teacher assessment effectively (e.g., CLASS)	10%	5%	10%	25%	50%
Teaching practitioners developmentally appropriate practice in infant and toddler settings	11%	5%	21%	0%	63%

Table A3-11: Interest in Professional Development Topics Related to Administration and Leadership, by Degree Level

Professional Development Topic	1- Not interested	2	3	4	5- Very Interested
Associate Degree Faculty (N=49)					
Early childhood systems and policy	2%	12%	31%	14%	41%
Organizational development	2%	14%	29%	24%	31%
Theories of leadership	2%	20%	27%	20%	31%
Bachelor's Degree Faculty (N=22)					
Early childhood systems and policy	9%	18%	23%	14%	36%
Organizational development	14%	9%	45%	9%	23%
Theories of leadership	5%	18%	27%	18%	32%
Dual-Level Faculty (N=28)					
Early childhood systems and policy	11%	4%	21%	18%	46%
Organizational development	14%	7%	29%	25%	25%
Theories of leadership	14%	4%	32%	21%	29%
Graduate Degree Faculty (N=20)					
Early childhood systems and policy	5%	10%	35%	25%	25%
Organizational development	25%	10%	20%	20%	25%
Theories of leadership	20%	10%	25%	10%	35%

Appendix 5: Family Engagement, Early Mathematics, and Working With Dual Language Learners: Detailed Tables*

Table A5-1: Family Engagement Coursework Required: Age-Group Focus, by Degree Level

If topic required for the degree program, age-group focus of the coursework:

Age-Group Focus	Associate Degree	Bachelor's Degree
Evidence-based research on the importance and value of building respectful and trusting relationships with families		
Birth to 2 years	56%	67%
3 and/or 4 years (pre-K)	56%	100%
K-grade 3 or higher	19%	83%
Required, but no age-group focus	44%	0%
	N=16	N=12
Considering family structures when working with children and families (e.g., single-parent and divorced families, LGBT families, multi-generational families) and having strategies to partner effectively with a variety of family types		
Birth to 2 years	57%	67%
3 and/or 4 years (pre-K)	57%	100%
K-grade 3 or higher	21%	75%
Required, but no age-group focus	43%	0%
	N=14	N=12
Working with families of children with special needs		
Birth to 2 years	50%	67%
3 and/or 4 years (pre-K)	50%	83%
K-grade 3 or higher	19%	58%
Required, but no age-group focus	50%	17%
	N=16	N=12
Working with families exposed to trauma		
Birth to 2 years	60%	**
3 and/or 4 years (pre-K)	60%	**
K-grade 3 or higher	30%	**
Required, but no age-group focus	40%	**
	N=10	

* Percentages may not total 100% due to rounding.

** Percentages not reported due to small sample size.

Table A5-1: Family Engagement Coursework Required: Age-Group Focus, by Degree Level (Continued)

If topic required for the degree program, age-group focus of the coursework:

Age-Group Focus	Associate Degree	Bachelor's Degree
Working with families to help them enhance their children's learning at home		
Birth to 2 years	63%	58%
3 and/or 4 years (pre-K)	63%	92%
K-grade 3 or higher	19%	75%
Required, but no age-group focus	38%	8%
	N=16	N=12
Techniques for engaging families in classroom, program, and/or school activities		
Birth to 2 years	60%	58%
3 and/or 4 years (pre-K)	60%	92%
K-grade 3 or higher	20%	75%
Required, but no age-group focus	40%	8%
	N=15	N=12
Strategies to effectively communicate with families, including communicating in their home language, making home visits, using technology (email, text message), and providing families opportunities for communication		
Birth to 2 years	50%	75%
3 and/or 4 years (pre-K)	50%	100%
K-grade 3 or higher	19%	83%
Required, but no age-group focus	50%	0%
	N=16	N=12
Techniques for gathering and using knowledge about children's families in curriculum planning		
Birth to 2 years	64%	54%
3 and/or 4 years (pre-K)	64%	85%
K-grade 3 or higher	21%	69%
Required, but no age-group focus	36%	15%
	N=14	N=13

Table A5-2: Interest in Professional Development Topics Related to Family Engagement, by Degree Level

Professional Development Topic	1- Not interested	2	3	4	5- Very Interested
Associate Degree Faculty (N=50)					
Evidence-based research on the importance and value of building respectful and trusting relationships with families	6%	2%	31%	10%	51%
Considering family structures when working with children and families and having strategies to partner effectively with a variety of family types	6%	8%	30%	14%	42%
Working with families of children with special needs	4%	8%	16%	22%	49%
Working with families exposed to trauma	4%	10%	25%	14%	47%
Working with families to help them enhance their children's learning at home	2%	0%	20%	29%	49%
Techniques for engaging families in classroom, program, and/or school activities	0%	8%	18%	31%	43%
Strategies to effectively communicate with families	2%	6%	29%	25%	39%
Techniques for gathering and using knowledge about children's families in curriculum planning	0%	6%	31%	20%	43%
Bachelor's Degree Faculty (N=22)					
Evidence-based research on the importance and value of building respectful and trusting relationships with families	0%	5%	50%	5%	41%
Considering family structures when working with children and families and having strategies to partner effectively with a variety of family types	0%	5%	32%	27%	36%
Working with families of children with special needs	0%	5%	41%	23%	32%
Working with families exposed to trauma	0%	5%	41%	14%	41%

Table A5-2: Interest in Professional Development Topics Related to Family Engagement (Continued)

Professional Development Topic	1- Not interested	2	3	4	5- Very Interested
Bachelor's Degree Faculty (continued)					
Working with families to help them enhance their children's learning at home	0%	5%	23%	14%	59%
Techniques for engaging families in classroom, program, and/or school activities	0%	5%	27%	23%	46%
Strategies to effectively communicate with families	0%	9%	32%	14%	46%
Techniques for gathering and using knowledge about children's families in curriculum planning	5%	9%	23%	27%	36%
Dual-Level Faculty (N=28)					
Evidence-based research on the importance and value of building respectful and trusting relationships with families	7%	4%	36%	21%	32%
Considering family structures when working with children and families and having strategies to partner effectively with a variety of family types	7%	0%	25%	14%	54%
Working with families of children with special needs	0%	0%	36%	11%	54%
Working with families exposed to trauma	11%	0%	36%	11%	43%
Working with families to help them enhance their children's learning at home	4%	7%	36%	14%	39%
Techniques for engaging families in classroom, program, and/or school activities	4%	4%	43%	11%	39%
Strategies to effectively communicate with families	7%	4%	36%	11%	43%
Techniques for gathering and using knowledge about children's families in curriculum planning	7%	7%	29%	21%	36%

Table A5-2: Interest in Professional Development Topics Related to Family Engagement, by Degree Level (Continued)

Professional Development Topic	1- Not interested	2	3	4	5- Very Interested
Graduate Degree Faculty (N=20)					
Evidence-based research on the importance and value of building respectful and trusting relationships with families	10%	10%	25%	5%	50%
Considering family structures when working with children and families and having strategies to partner effectively with a variety of family types	0%	5%	35%	10%	50%
Working with families of children with special needs	0%	0%	35%	10%	55%
Working with families exposed to trauma	5%	0%	25%	20%	50%
Working with families to help them enhance their children's learning at home	5%	5%	25%	25%	40%
Techniques for engaging families in classroom, program, and/or school activities	5%	0%	35%	15%	45%
Strategies to effectively communicate with families	5%	5%	20%	15%	55%
Techniques for gathering and using knowledge about children's families in curriculum planning	5%	0%	25%	10%	60%

Table A5-3: Coursework Required Related to Development of Children's Mathematical Understanding: Age-Group Focus, by Degree Level

If topic required for the degree program, age-group focus of the coursework:

Age-Group Focus	Associate Degree	Bachelor's Degree
Building on children's natural interest in mathematics and using everyday activities as natural vehicles for developing children's mathematical knowledge		
Birth to 2 years	57%	46%
3 and/or 4 years (pre-K)	71%	85%
K-grade 3 or higher	14%	69%
Required, but no age-group focus	29%	15%
	N=14	N=13
Encouraging children's inquiry and exploration to foster problem solving and mathematical reasoning		
Birth to 2 years	64%	46%
3 and/or 4 years (pre-K)	64%	85%
K-grade 3 or higher	14%	69%
Required, but no age-group focus	36%	15%
	N=14	N=13
Introducing explicit mathematical concepts through planned experiences		
Birth to 2 years	58%	33%
3 and/or 4 years (pre-K)	83%	83%
K-grade 3 or higher	17%	67%
Required, but no age-group focus	17%	17%
	N=12	N=12
Creating a mathematically rich environment		
Birth to 2 years	64%	33%
3 and/or 4 years (pre-K)	82%	75%
K-grade 3 or higher	18%	58%
Required, but no age-group focus	18%	25%
	N=11	N=12
Developing children's mathematical vocabulary		
Birth to 2 years	54%	33%
3 and/or 4 years (pre-K)	77%	83%
K-grade 3 or higher	15%	67%
Required, but no age-group focus	23%	17%
	N=13	N=12
Assessing children's mathematical development to inform and individualize instruction		
Birth to 2 years	58%	33%
3 and/or 4 years (pre-K)	75%	83%
K-grade 3 or higher	17%	67%
Required, but no age-group focus	25%	17%
	N=12	N=12

Table A5-4: Coursework Required Related to Teaching Children Math Skills: Age-Group Focus, by Degree Level

If topic required for the degree program, age-group focus of the coursework:

Age-Group Focus	Associate Degree	Bachelor's Degree
Teaching children number sense (counting and cardinality)		
Birth to 2 years	50%	45%
3 and/or 4 years (pre-K)	71%	100%
K-grade 3 or higher	7%	82%
Required, but no age-group focus	29%	0%
	N=14	N=11
Teaching children operations and algebraic thinking		
Birth to 2 years	55%	36%
3 and/or 4 years (pre-K)	91%	100%
K-grade 3 or higher	18%	82%
Required, but no age-group focus	9%	0%
	N=11	N=11
Teaching children measurement skills		
Birth to 2 years	55%	45%
3 and/or 4 years (pre-K)	91%	100%
K-grade 3 or higher	18%	82%
Required, but no age-group focus	9%	0%
	N=11	N=11
Teaching children geometry skills		
Birth to 2 years	64%	45%
3 and/or 4 years (pre-K)	91%	100%
K-grade 3 or higher	18%	82%
Required, but no age-group focus	9%	0%
	N=11	N=11
Teaching children mathematical reasoning/practices		
Birth to 2 years	60%	45%
3 and/or 4 years (pre-K)	90%	100%
K-grade 3 or higher	20%	82%
Required, but no age-group focus	10%	0%
	N=10	N=11

Table A5-5: Capacity to Teach Coursework on the Development of Children's Mathematical Understanding, as Reported by Faculty Members, by Age Group and Degree Level

Age-Group Focus	Associate Degree Faculty (N=50)	Bachelor's Degree Faculty (N=23)	Dual-Level Faculty (N=28)	Graduate Degree Faculty (N=21)
Building on children's natural interest in mathematics and using everyday activities as natural vehicles for developing children's mathematical knowledge				
Birth to 2 years	64%	65%	79%	52%
3 and/or 4 years (pre-K)	78%	83%	86%	76%
K-grade 3 or higher	68%	78%	75%	62%
Encouraging children's inquiry and exploration to foster problem solving and mathematical reasoning				
Birth to 2 years	64%	61%	79%	52%
3 and/or 4 years (pre-K)	80%	78%	86%	76%
K-grade 3 or higher	70%	74%	75%	67%
Introducing explicit mathematical concepts through planned experiences				
Birth to 2 years	52%	61%	75%	75%
3 and/or 4 years (pre-K)	72%	83%	86%	86%
K-grade 3 or higher	60%	83%	68%	68%
Creating a mathematically rich environment				
Birth to 2 years	60%	61%	79%	52%
3 and/or 4 years (pre-K)	74%	78%	86%	76%
K-grade 3 or higher	64%	78%	71%	67%
Developing children's mathematical vocabulary				
Birth to 2 years	58%	61%	71%	52%
3 and/or 4 years (pre-K)	74%	83%	86%	81%
K-grade 3 or higher	62%	83%	75%	62%
Assessing children's mathematical development to inform and individualize instruction				
Birth to 2 years	50%	57%	68%	43%
3 and/or 4 years (pre-K)	72%	78%	86%	62%
K-grade 3 or higher	58%	74%	68%	57%

Table A5-6: Capacity to Teach Coursework on Teaching Children Specific Math Skills, as Reported by Faculty Members, by Age Group and Degree Level

Age-Group Focus	Associate Degree Faculty (N=50)	Bachelor's Degree Faculty (N=23)	Dual-Level Faculty (N=28)	Graduate Degree Faculty (N=21)
Teaching children number sense (counting and cardinality)				
Birth to 2 years	62%	65%	82%	48%
3 and/or 4 years (pre-K)	78%	87%	86%	67%
K-grade 3 or higher	70%	78%	71%	62%
Teaching children operations and algebraic thinking				
Birth to 2 years	46%	48%	68%	33%
3 and/or 4 years (pre-K)	68%	83%	86%	62%
K-grade 3 or higher	58%	78%	68%	52%
Teaching children measurement skills				
Birth to 2 years	54%	65%	71%	48%
3 and/or 4 years (pre-K)	78%	87%	86%	67%
K-grade 3 or higher	72%	78%	71%	62%
Teaching children geometry skills				
Birth to 2 years	54%	65%	71%	48%
3 and/or 4 years (pre-K)	78%	87%	86%	67%
K-grade 3 or higher	70%	78%	71%	62%
Teaching children mathematical reasoning/practices				
Birth to 2 years	48%	57%	64%	48%
3 and/or 4 years (pre-K)	70%	87%	82%	67%
K-grade 3 or higher	60%	78%	68%	62%

Table A5-7: Interest in Professional Development Topics Related to Early Mathematical Development, by Degree Level

Professional Development Topic	1- Not interested	2	3	4	5- Very Interested
Associate Degree Faculty (N=50)					
Teaching practitioners to implement strategies that support mathematical understanding in children birth to age two	4%	16%	26%	12%	42%
Teaching practitioners to implement strategies that support mathematical understanding in children ages three and four (pre-K)	4%	8%	26%	14%	48%
Teaching practitioners to implement strategies that support mathematical understanding in children in grades K-3 or higher	8%	6%	28%	14%	44%
Teaching practitioners how to effectively use assessment to inform and individualize instruction	0%	0%	225	18%	60%
Strategies to help practitioners who struggle with math build confidence in their ability to facilitate children's mathematical understanding and skill	2%	0%	20%	14%	64%
Bachelor's Degree Faculty (N=22)					
Teaching practitioners to implement strategies that support mathematical understanding in children birth to age two	0%	14%	18%	23%	46%
Teaching practitioners to implement strategies that support mathematical understanding in children ages three and four (pre-K)	0%	9%	18%	18%	55%
Teaching practitioners to implement strategies that support mathematical understanding in children in grades K-3 or higher	0%	9%	18%	18%	55%
Teaching practitioners how to effectively use assessment to inform and individualize instruction	0%	5%	23%	23%	50%
Strategies to help practitioners who struggle with math build confidence in their ability to facilitate children's mathematical understanding and skill	0%	0%	18%	18%	64%

Table A5-7: Interest in Professional Development Topics Related to Early Mathematical Development, by Degree Level (Continued)

Professional Development Topic	1- Not interested	2	3	4	5- Very Interested
Dual-Level Faculty (N=28)					
Teaching practitioners to implement strategies that support mathematical understanding in children birth to age two	4%	7%	29%	14%	46%
Teaching practitioners to implement strategies that support mathematical understanding in children ages three and four (pre-K)	4%	4%	21%	25%	46%
Teaching practitioners to implement strategies that support mathematical understanding in children in grades K-3 or higher	7%	11%	25%	18%	39%
Teaching practitioners how to effectively use assessment to inform and individualize instruction	4%	7%	14%	25%	50%
Strategies to help practitioners who struggle with math build confidence in their ability to facilitate children's mathematical understanding and skill	4%	4%	18%	14%	61%
Graduate Degree Faculty (N=20)					
Teaching practitioners to implement strategies that support mathematical understanding in children birth to age two	5%	11%	53%	5%	26%
Teaching practitioners to implement strategies that support mathematical understanding in children ages three and four (pre-K)	5%	10%	40%	10%	35%
Teaching practitioners to implement strategies that support mathematical understanding in children in grades K-3 or higher	5%	5%	45%	15%	30%
Teaching practitioners how to effectively use assessment to inform and individualize instruction	5%	0%	25%	15%	55%
Strategies to help practitioners who struggle with math build confidence in their ability to facilitate children's mathematical understanding and skill	5%	10%	25%	20%	40%

Table A5-8: Coursework Required Related to Dual Language Learners: Age-Group Focus, by Degree Level

If topic required for the degree program, age-group focus of the coursework:

Age-Group Focus	Associate Degree	Bachelor's Degree
Importance and benefits of bilingualism for young children's development		
Birth to 2 years	67%	45%
3 and/or 4 years (pre-K)	67%	73%
K-grade 3 or higher	27%	55%
Required, but no age-group focus	33%	27%
	N=15	N=11
Role of home language development in helping young children learn English		
Birth to 2 years	59%	42%
3 and/or 4 years (pre-K)	59%	75%
K-grade 3 or higher	18%	58%
Required, but no age-group focus	41%	25%
	N=17	N=12
Strategies to support the cognitive development of young DLLs		
Birth to 2 years	67%	33%
3 and/or 4 years (pre-K)	67%	75%
K-grade 3 or higher	27%	58%
Required, but no age-group focus	33%	25%
	N=15	N=12
Strategies to support the language development of young DLLs		
Birth to 2 years	73%	42%
3 and/or 4 years (pre-K)	73%	83%
K-grade 3 or higher	27%	67%
Required, but no age-group focus	27%	17%
	N=15	N=12
Strategies to support the literacy development of young DLLs		
Birth to 2 years	69%	42%
3 and/or 4 years (pre-K)	69%	83%
K-grade 3 or higher	25%	67%
Required, but no age-group focus	31%	17%
	N=16	N=12
Strategies to support the development of mathematical knowledge and understanding of young DLLs		
Birth to 2 years	50%	42%
3 and/or 4 years (pre-K)	57%	83%
K-grade 3 or higher	29%	67%
Required, but no age-group focus	43%	17%
	N=14	N=12

Table A5-8: Coursework Required Related to Dual Language Learners: Age-Group Focus, by Degree Level (Continued)

If topic required for the degree program, age-group focus of the coursework:

Age-Group Focus	Associate Degree	Bachelor's Degree
Strategies to support the socioemotional development of young DLLs		
Birth to 2 years	53%	50%
3 and/or 4 years (pre-K)	60%	83%
K-grade 3 or higher	27%	67%
Required, but no age-group focus	40%	17%
	N=15	N=12
How to use appropriate teaching strategies for young DLLs within various classroom language models (e.g., English only, dual language, English with home language support)		
Birth to 2 years	57%	33%
3 and/or 4 years (pre-K)	64%	75%
K-grade 3 or higher	21%	58%
Required, but no age-group focus	36%	25%
	N=14	N=12
How to use observation, assessment, and documentation to inform strategies for teaching young DLLs		
Birth to 2 years	62%	33%
3 and/or 4 years (pre-K)	62%	75%
K-grade 3 or higher	23%	58%
Required, but no age-group focus	38%	25%
	N=13	N=12
Strategies for engaging families from linguistically diverse backgrounds		
Birth to 2 years	47%	33%
3 and/or 4 years (pre-K)	53%	75%
K-grade 3 or higher	20%	58%
Required, but no age-group focus	47%	25%
	N=15	N=12

Table A5-9: Interest in Professional Development Topics Related to Dual Language Learners, by Degree Level

Professional Development Topic	1- Not interested	2	3	4	5- Very Interested
Associate Degree Faculty (N=49)					
Importance and benefits of bilingualism for young children's development	6%	4%	29%	16%	45%
Role of home language development in helping young children learn English	6%	6%	33%	16%	39%
Strategies to support the cognitive development of young DLLs	2%	8%	29%	12%	49%
Strategies to support the language development of young DLLs	2%	8%	27%	16%	47%
Strategies to support the literacy development of young DLLs	2%	6%	24%	18%	49%
Strategies to support the development of mathematical knowledge and understanding of young DLLs	2%	8%	33%	18%	39%
Strategies to support the socioemotional development of young DLLs	2%	4%	20%	20%	53%
How to use appropriate teaching strategies for young DLLs within various classroom language models	6%	6%	22%	16%	49%
How to use observation, assessment, and documentation to inform strategies for teaching DLLs	2%	4%	29%	27%	39%
Strategies for engaging families from linguistically diverse backgrounds	2%	4%	24%	20%	49%
Bachelor's Degree Faculty (N=22)					
Importance and benefits of bilingualism for young children's development	0%	5%	36%	32%	27%
Role of home language development in helping young children learn English	0%	5%	41%	23%	32%
Strategies to support the cognitive development of young DLLs	0%	5%	23%	23%	50%
Strategies to support the language development of young DLLs	0%	5%	18%	23%	55%
Strategies to support the literacy development of young DLLs	0%	5%	18%	27%	50%
Strategies to support the development of mathematical knowledge and understanding of young DLLs	0%	0%	27%	18%	55%

Table A5-9: Interest in Professional Development Topics Related to Dual Language Learners, by Degree Level (Continued)

Professional Development Topic	1- Not interested	2	3	4	5- Very Interested
Bachelor's Degree Faculty (continued)					
Strategies to support the socioemotional development of young DLLs	0%	0%	36%	18%	45%
How to use appropriate teaching strategies for young DLLs within various classroom language models	0%	0%	27%	23%	50%
How to use observation, assessment, and documentation to inform strategies for teaching DLLs	0%	5%	27%	18%	50%
Strategies for engaging families from linguistically diverse backgrounds	0%	5%	33%	10%	52%
Dual-Level Faculty (N=28)					
Importance and benefits of bilingualism for young children's development	0%	7%	30%	19%	44%
Role of home language development in helping young children learn English	0%	7%	37%	19%	37%
Strategies to support the cognitive development of young DLLs	0%	4%	25%	36%	36%
Strategies to support the language development of young DLLs	0%	4%	29%	29%	39%
Strategies to support the literacy development of young DLLs	0%	4%	29%	25%	43%
Strategies to support the development of mathematical knowledge and understanding of young DLLs	4%	4%	29%	25%	39%
Strategies to support the socioemotional development of young DLLs	4%	4%	21%	29%	43%
How to use appropriate teaching strategies for young DLLs within various classroom language models	0%	7%	14%	32%	46%
How to use observation, assessment, and documentation to inform strategies for teaching DLLs	0%	4%	21%	39%	36%
Strategies for engaging families from linguistically diverse backgrounds	0%	11%	21%	18%	50%

Table A5-9: Interest in Professional Development Topics Related to Dual Language Learners, by Degree Level (Continued)

Professional Development Topic	1- Not interested	2	3	4	5- Very Interested
Graduate Degree Faculty (N=19)					
Importance and benefits of bilingualism for young children's development	5%	0%	32%	21%	42%
Role of home language development in helping young children learn English	5%	0%	47%	21%	26%
Strategies to support the cognitive development of young DLLs	0%	0%	53%	16%	32%
Strategies to support the language development of young DLLs	0%	0%	42%	21%	37%
Strategies to support the literacy development of young DLLs	0%	0%	37%	21%	42%
Strategies to support the development of mathematical knowledge and understanding of young DLLs	0%	5%	63%	5%	26%
Strategies to support the socioemotional development of young DLLs	0%	0%	42%	16%	42%
How to use appropriate teaching strategies for young DLLs within various classroom language models	0%	5%	53%	0%	42%
How to use observation, assessment, and documentation to inform strategies for teaching DLLs	0%	0%	47%	16%	37%
Strategies for engaging families from linguistically diverse backgrounds	5%	5%	25%	15%	50%

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