THE STATE OF EARLY CHILDHOOD HIGHER EDUCATION IN **NEBRASKA**

TECHNICAL REPORT
SEPTEMBER, 2015

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UNIVERSITY OF CALIFORNIA, BERKELEY

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The Center for the Study of Child Care Employment (CSCCE), founded in 1999, focuses on achieving comprehensive public investments which 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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CHAPTER 1: 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. And 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 in order 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 Nebraska, teacher certification has included early education from infancy through early elementary for more than a decade. Yet, there remains great variability in what constitutes an appropriate course of study and certification for teachers and administrators working with young children, across multiple settings.

To address this issue, the *Early Childhood Higher Education Inventory* (Kipnis, Ryan, Austin, Whitebook & Sakai, 2012) 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 series of questions developed for the Inventory focuses specifically on the issues of early mathematics and family engagement, with particular attention to program content and faculty attitudes. 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 family involvement.

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 Nebraska during the 2014-2015 academic year. This Technical Report presents detailed findings collected by implementing the Inventory's mapping, program, and faculty modules (Kipnis et al., 2012).

METHODOLOGY

Mapping Module

Through an extensive document review, the Mapping Module identifies the state's early childhood higher education 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 2014, CSCCE compiled a comprehensive list of institutions offering early childhood degree programs. To compile this list, we relied on several sources. To initially identify the colleges and universities, CSCCE accessed the *2014-2015 Teacher Preparation Programs in Nebraska Colleges and Universities* on the Nebraska Department of Education website.[1] We then conducted an extensive web search of these colleges and universities to identify:

- Early childhood degree and multiple subject credential offerings;
- Departments in which early childhood degree programs were housed;
- Early childhood certificates and other programs offered; and
- Contact information for the program leader (e.g., dean, chair, or program coordinator).

In September and October, a list of institutions was provided by the Buffett Early Childhood Institute of colleges offering an early childhood degree program, including names and contact information for key informants at each institution. This list was matched against the information CSCCE had compiled, and key contact information was updated as needed.

For each college and university identified, we conducted an extensive web 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 program leaders.

A letter was emailed to each contact, introducing CSCCE, describing the purpose of the Inventory, and identifying the Inventory's funding sources as the Buffett Early Childhood Institute at the University of Nebraska. We then attempted to contact, via telephone, the

[1] http://www.education.ne.gov/index.html

identified program leaders to verify the information gathered through our various sources. Institutions that were found not to offer an early childhood degree program (e.g., an identified program was found to focus on developmental psychology, but with no mention of early education or of preparing students to working as classroom teachers) were excluded from the sample.

Nebraska's population of early childhood higher education programs

Through this process, we identified public and private institutions of higher education in Nebraska serving more than 1,700 prospective and current early childhood practitioners across the state.[2] Appendix Tables A1-1 and A1-2 display the early childhood degrees offered by these institutions.

Twenty institutions of higher education in Nebraska were identified as offering a total of 42 early childhood degree programs. Among these, eight were public community colleges, which offered 12 early childhood associate degree programs. Six public colleges and universities offered at least one early childhood degree program at the bachelor's level, and four of the six also offered at least one graduate level program; and six private colleges offered at least one early childhood degree program at the bachelor's level and three of these offered a master's degree program. In total, these 12 colleges and universities offered 20 bachelor's degree programs, eight master's degree programs, and two doctoral degree programs in early childhood.[3]

Program Module

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

Sample Development

During the telephone call with program leaders, CSCCE identified the appropriate person to respond to the Program Module of the Inventory. We then asked the appropriate respondent

[2] Based on information provided by the programs that participated in the Inventory, it is estimated that during the 2013-2014 academic year, 960 students were registered in community college programs, 678 students were registered in bachelor's degree programs, and 94 students were registered in master's degree programs. During this same time period, the colleges and universities that participated in the Inventory estimated that they conferred 116 associate degrees, 147 bachelor's, and 24 master's degrees.

[3] There are two doctoral programs in Nebraska specifically identified as early childhood education, and both are offered through the University of Nebraska, Lincoln. As data for these two programs cannot be dis-identified, program or faculty data collected for the programs are not included in this report.

whether s/he was willing to participate. Of the 20 institutions of higher education offering early childhood degree programs, 100 percent of the institutions agreed to participate in the Inventory.

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 and adolescent development), a member of our research team engaged in a phone conversation with the identified program representative prior to sending the online survey, in order to determine the degree of 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. For the four community colleges that offered a degree program that was available at multiple campuses, the degree program was considered one program and surveyed only once. A total of 35 program surveys were emailed to the degree programs: nine to associate, 19 to bachelor's, and seven to master's degree programs. The final sample consisted of nine associate, 15 bachelor's, and six master's degree program surveys. The response rate for associate degree programs was 100 percent, bachelor's degree programs was 79 percent, and for master's degree programs, 86 percent. (See **Table 1.1.**)

Response Rate

Table 1.1
Response Rate for the Program Module of the Nebraska Early Childhood Higher Education Inventory

Program Type	Number of Degrees Offered by IHE in Sample[1]	Number of Program Modules Administered [2]	Program Module Response Rate	
			Number	Percentage
Associate	12	9	9	100%
Bachelor's	20	19	15	79%
Master's	8	7	6	86%

[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 SurveyMonkey, an online survey software program. The Program Module was open for respondents for approximately 30 days during the spring 2015 semester.

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.
- Program content and age-group focus. Respondents were asked to indicate whether topics within the following categories were required in order for students to complete the degree program. For each topic, the respondent was also asked to indicate whether coursework focused on infants and toddlers (birth through two years), preschoolers (three through four years), or children in grades K-3 or higher.
    - Child Development and Learning
    - Teaching Diverse Child Populations
    - Teaching and Curriculum
    - Teaching Skills in Early Childhood Settings
    - Family and Community
    - Development of Children's Mathematical Understanding
    - Teaching Math Skills to Children
    - Early Childhood Administration and Leadership (asked if offered, not required)
- 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 practicum experiences:
    - Timing and duration
    - Age-group focus (infant, preschool, early elementary)
    - Supervision: who supervises, criteria for selecting cooperating teachers at the site, resources for cooperating teachers
    - Field sites: criteria for selection
    - Differences in experiences for pre-service and experienced teachers
- Student population
    - Target: Pre-service teachers and/or experienced teachers
    - Number of students enrolled, and number attaining degrees
- Available student services
- Challenges facing the degree program

Data Analysis

Using SPSS (Statistical Package for the Social Sciences 22), we computed frequencies for all questions, by program degree level or type (associate, bachelor's, or master's). Data are reported by program level or type, rather than aggregated, as the preponderance of associate degree programs would skew the findings.

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

During the telephone conversations with the program lead described above, we requested a list of names and email addresses for all full- and part-time/adjunct faculty members teaching in the early care and education program. Nineteen of the 20 colleges that agreed to participate in the Inventory sent CSCCE the list of faculty names, and these names served as the sample universe for the Faculty Module. If the program leader also taught in the early childhood program, he or she was included in the Faculty Module sample.

A total of 122 surveys were emailed to individual faculty members, resulting in an eligible sample of 47 community college and 75 bachelor's and/or graduate degree faculty. The final sample consisted of 26 community college faculty members and 46 bachelor's, master's, and doctoral degree faculty members who completed the Faculty Module. The response rate for all faculty surveys was 59 percent. (See **Table 1.2**.) While we cannot assume that findings from this module are representative of all early childhood teacher educators in the state, these data should be interpreted with caution and not assumed to be generalizable to the total population of early childhood faculty members in Nebraska.

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 SurveyMonkey. The Faculty Module was open for approximately 30 days during the spring 2015 semester.

Faculty Module Content: All Degree Types

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

- Current employment
  - Faculty status
  - Primary responsibility
  - Number of courses taught in a typical year
  - Number of students advised in a typical year
  - Primary teaching focus
  - Age-group expertise
- Current teaching expertise. Respondents were asked to indicate whether, within the past two years, they had taught topics within the following categories. For each topic, respondents were also asked to indicate whether the coursework focused on infants and toddlers, preschoolers, or children in grades K-3 or higher.
  - Child Development and Learning
  - Teaching Diverse Child Populations
  - Teaching and Curriculum
  - Teaching Skills in Early Childhood Settings
  - Family and Community
  - Development of Children's Mathematical Understanding
  - Teaching Children Math Skills
  - Early Childhood Administration and Leadership
- Professional development and experience in the early childhood field
  - Professional development experiences in the past three years
  - Professional roles in the past 10 years
  - Additional professional development that would be helpful
- Resources that would be helpful to the degree program
- Demographics and educational background
  - Highest level of education
  - Credits in early childhood/child development
  - Gender
  - Race/ethnicity
  - Age
  - Language capacity

Table 1.2
Response Rate for the Faculty Module of the Nebraska Early Childhood Higher Education Inventory

Faculty Type	Number of Faculty Modules Administered[1]	Number of Faculty Responses[2]	Faculty Module Response Rate
Associate Degree Faculty	47	26	55%
Bachelor's and Graduate Degree Faculty	75	46	61%
TOTAL	122	71	59%

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

Data Analysis

Using SPSS (Statistical Package for the Social Sciences 22), we computed frequencies for all questions for each degree program (associate, bachelor's, master's, doctoral). If faculty members reported that they taught in more than one degree program at their institution, they were included in the analysis for each degree program in which they taught.

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A note on interpreting the findings presented in this report: Due to the small sample for some groups (e.g., six master's degree programs, 12 doctoral faculty members), the findings should be interpreted with caution and should not be assumed to be generalizable to other populations.

CHAPTER 2: EARLY CHILDHOOD HIGHER EDUCATION PROGRAMS

Primary Goals of Nebraska Early Childhood Degree Program

The Inventory asked program leaders 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 interventionists or early childhood special educators.
- To prepare students for multiple roles involving young children, working in many types of settings.

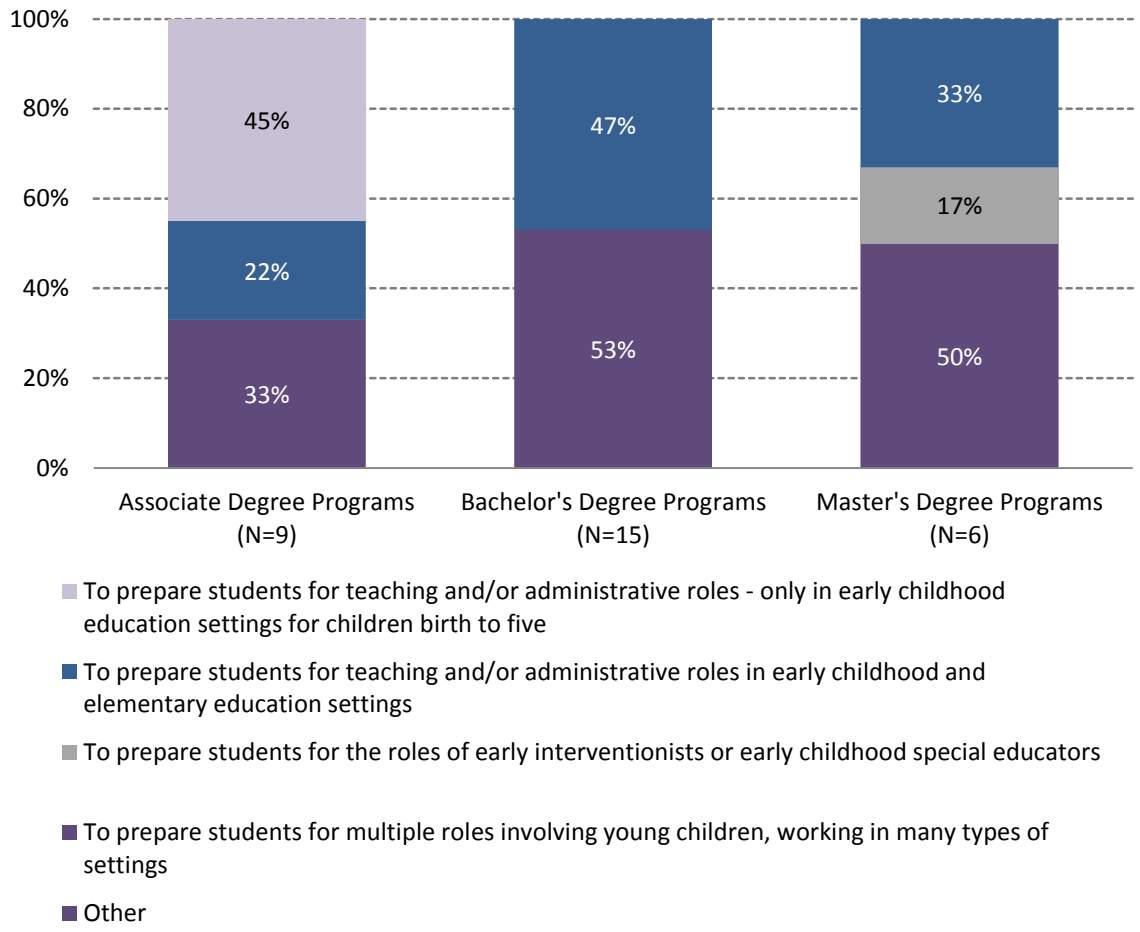
See **Figure 2.1**.

- About four in ten associate degree programs reported that their primary goal was "to prepare students for teaching and/or administrative roles, only in early childhood education settings for children birth to five." One-third of associate degree programs reported that their primary goal was "to prepare students for multiple roles involving young children, working in many types of settings." Slightly less than one quarter reported that their primary goal was "to prepare students for teaching and/or administrative roles in early childhood and elementary education settings."
- Approximately one-half of bachelor's degree programs reported that their primary goal was to "prepare students to work in multiple roles involving young children, working in many types of settings" or "to prepare students for teaching and/or administrative roles in early childhood and elementary settings."

- One-half of master's degree programs also reported that their primary goal was to "prepare students to work in multiple roles involving young children, working in many types of settings."

  ⇒ Approximately one-third of master'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."

Figure 2.1: Primary Goals of Nebraska's Early Childhood Higher Education Degree Programs, by Program



Students Served in Nebraska Early Childhood Degree Programs

The Inventory asked program leaders a series of questions about the students in their programs.

Program leaders 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 2013-2014 academic year.

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

- 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.

If the service was offered, respondents were asked to indicate whether the service was offered specifically to students in the degree program, and/or to the student body as a whole.

Targeted Student Population (See **Figure 2.2**)

- Associate and bachelor's degree programs were more likely than master's degree programs to report targeting both groups of students: pre-service students and those already working in the early childhood field.

  ⇒ Three-quarters (78 percent) of associate degree programs reported targeting both groups of students.
  ⇒ Approximately two-thirds (60 percent) of bachelor's degree programs reported targeting both groups of students.
  ⇒ One-third (33 percent) of master's degree programs reported targeting both groups of students.

- Master's degree programs were the only degree programs to report exclusively targeting students already working in early childhood settings. More than two-thirds (67 percent) did so, compared to none of the bachelor's and associate degree programs.

- Although small percentages of degree programs at all levels reported exclusively targeting pre-service students, bachelor's degree programs were the most likely to do so. Forty percent of these exclusively targeted pre-service students, compared to less than one quarter (22 percent) of associate and none of the master's degree programs.

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

- Degree programs reported a wide range in the numbers of students enrolled in their programs (from four to more than 100), and in the number of degrees conferred (from none to more than 40) in the 2013-2014 academic year.

- Associate degree programs were the most likely to report enrolling 51 or more students. Approximately one-third of associate degree programs did so, compared to 20 percent of bachelor's and none of the master's degree programs.

- Similarly, associate degree programs were the most likely to report conferring 21 or more degrees during the 2013-2014 academic year. Twenty-two percent of associate degree programs did so, compared to less than 15 percent of bachelor's and none of the master's degree programs.

Student Services (See **Figures 2.5, 2.6, and 2.7**)

- Degree programs reported that students were offered a variety of services to help them access their education and to succeed in their educational careers. These included three general categories of service: 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 in the student services offered.

  ⇒ Associate degree programs were the most likely to report offering classes off campus in community-based settings. Approximately 67 percent did so, compared to 50 percent of bachelor's and 50 percent of master's degree programs.

- In general, degree programs reported that these student services were offered to all students in the college or university, and were not targeted specifically to students in the early childhood degree program.

  ⇒ The one exception is for cohort programs. All associate degree programs reported offering cohort programs tailored to students in the degree program but none offered this service to the student body as a whole. Almost two-thirds of bachelor's degree programs reported offering cohort programs tailored to students in early childhood

degree programs while only one-third offered cohort programs to all students in the college or university.

- Program leaders were also asked to specify the format(s) in which the degree program is offered.

  ⇒ Associate degree programs were most likely to offer the degree program in multiple formats: as an "online/distance learning degree program" (56 percent), a "traditional/on-campus degree program" (78 percent), and as a "blended degree program, a combination of online and in person courses" (78 percent).

  ⇒ The majority of bachelor's degree programs reported that the program was offered as a "traditional/on-campus degree program" (73 percent), 40 percent offered a "blended degree program, a combination of online and in person courses", and approximately one-quarter (27 percent) offered an "online/distance learning degree program."

  ⇒ Master's degree programs were most likely to offer a "blended degree program, a combination of online and in person courses" (83 percent), and less likely than other degree levels to offer a "traditional/on-campus degree program" (17 percent) or "online/distance learning degree program" (33 percent).

Figure 2.2: Target Student Population of Nebraska Early Childhood Higher Education Degree Programs, by Program

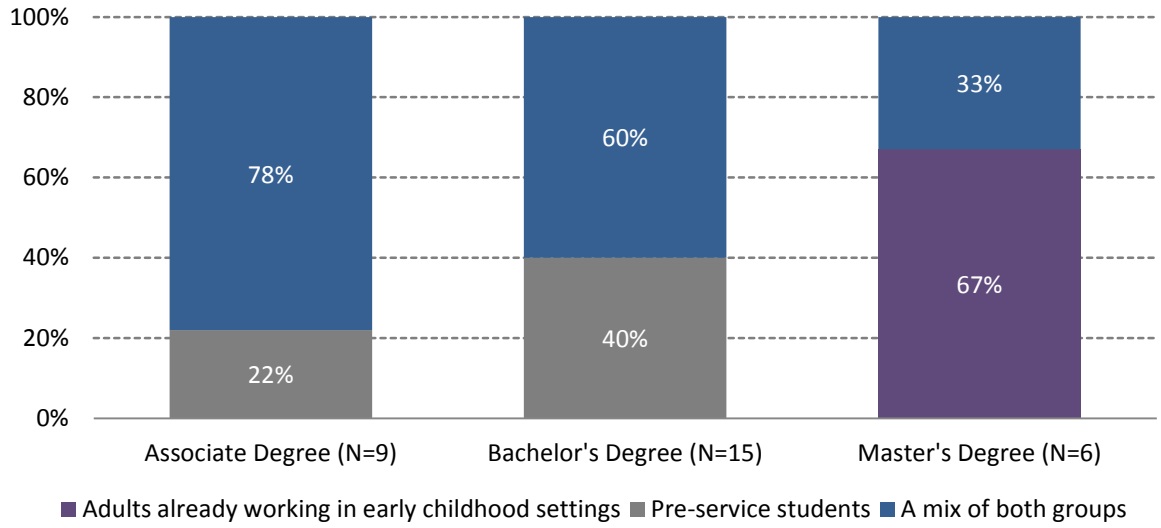


Figure 2.3: Number of Students Enrolled in Nebraska Early Childhood Higher Education Degree Programs in the 2013-2014 Academic Year, by Program

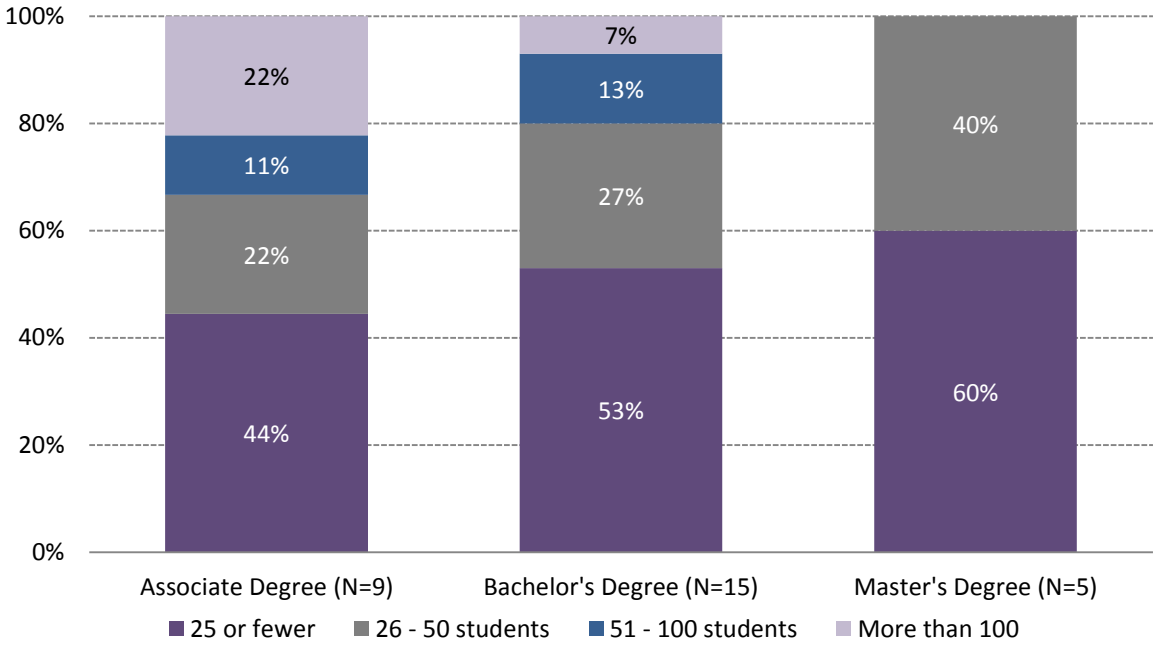


Figure 2.4: Number of Degree Conferred in Nebraska Early Childhood Higher Education Degree Programs in the 2013-2014 Academic Year, by Program

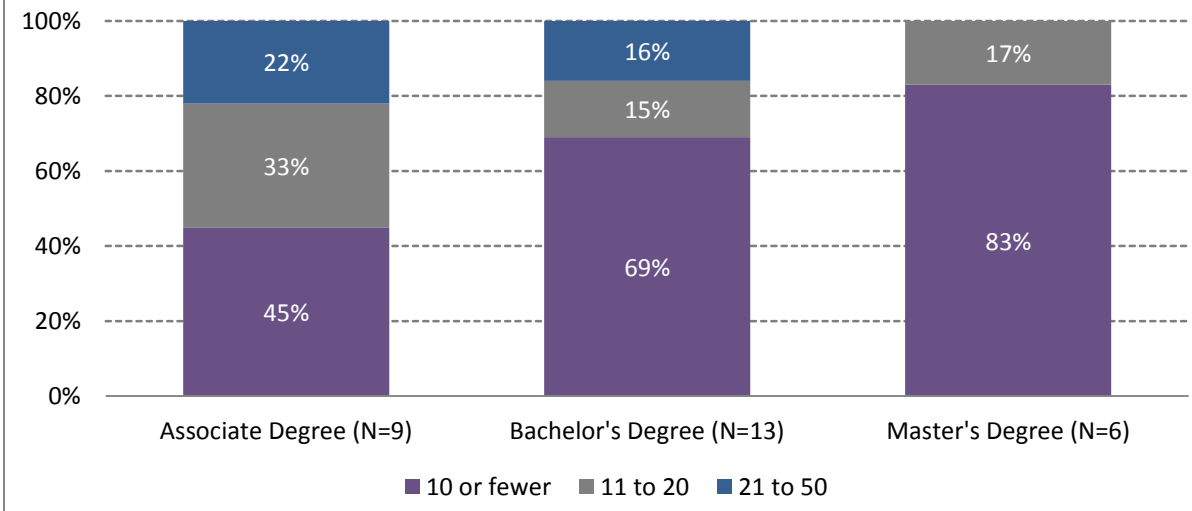


Figure 2.5: Services Offered to Students in Nebraska Early Childhood Higher Education Degree Programs: Counseling Support, by Program

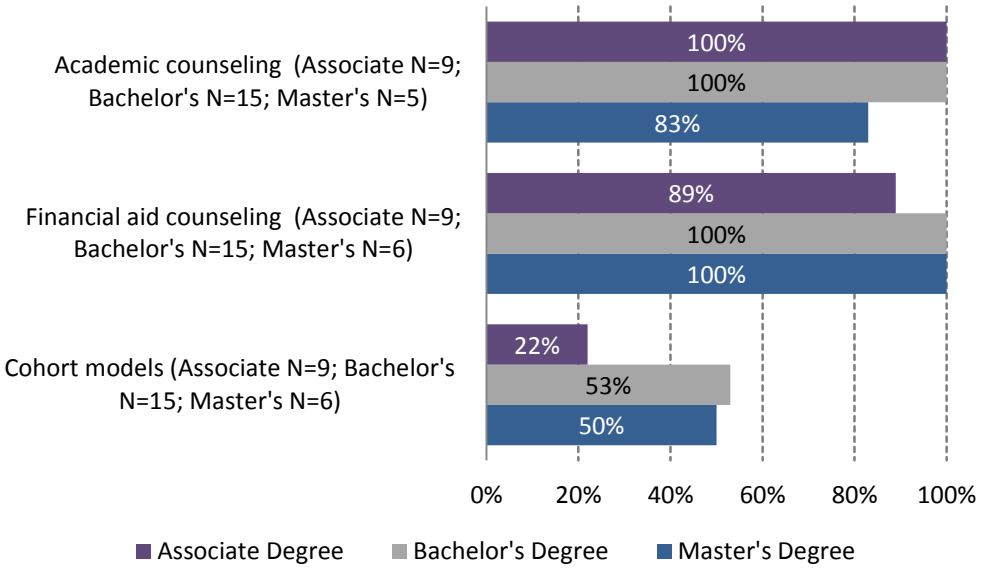


Figure 2.6: Services Offered to Students in Nebraska Early Childhood Higher Education Degree Programs: Access Support, by Program

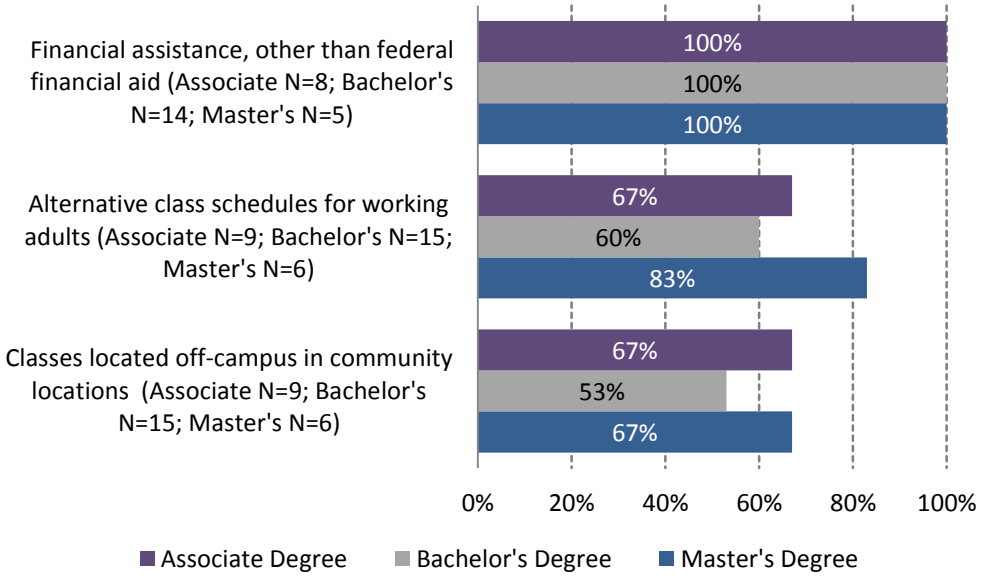
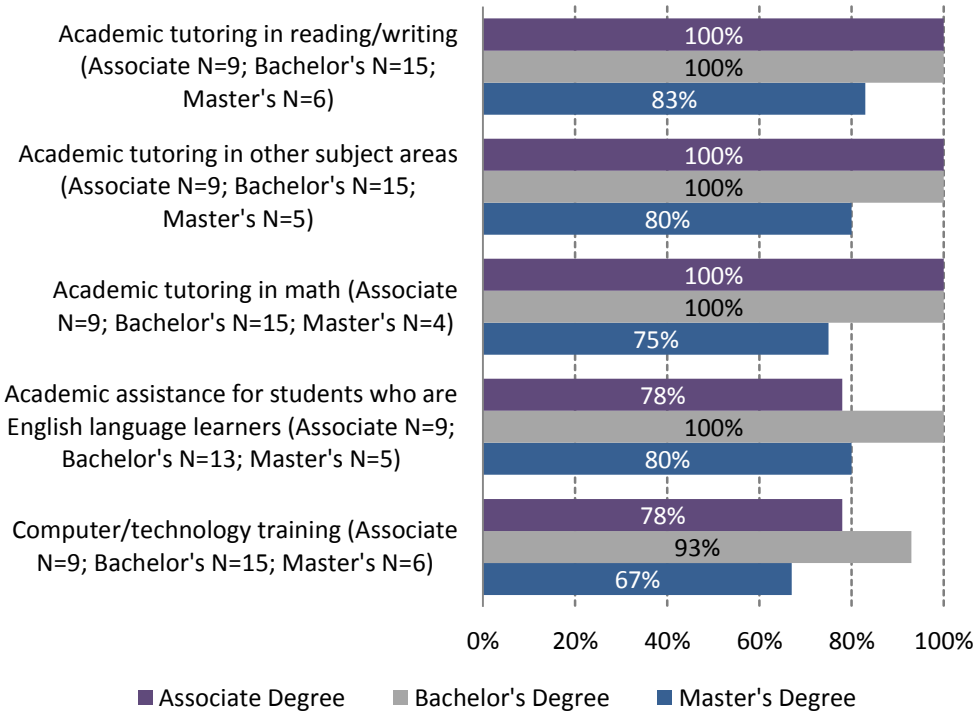


Figure 2.7: Student Services Offered in Nebraska Early Childhood Higher Education Degree Programs: Skills Support, by Program



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

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

1. Child Development and Learning
2. Teaching Diverse Child Populations
3. Teaching and Curriculum
4. Teaching Skills in Early Childhood Settings
5. Early Childhood Administration and Leadership (offered, not required)
6. Family Engagement[1]
7. Early Mathematics[1]

- Teaching math skills to young children
- Development of young children's mathematical understanding

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

1. Infants and toddlers (birth to 2 years)
2. Preschool (3 and/or 4 years)
3. Kindergarten through 3rd grade or higher

[1]Findings related to family engagement and early mathematics are reported in Chapter 5.

- *Child Development and Learning:* Eighty percent or more of degree programs at all levels reported requiring each of the seven "child development and learning" topics listed in the Inventory, with two exceptions. (See **Appendix Table A2-1**.)

  ⇒ Only one-half of master's degree programs reported requiring the topic "development of dual language learners" and the topic "understanding the effects of disability on child development."

- *Teaching Diverse Child Populations:* Eighty percent or more of degree programs at all levels reported requiring each of the five "teaching diverse child populations" topics, with two exceptions. (See **Appendix Table A2-2**.)

  ⇒ Sixty-seven (67 percent) of master's degree program required "teaching children with special needs."
  ⇒ One-half of master's degree programs required the topic "teaching children who are dual language learners."

- *Teaching and Curriculum*: All of the associate and bachelor's degree programs required each of the ten "teaching and curriculum" content areas, whereas the master's degree programs varied in their requirements. (See **Appendix Table A2-3**.)

  ⇒ Nearly all master's degree programs required nine of the 10 topics. The one topic required by only four (67 percent) of master's degree programs was "teaching social studies to children."

- *Teaching Skills in Early Childhood Settings:* Eighty-three percent or more of degree programs at all levels reported requiring each of the three "teaching skills in early childhood settings" listed in the Inventory. (See **Appendix Table A2-4**.)

- *Early Childhood Administration and Leadership:* Program leaders were asked whether content in this topic area was *offered* to students, but did not have to be required. Overall, a smaller percentage of degree programs at all levels reported offering coursework related to "early childhood administration and leadership" than the required content areas described above.

  ⇒ Less than one-half (five) of the 15 topics were offered by three-quarters or more of all degree programs (see **Figure 2.8**):
  - Assessment and documentation to inform program quality;
  - Building relationships with other teachers and/or early childhood professionals;
  - Guiding practitioners in implementing curriculum and appropriate teaching strategies;
  - Assessment and documentation to inform teaching and learning; and
  - Early childhood system and public policy.

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

- While degree programs consistently reported requiring a focus in the coursework on preschool-age children, and often on children in the early elementary grades, a focus on infants and toddlers varied more by topic and degree program.

- Whereas bachelor's and master's degree programs reported focusing many topics on infants and toddlers, associate degree programs did so more consistently.

  ⇒ In the child development and learning domain, though nearly all topics were required across degree programs as reported above, the age group focus that was required in the topic areas varied.
  - When a content topic was required, all degree programs required topics to include a focus on preschool age-children.

⇒ Degree programs, across levels, typically required a the "child development and learning" topics to include a focus on children in early elementary with two exceptions:
- Four of six (67 percent) of master's degree programs required a focus on early elementary aged children for the topics "development of dual language learners" and "understanding the effects of disability on child development."

⇒ The requirement to focus on infants and toddlers in the coursework varied. For example:
- Infants and toddlers were a required focus in the topic area of "development of children's literacy skills" by 89 percent of associate, 73 percent of bachelor's and only 40 percent of master's degree programs that required this content topic;
- Infants and toddlers were a required focus on approximately one-half of degree programs, across levels, in the topic "development of children's scientific development"; and
- Infants and toddlers were require in the topic area "development of dual language learners" by 56 percent of associate and 71 percent of bachelor's degree programs, and in two of the three master's degree programs that required this topic.

Figure 2.8: Coursework on Administration and Leadership Offered in Nebraska Early Childhood Higher Education Degree Programs, by Program

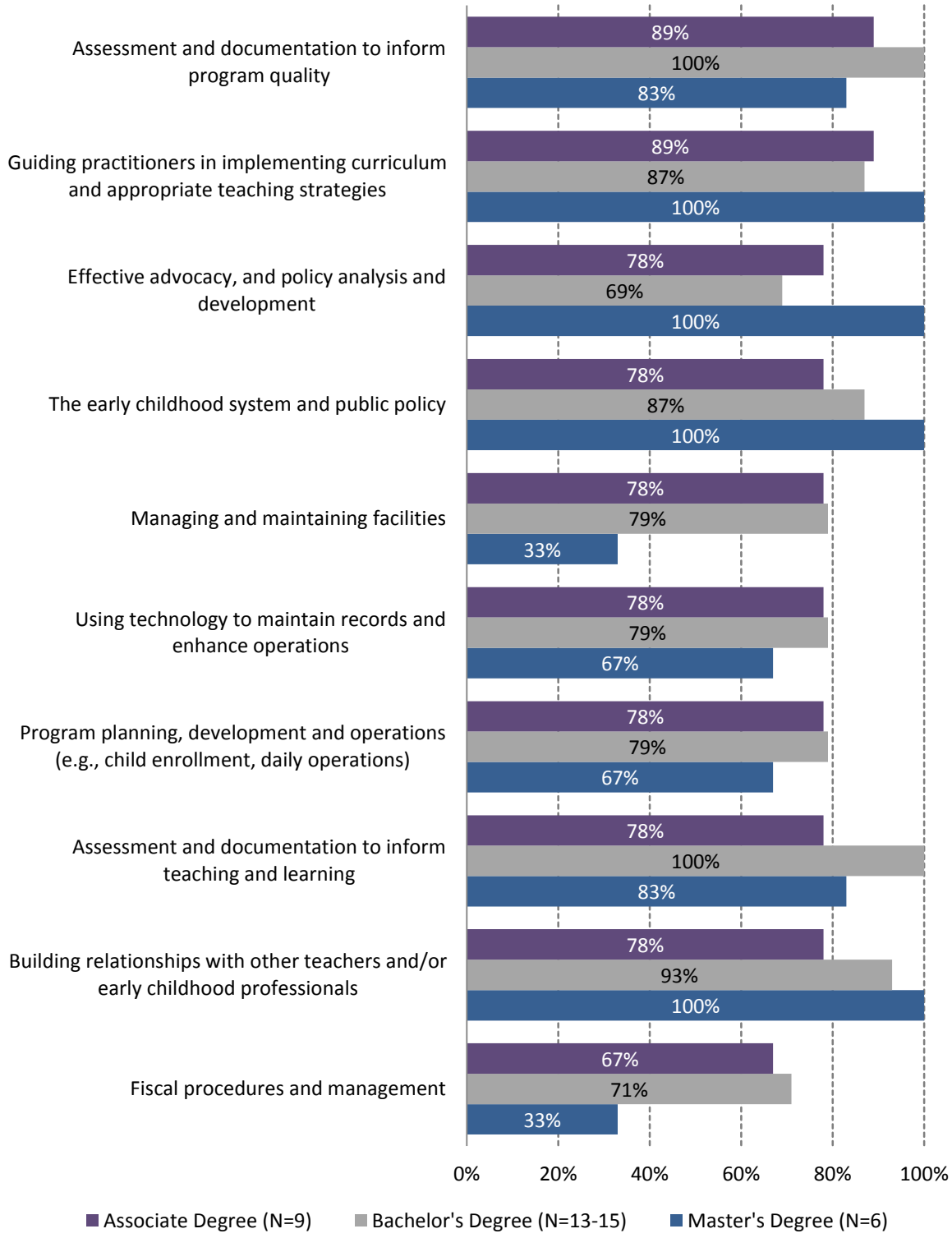
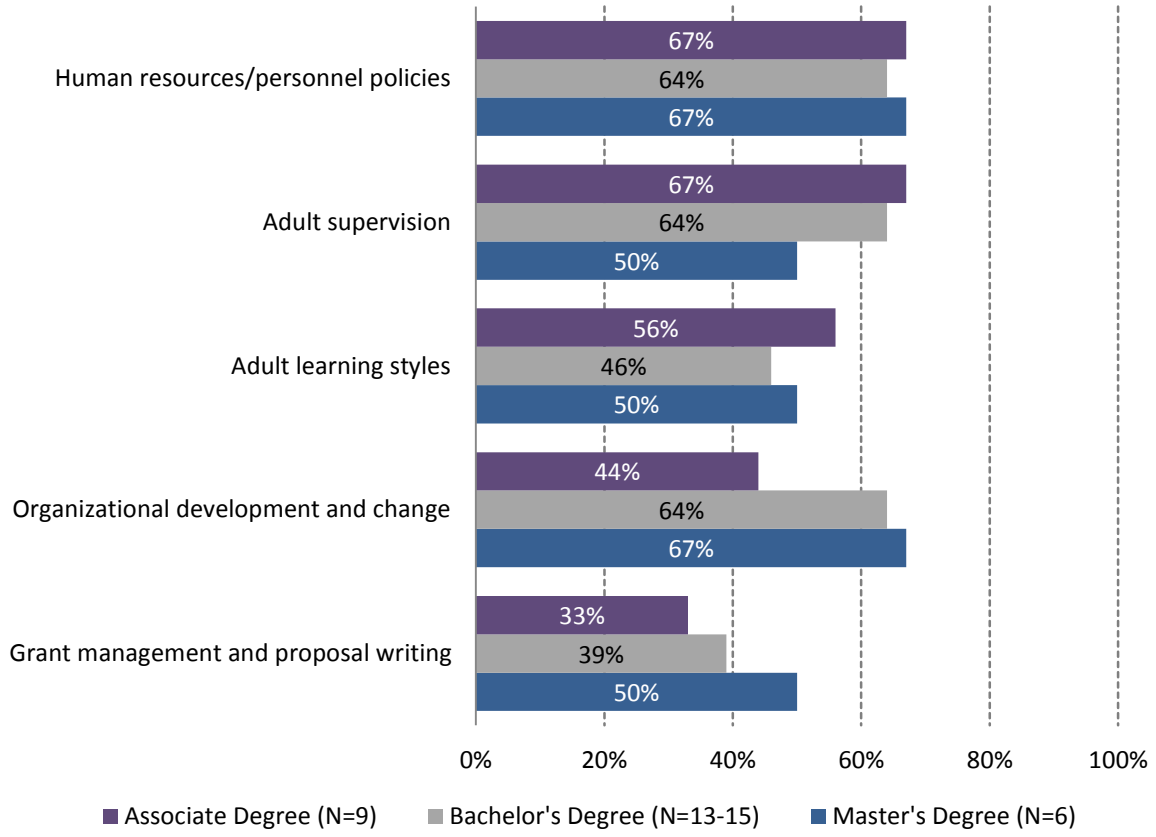


Figure 2.8: Coursework on Administration and Leadership Offered in Nebraska Early Childhood Higher Education Degree Programs, by Program (Continued)



Student Field Experiences

The Inventory asked program leaders about two types of field-based experiences offered to students:

1. Student teaching: defined as full-time immersion in a classroom, with increasing responsibility for curriculum planning and teaching, and supervision by a cooperating teacher.
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 and/or cooperating teacher and/or mentor.

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

1. Timing and duration of the field experience;
2. Age-group focus of the field experience;
3. Faculty status of the faculty supervisor;
4. Criteria for selecting field sites;
5. Criteria for selecting cooperating teachers at the field sites (teachers at the sites who provide supervision and guidance for the students); and
6. Differences in field experience structures for pre-service and experienced teachers.

Please note that data for the degree programs requiring student teaching are not included in the figures because of very small sample sizes. These data are included in the narrative as appropriate.

- Overall, degree programs were more likely to require practicum experiences than student teaching. In addition, bachelor's degree programs were more likely to require student teaching than were associate and master's degree programs. (See **Figure 2.9**.)

  ⇒ While almost all bachelor's (93 percent) degree programs reported requiring students to participate in a student teaching experience, one-third of associate degree programs and one master's degree program reported doing so.

For degree programs that required the field experience:

- When age groups were required, degree programs were more likely to require a focus on preschoolers or older children than on infants and toddlers for student teaching.
  ⇒ More than three-quarters (78 percent) of degree programs required student teaching focused on kindergarten through third grade or higher; almost two-thirds required

student teaching focused on preschool-age children; and only 11 percent required student teaching on infants and toddlers.

⇒ Nearly two-thirds of bachelor's degree programs reported not offering student teaching experiences focused on infants and toddlers.

- Degree programs were more likely to report requiring practicum experiences to focus on preschoolers and infants and toddlers than older age groups. (See **Figure 2.10**.)

  ⇒ All associate degree and 93 percent of bachelor's degree programs reported requiring practicum experiences focused on the preschool years. (The sample size for master's degree programs was too small to report the findings.)

  ⇒ All associate degree programs and almost all (73 percent) bachelor's degree programs required a focus on infants and toddlers.

- Almost all degree programs at all levels reported having criteria for selecting student teaching field and practicum sites.

- Degree programs varied widely in the criteria used to select field sites for both student teaching and practicum experiences. (See **Figures 2.11** and **2.12.**)

  ⇒ The three most frequently reported criteria for <u>student teaching</u> sites reported by degree programs were:
  - Teacher qualifications;
  - Site is a public school; and
  - Degree program/college has a partnership with a school district.

  ⇒ The three most frequently reported criteria for <u>practicum</u> sites reported by associate degree programs were:
  - Age of children served at the site (student teaching and practicum);
  - Teacher qualification/characteristics (student teaching); and
  - Site is a public school (practicum).

  ⇒ The four most frequently reported criteria for <u>practicum</u> sites reported by bachelor's degree programs were:
  - Age of children served at the site;
  - Location of site (e.g., proximity to college/university or student workplace); and
  - Degree program/college has a partnership with a school district.

- Most associate degree programs (67 percent) and all bachelor's degree programs used cooperating teachers to work with <u>student teachers</u>.

- Almost all associate degree programs (89 percent), and all bachelor's degree programs used cooperating teachers to supervise <u>practicum</u> experiences.

- The most frequently reported criterion reported by degree programs at all levels for both student teaching and practicum experiences was "cooperating teacher holds a particular state credential." (See **Figures 2.13**.)

- Student teaching experiences occurred at the end of the course of study in all degree programs.

- The first practicum experience occurred at different times for students at different degree levels.

  ⇒ Approximately three-quarters of associate degree programs reported that the first practicum occurred within the first year of study. Approximately one-quarter reported that it occurred during the middle of the course of study.
  ⇒ Approximately one-half of bachelor's degree programs reported that the first practicum occurred within the first year of study. Approximately one-half reported that it occurred during the middle of the course of study.

- Most programs did not structure field-based experiences differently for pre-service and experienced teachers.

  ⇒ Approximately one-third of degree programs at all levels reported structuring student teaching experiences differently for pre-service and experienced teachers.
  ⇒ Less than one-quarter of degree programs across all levels reported structuring practicum experiences differently for pre-service and experienced teachers.

Figure 2.9: Field Experiences Required in Nebraska Early Childhood Higher Education Degree Programs, by Program

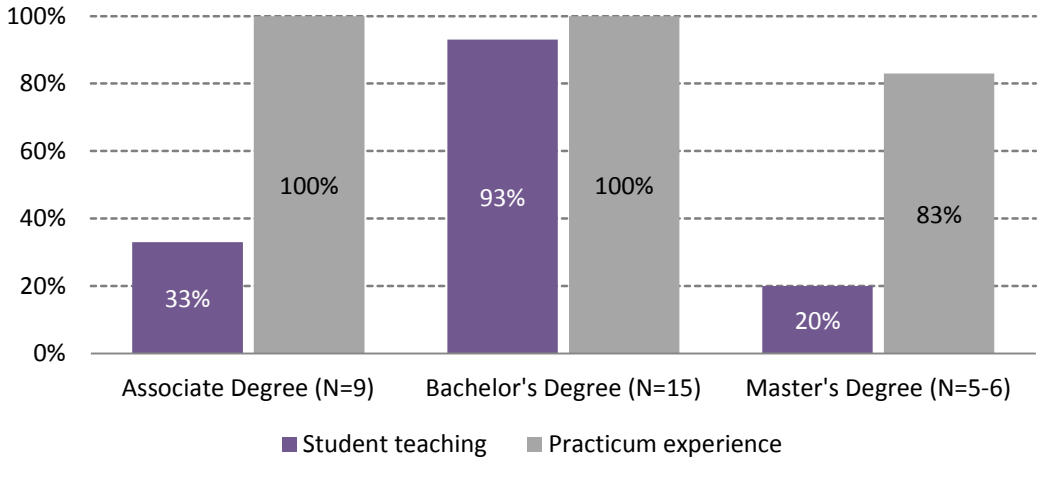


Figure 2.10: Age-Group Focus of Practicum Experiences in Nebraska Early Childhoood Higher Education Degree Programs, by Program

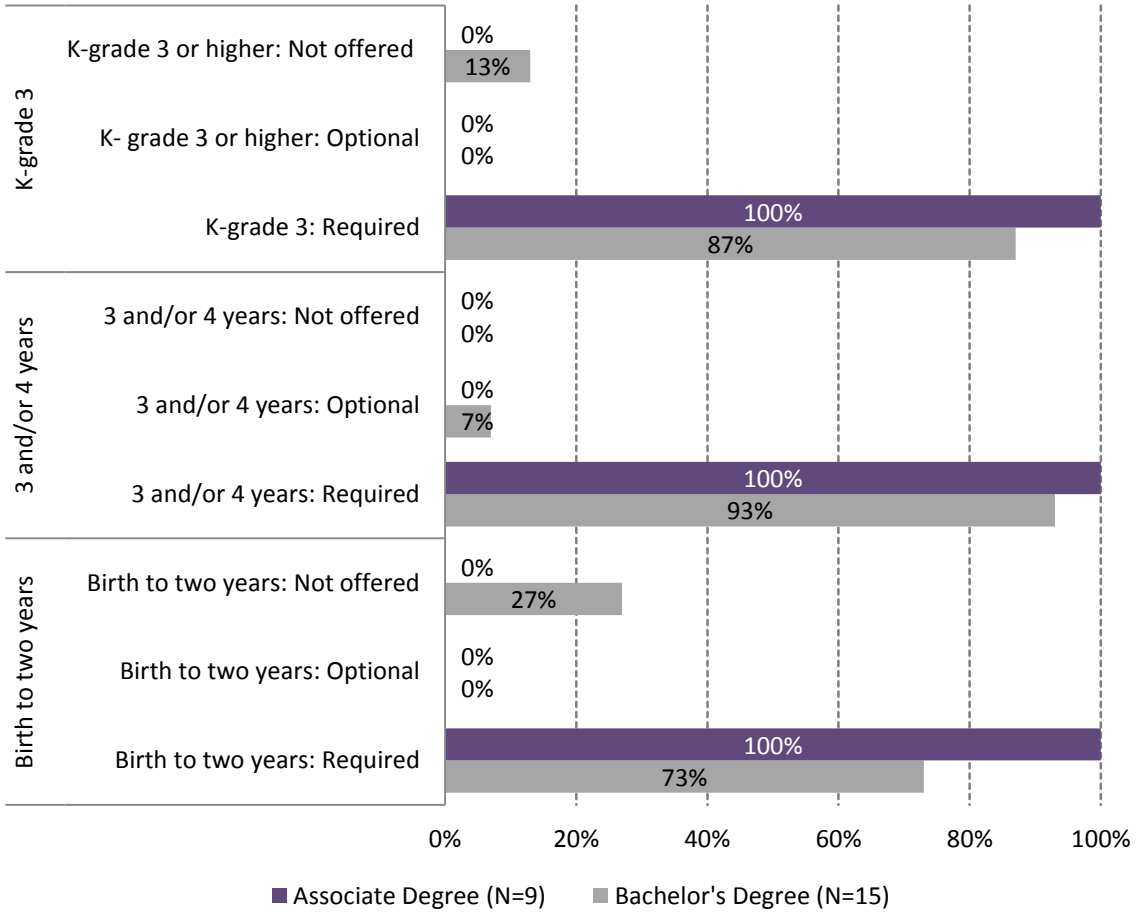


Figure 2.11: Criteria for Selecting Praciticum Sites in Nebraska Early Childhood Higher Education Degree Programs: Child Characteristics, by Program

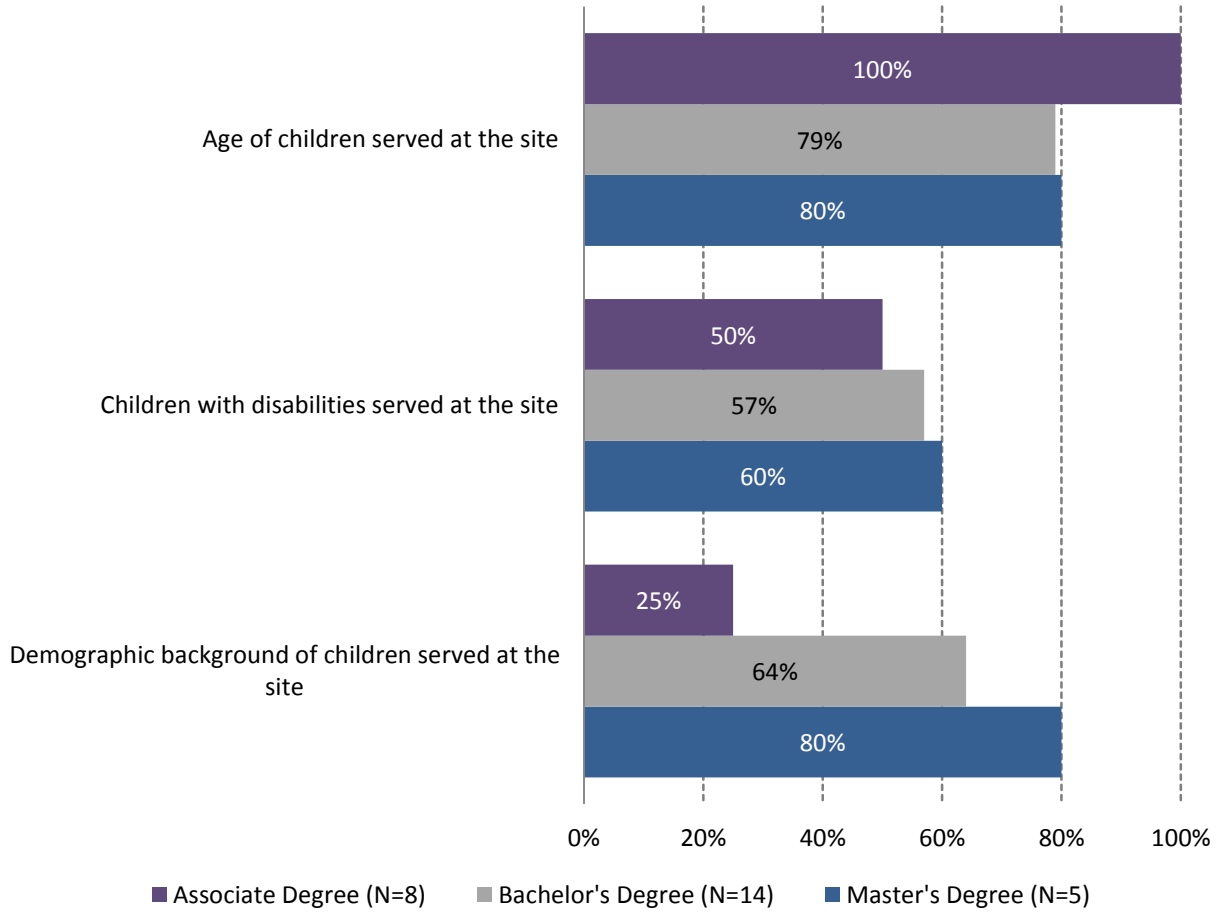


Figure 2.12: Criteria for Selecting Practicum Sites in Nebraska Early Childhood Higher Education Degree Programs: Site Characteristics, by Program

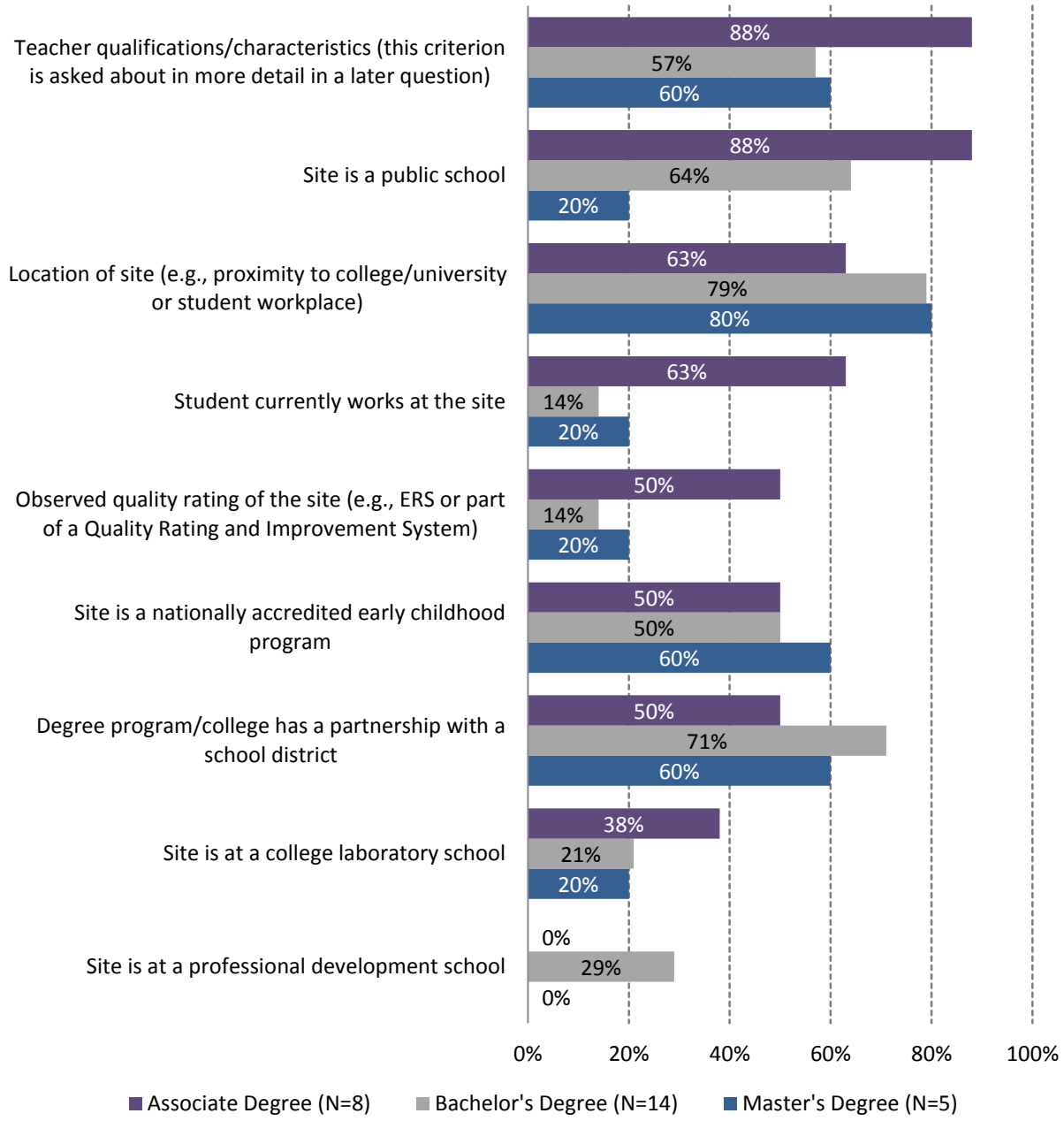
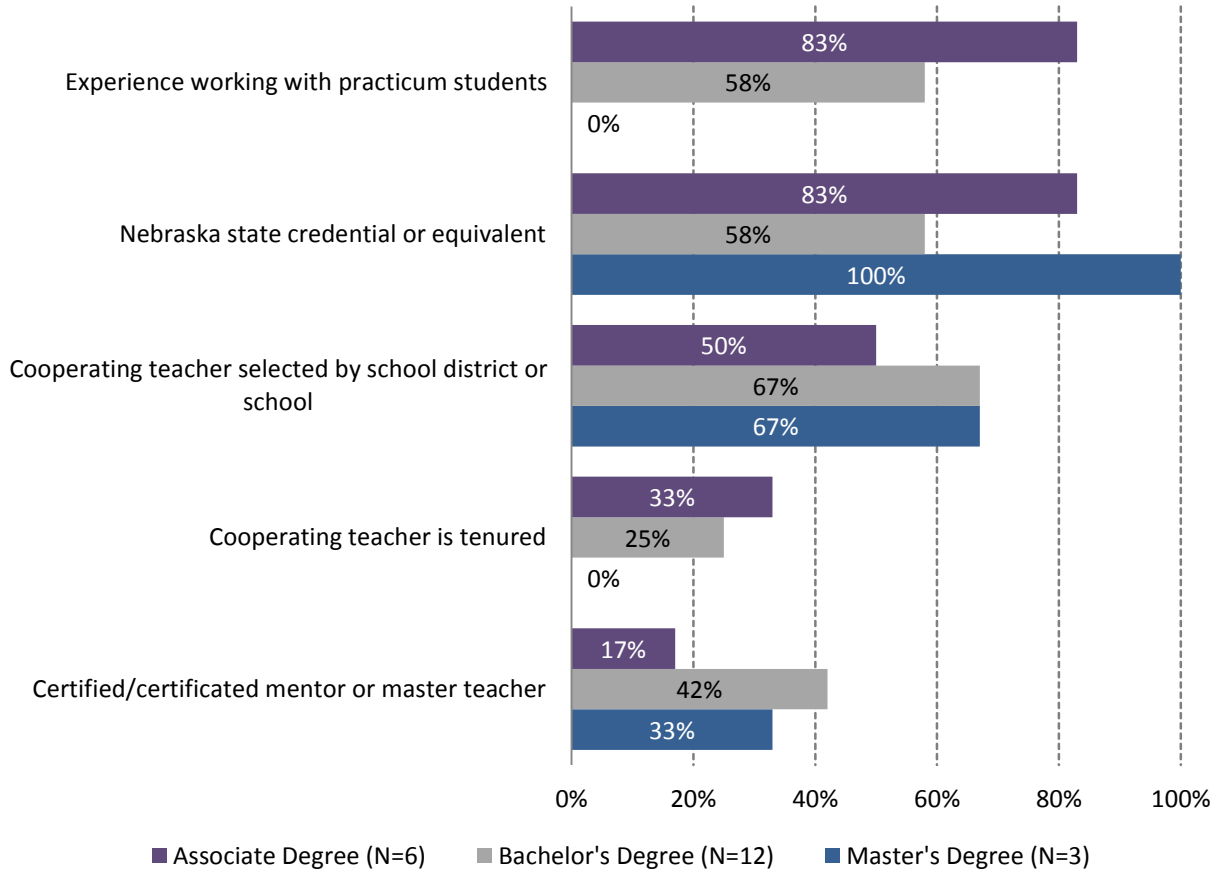


Figure 2.13: Criteria for Selecting Cooperating Teachers for Practicum Sites in Nebraska Early Childhood Higher Education Degree Programs, by Program



Articulation and Alignment with the Nebraska Professional Development System

The Inventory asked program leaders about 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:

1. Whether the degree program offered the Early Childhood Inclusive Certification.
2. Whether the degree program offered, or planned to offer Nebraska Certificate Endorsements.
3. Whether the degree program offered coursework that could be applied to the Child Development Associate credential.
4. Whether the degree program incorporated any of eleven Nebraska early childhood education standards into its course content.

- Approximately two-thirds of associate degree programs reported articulation agreements with early childhood bachelor's degree programs. Accordingly, three-quarters of bachelor's degree programs reported articulation agreements with associate degree programs.

- Approximately two-thirds of bachelor's degree programs offered the Early Childhood Inclusive Initial Certification; one associate and one master's degree program reported doing so.

- Three-quarters of associate degree programs, and one-fifth percent of bachelor's degree programs, reported offering coursework required for the Child Development Associate (CDA).

- Program leaders were asked to describe the status of offering four Certificate Endorsements: the (1) Unified Early Childhood Education: Birth to Grade 3 and/or Inclusive Early Childhood Education: Birth to Grade 3; (2) Early Childhood Education Supplemental: Pre-K to Grade 3; (3) Early Childhood Special Education; and (4) Early Intervention Specialist.

  ⇒ Two-thirds of bachelor's degree programs reported that their program currently offered the *Unified Early Childhood Education: Birth to Grade 3* and/or *Inclusive Early Childhood Education: Birth to Grade 3 Certificate Endorsement*. Most associate (56 percent) and master's degree programs (67 percent) reported that the endorsement was not offered, and there were no plans to do so.

  ⇒ The vast majority of bachelor's (80 percent) and master's programs (83 percent) reported that the *Early Childhood Education Supplemental: Pre-K to Grade 3 Certificate*

Endorsement was currently offered with no changes planned to course content or status. This endorsement was not offered by most associate degree programs (78 percent).

⇒ The majority of degree programs (78 percent of associate, 60 percent of bachelor's, and 83 percent of master's degree programs) reported that the program did not offer the *Early Childhood Special Education Certificate Endorsement*, and only one bachelor's degree program reported planning to offer it.

⇒ Only one associate and one master's degree program reported offering the *Early Intervention Specialist Certificate Endorsement*, and only two bachelor's degree programs reported planning to offer it. One-third of bachelor's degree programs reported not knowing the status of offering the *Early Intervention Specialist Certificate Endorsement*.

- Incorporation of state specific early childhood education standards varied by degree program, across standards. (See **Figure 2.14.)**

⇒ Among the 11 state specific early childhood education standards, four standards were incorporated into course content by less than one-half of all degree programs.

- The *Nebraska Early Childhood Integrated Skills & Competencies for Professionals* were incorporated into course content by approximately one-quarter (27 percent) of bachelor's degree programs, and not at all by associate and master's degree programs.
- Both the *Nebraska Early Childhood Integrated Skills & Competencies for Professionals* and the *Nebraska Early Learning Guidelines for Nature (Infants and Toddlers)* were reported as being incorporated into course content by 22 percent of associate, 53 percent of bachelor's, and 40 percent of master's degree programs.
- The *Nebraska Early Learning Guidelines for Nature (ages 3 to 5 years)* was reported as being incorporated into course content by content by 33 percent of associate, 53 percent of bachelor's, and 40 percent of master's degree programs.

⇒ The *Early Childhood Special Education Standards (from Rule 24)* was reported as being incorporated into the course content by 56 percent of associate, 60 percent of bachelor's, and 40 percent of master's degree programs.

⇒ Nearly all degree programs (100 percent of associate and master's degree, and 93 percent of bachelor's) reported incorporating the *Nebraska Early Learning Guidelines ages 3 to 5* into course content.

⇒ Six standards were reported as being incorporated by at least one-half of all degree programs, across levels:

- *Early Childhood Education Standards (from Rule 24)*
- *Nebraska Early Learning Guidelines ages Birth to 3*
- *Nebraska Early Learning Guidelines ages 3 to 5*
- *Nebraska Early Learning Guidelines Kindergarten*
- *Nebraska Core Competencies for Early Childhood Professionals*

- *Nebraska Early Childhood Pyramid Model for Supporting Social/Emotional Competence*

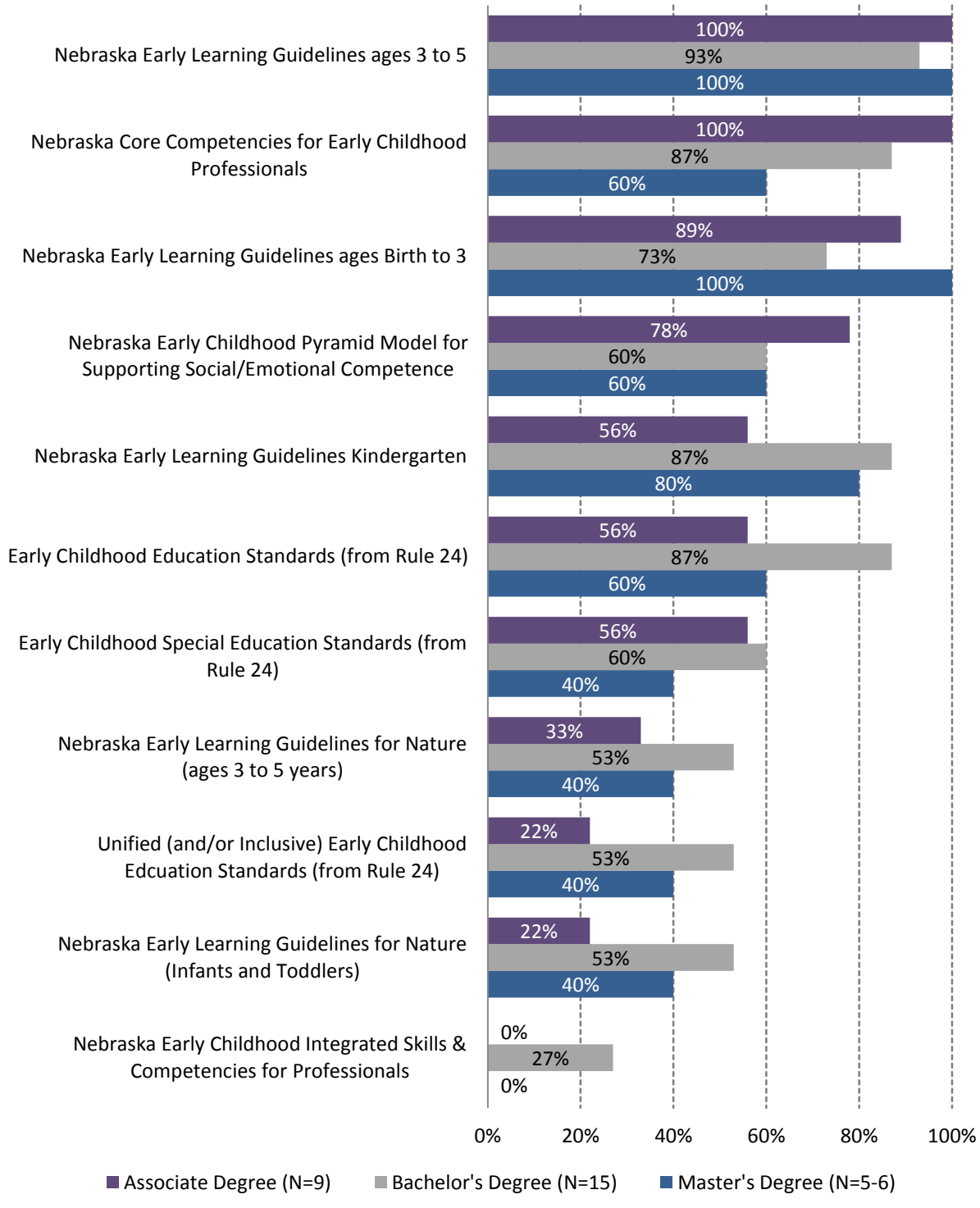
- Faculty were asked if they integrated components of three standards into their course(s) in any way during the previous two years: (1) *Nebraska Early Childhood Pyramid Model for Supporting Social/Emotional Competence*; (2) *Nebraska Early Learning Guidelines for Nature (Infants and Toddlers*; and (3) *Nebraska Early Learning Guidelines for Nature (child and adult)*.

  ⇒ Only 38 percent of associate, 29 percent of bachelor's, 46 percent of master's, and 42 percent of doctoral degree faculty members reported that they had integrated any components of the *Nebraska Early Childhood Pyramid Model for Supporting Social/Emotional Competence* standard into their course(s) in the previous two years.
    - 31 percent of associate and 18 percent of bachelor's degree faculty members either declined to answer this question, or indicated that they did not know if they had integrated the *Nebraska Early Childhood Pyramid Model for Supporting Social/Emotional Competence* into their courses.

  ⇒ Almost two-thirds of faculty members at the associate degree level reported that they had integrated components of the *Nebraska Early Learning Guidelines for Nature (Infants and Toddlers)* into their course(s) in the previous two years. Fewer bachelor's (32 percent), master's (44 percent), and doctoral (50 percent) degree faculty members reported doing so.

  ⇒ More than three-quarters of associate degree faculty members reported that they had integrated components of the *Nebraska Early Learning Guidelines for Nature (child and adult)* into their course(s) in the previous two years. About two-fifths of faculty at all other degree levels reported doing so.

Figure 2.14: State Early Care and Education Standards Incorporated in Course Content in Nebraska Early Childhood Higher Education Degree Programs, by Program



CHAPTER 3: EARLY CHILDHOOD HIGHER EDUCATION FACULTY

Demographics of Faculty Members Participating in the Inventory

- Nearly all faculty members who participated in the Inventory were women (96 percent of associate degree faculty, 97 percent of bachelor's degree faculty, 100 percent of master's degree faculty, and 92 percent of doctoral degree faculty).

- The average age of associate degree faculty members was 51 years. The average age of bachelor's and doctoral degree faculty was 52 years. The average age for master's degree faculty was 56 years. (See **Figure 3.1**.)

  ⇒ Approximately one-quarter of associate, one-third of bachelor's and doctoral degree faculty members, and two-fifths of master's degree faculty members reported being age 60 or older, potentially close to retirement.
  ⇒ Approximately two-thirds of associate degree faculty members and one-half of bachelor's, master's, and doctoral degree faculty members reported being 40 to 59 years old.
  ⇒ Approximately one-fifth of bachelor's and doctoral degree faculty members reported being younger than age 40, compared to approximately one-tenth of associate and master's degree faculty members.

- Almost all bachelor's and master's degree faculty members and the vast majority of associate and doctoral degree faculty members identified as White/Caucasian. (See **Figure 3.2**.)

- All faculty members at all degree levels reported fluency in English, less than 10 percent reported fluency in a non-English language (i.e., Spanish or Korean). (See **Figure 3.3**.)

- About one-third of associate and master's degree faculty members, one-quarter of bachelor's degree members, and one-half of doctoral degree faculty members reported that it would be helpful to know another language, primarily Spanish, to improve communication with their students.

Figure 3.1: Age of Faculty Participating in the Nebraska Early Childhood Higher Education Inventory, by Degree Program

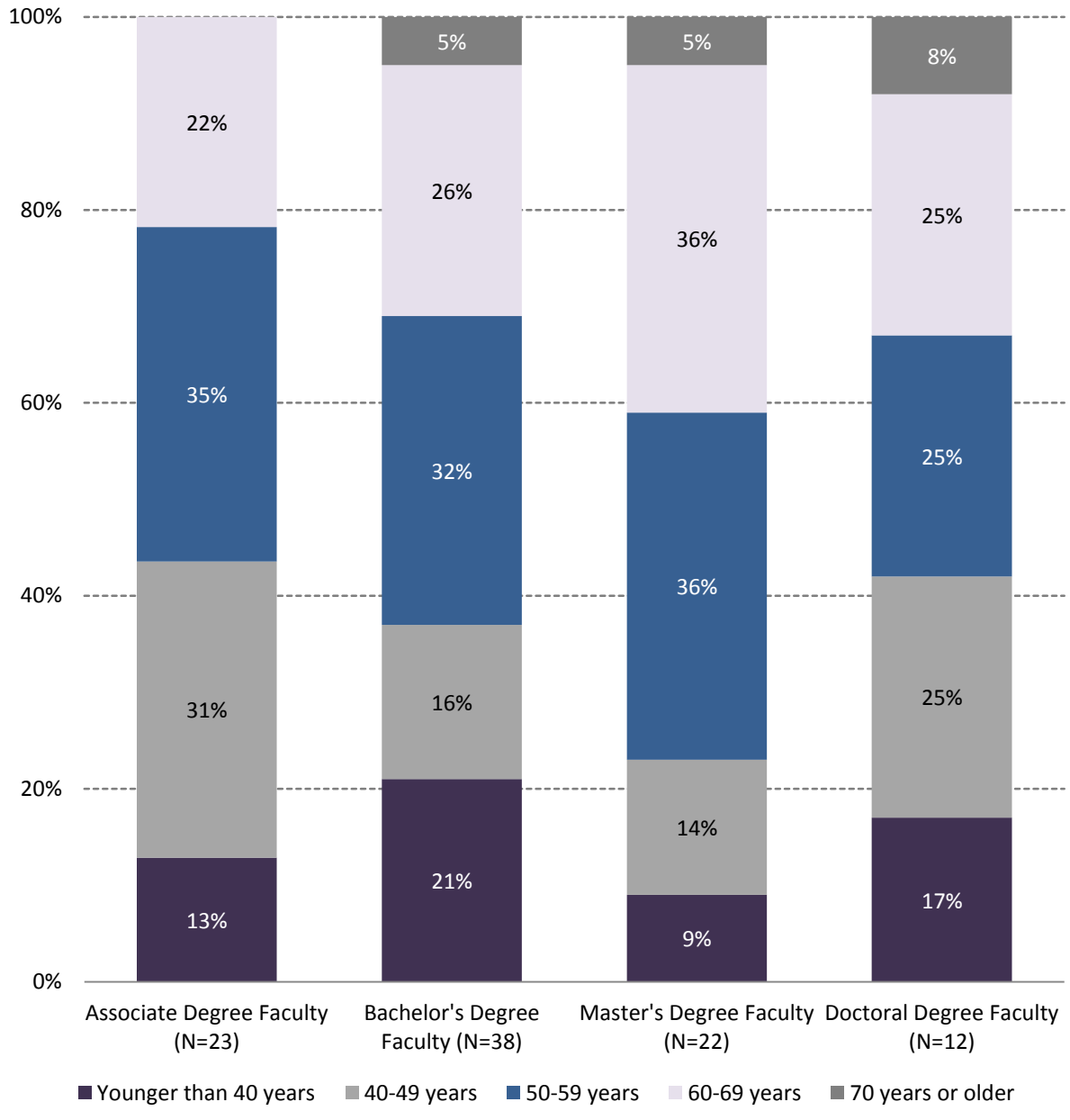


Figure 3.2: Race/Ethnicity of Faculty Participating in the Nebraska Early Childhood Higher Education Inventory, by Degree Program

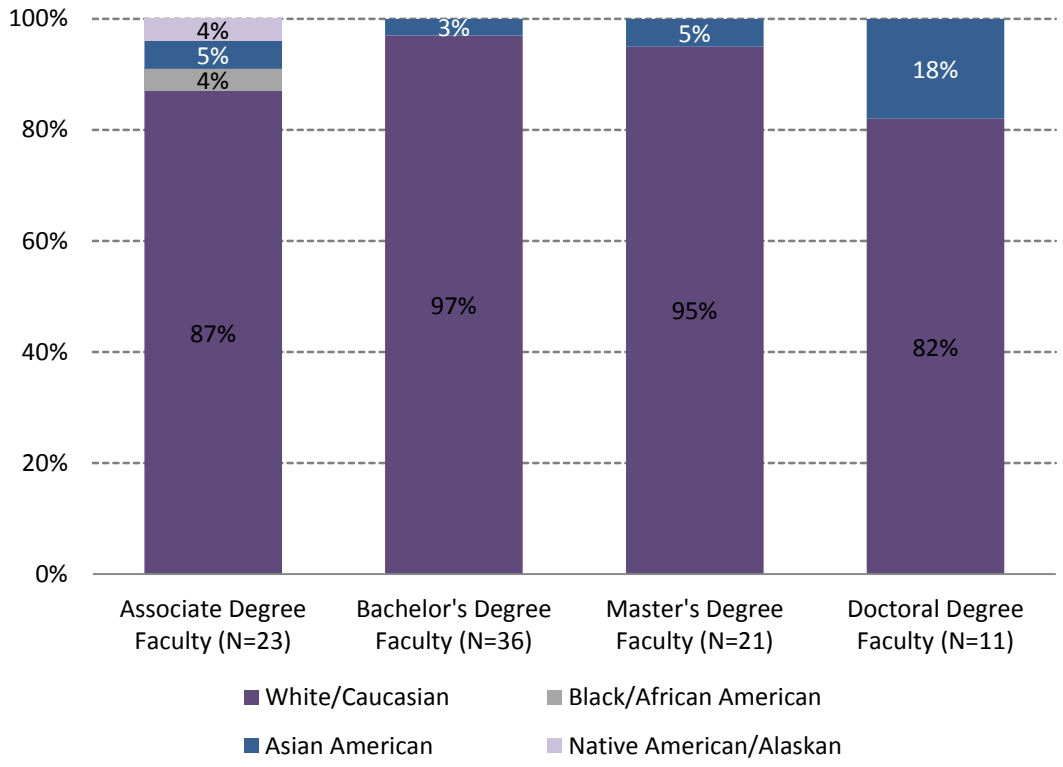
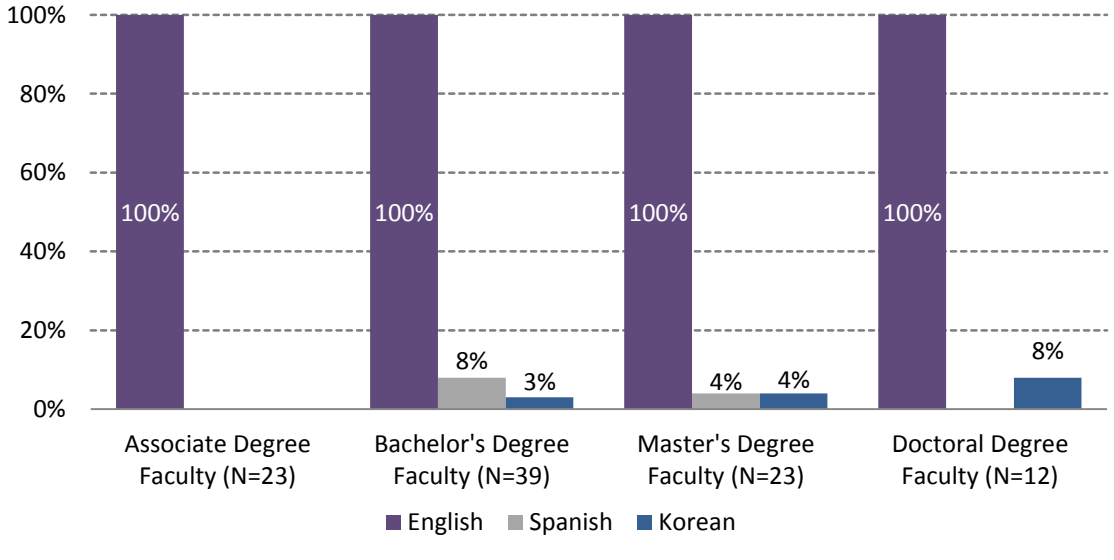


Figure 3.3: Languages Spoken Fluently by Faculty Participating in the Nebraska Early Childhood Higher Education Inventory, by Degree Program



Education Levels of Faculty Members Participating in the Inventory

- The vast majority of associate degree faculty members (83 percent) reported having attained a master's degree as their highest level of education. (See **Figure 3.4**.)

- The majority of bachelor's (61 percent) and master's (61 percent) degree faculty and all doctoral degree faculty members reported having attained a doctoral degree. (See **Figure 3.4**.)

- Approximately three-quarters of associate, master's, and doctoral faculty members, and more than one-half (57 percent) of bachelor's degree faculty members reported having attained an early childhood education or child development (ECE/CD) degree at either the bachelor's or graduate level. (See **Figure 3.5**.)

Figure 3.4: Highest Level of Education of Faculty Participating in the Nebraska Early Childhood Higher Education Inventory, by Degree Program

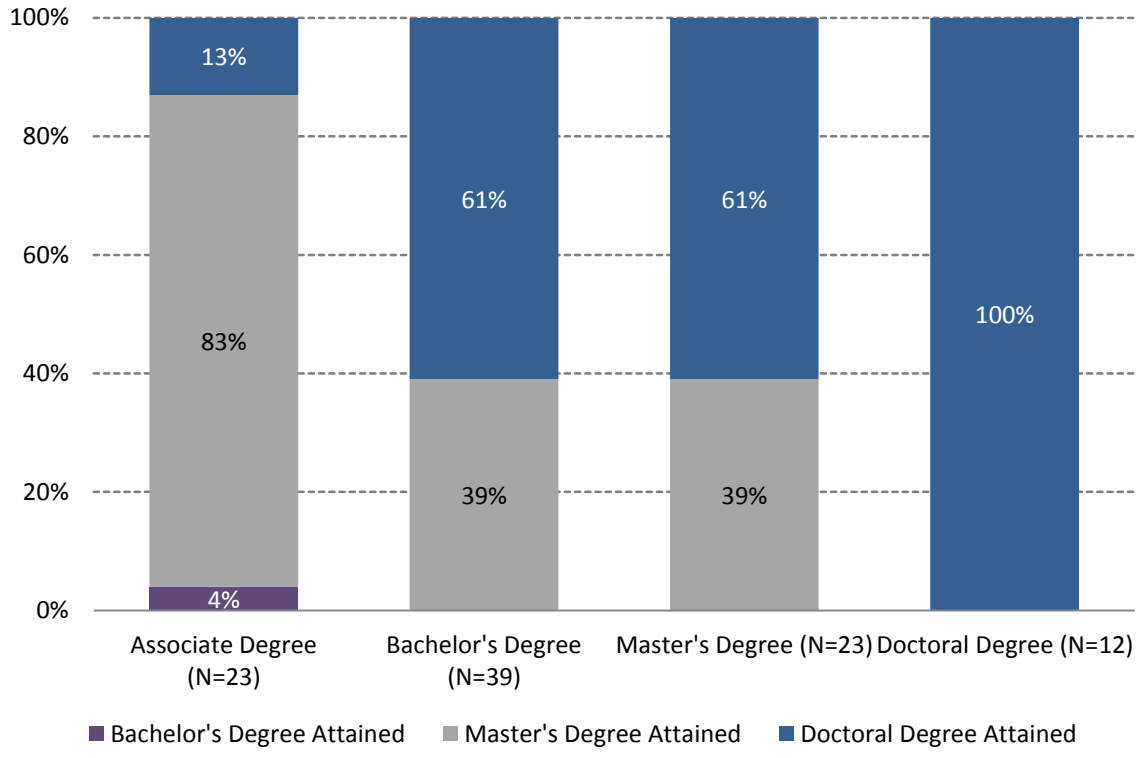
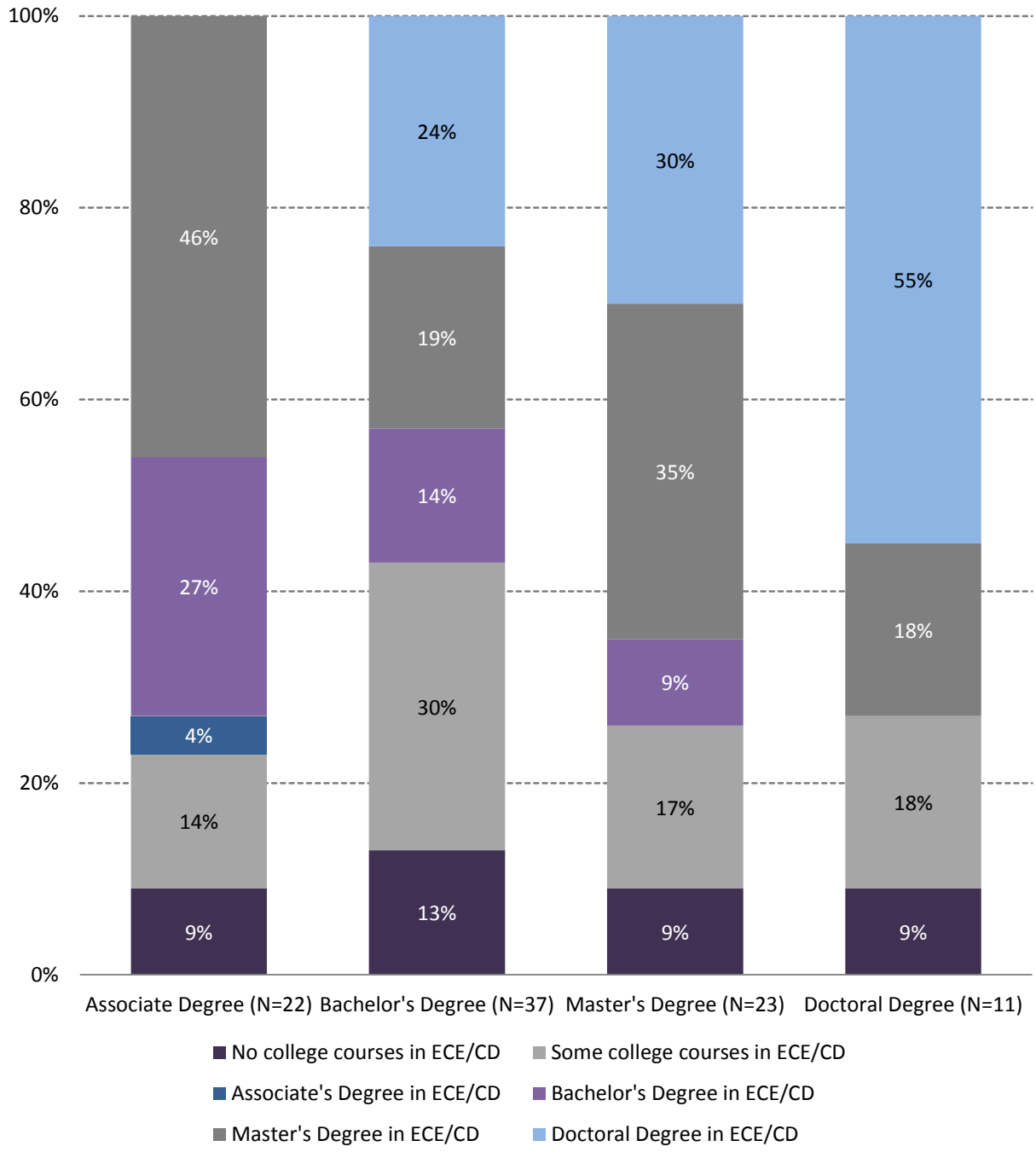


Figure 3.5: ECE/CD Degree Attainment by Faculty Participating in the Nebraska Early Childhood Higher Education Inventory, by Degree Program



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

Professional Experiences

- The majority of faculty members (65 percent of associate degree, 73 percent of bachelor's degree, 77 percent of master's degree, and 83 percent of doctoral degree faculty members), reported having taught at the college level for more than five years, and most have taught at their current college or university for five or more years. (See **Figure 3.6** and **3.7**.)

- Approximately two-thirds of associate degree faculty, one-half of bachelor's degree faculty, one-third of master's degree faculty, and one-fifth of doctoral degree faculty, reported having worked in roles other than college-level teaching or administration in the past 10 years. (See **Figure 3.8.**)

  ⇒ The roles most frequently reported roles by associate, bachelor's and master's degree faculty members were "classroom teacher" and "early childhood professional development provider."
  ⇒ The only role reported by doctoral degree faculty was "early childhood professional development provider."
  ⇒ Among bachelor's degree faculty members, 88 percent of adjunct and 100 percent of full-time non-tenured bachelor's degree faculty member reported having worked in other roles, compared to one-third of bachelor's degree tenure-track faculty members.

Current Employment

- Approximately two-fifths of associate and one-fifth of bachelor's and master's degree faculty members identified themselves as adjunct faculty or part-time lecturers. All doctoral degree faculty members identified themselves as tenured or tenure-track faculty. (See **Figure 3.9**.)

- Across degree levels, most faculty members reported that in addition to teaching, they had other areas of responsibility, but this percentage varied by degree level (50 percent of associate, 78 percent of bachelor's, 81 percent of master's, and 92 percent of doctoral degree faculty). (See **Figure 3.10**.)

  ⇒ Among the other areas of responsibility, in addition to teaching, most faculty reported "supervising student teaching and/or practicum" (92 percent of associate, 80 percent of bachelor's, 76 percent of master's, and 73 percent of doctoral degree faculty members)
  ⇒ The majority of associate degree faculty members also reported that in addition to teaching, they were responsible for "program administration/coordination/department

chair." Less than one-half of bachelor's (44 percent), master's (43 percent), and doctoral (46 percent) degree faculty members reported administrative responsibilities in addition to teaching.

⇒ Doctoral degree faculty members (82 percent) were more likely than other faculty to report "research" as an area of responsibility in addition to teaching. "Research" was reported by less than 10 percent of associate degree faculty members (8 percent), and by 44 percent of bachelor's and 48 percent of master's degree faculty members.

- On average, associate and master's degree faculty members reported teaching eight courses in a typical academic year, and bachelor's and doctoral degree faculty members reported teaching four courses. (See **Figure 3.11.**)

- Across all degree levels, one-quarter to almost one-half of faculty members reported that they did not have a student advising load in a typical academic year. Forty-six percent of associate, 42 percent of bachelor's, 35 percent of master's, and 25 percent of doctoral degree faculty did not have a student advising load.

  ⇒ When faculty members advised students during the academic year, on average, associate degree faculty members reported advising 43 students, bachelor's degree faculty members reported advising 30 students, master's degree faculty reported advising 28 students, and doctoral degree faculty reported advising 22 students. (See **Figure 3.12**.)

Figure 3.6: Number of Years Teaching at the College or University Level for Faculty Participating in the Nebraska Early Childhood Higher Education Inventory, by Degree Program

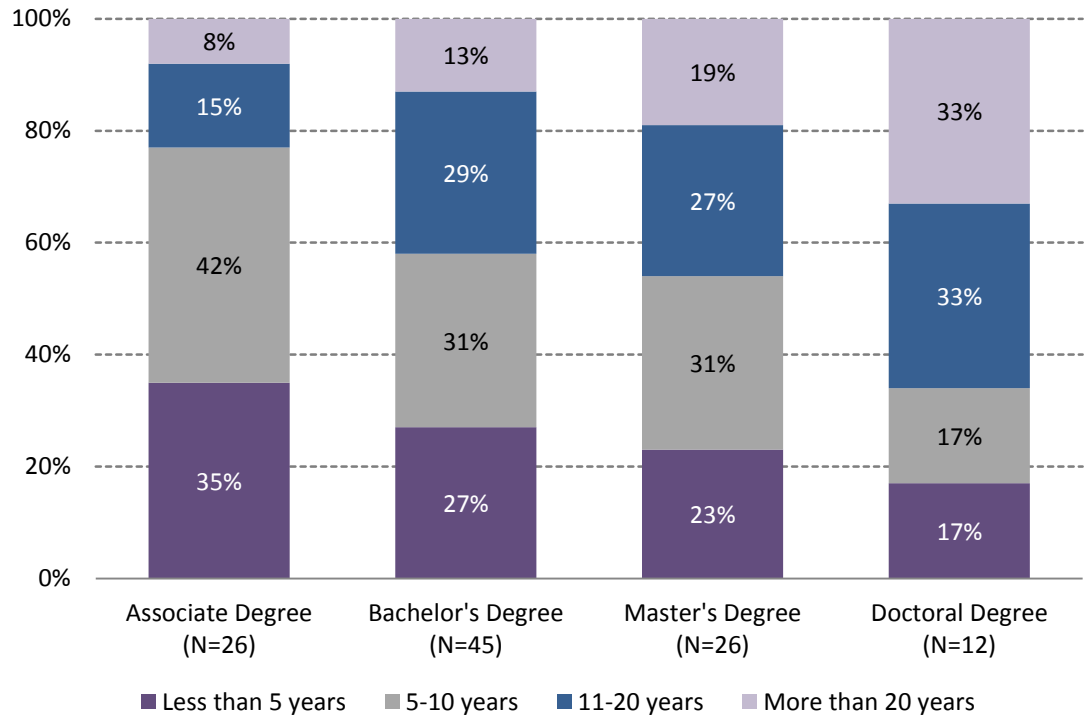
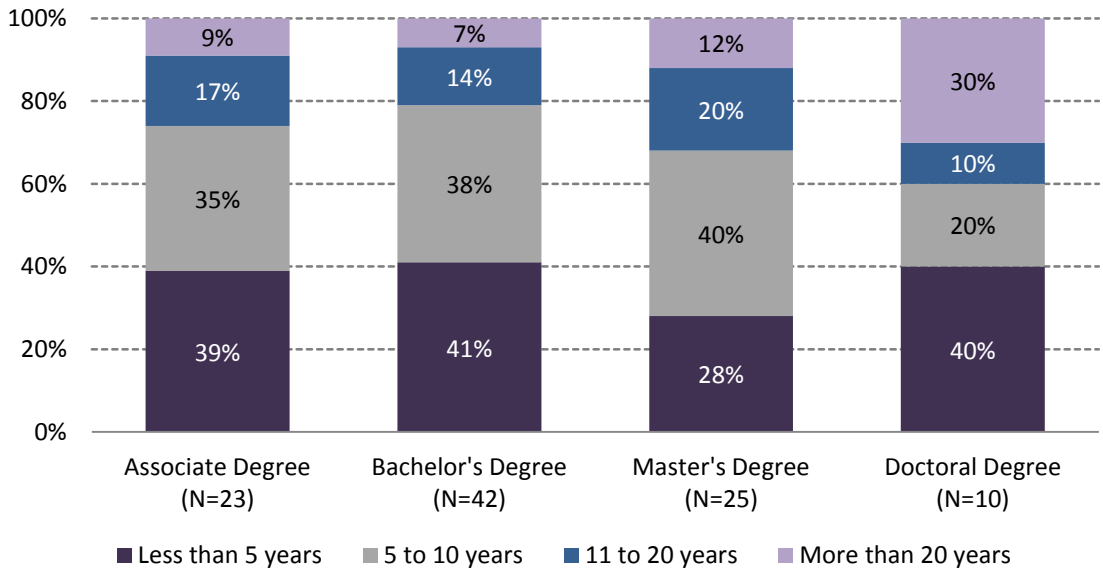


Figure 3.7: Number of Years Teaching at Current College or University for Faculty Participating in the Nebraska Early Childhood Higher Education Inventory, by Degree Program



Other Employment

Associate degree faculty members (65 percent) were more likely to report that they had worked in roles other than college-level teaching or administration in the past 10 years than faculty members at all other degree levels (54 percent of bachelor's, 30 percent of master's, and 18 percent of doctoral faculty members). ***Figure 3.8*** *displays the most frequently mentioned job roles.*

Figure 3.8: Most Frequently Reported Job Roles in the Last 10 Years of Faculty Participating in the Nebraska Early Childhood Higher Education Inventory, by Degree Program

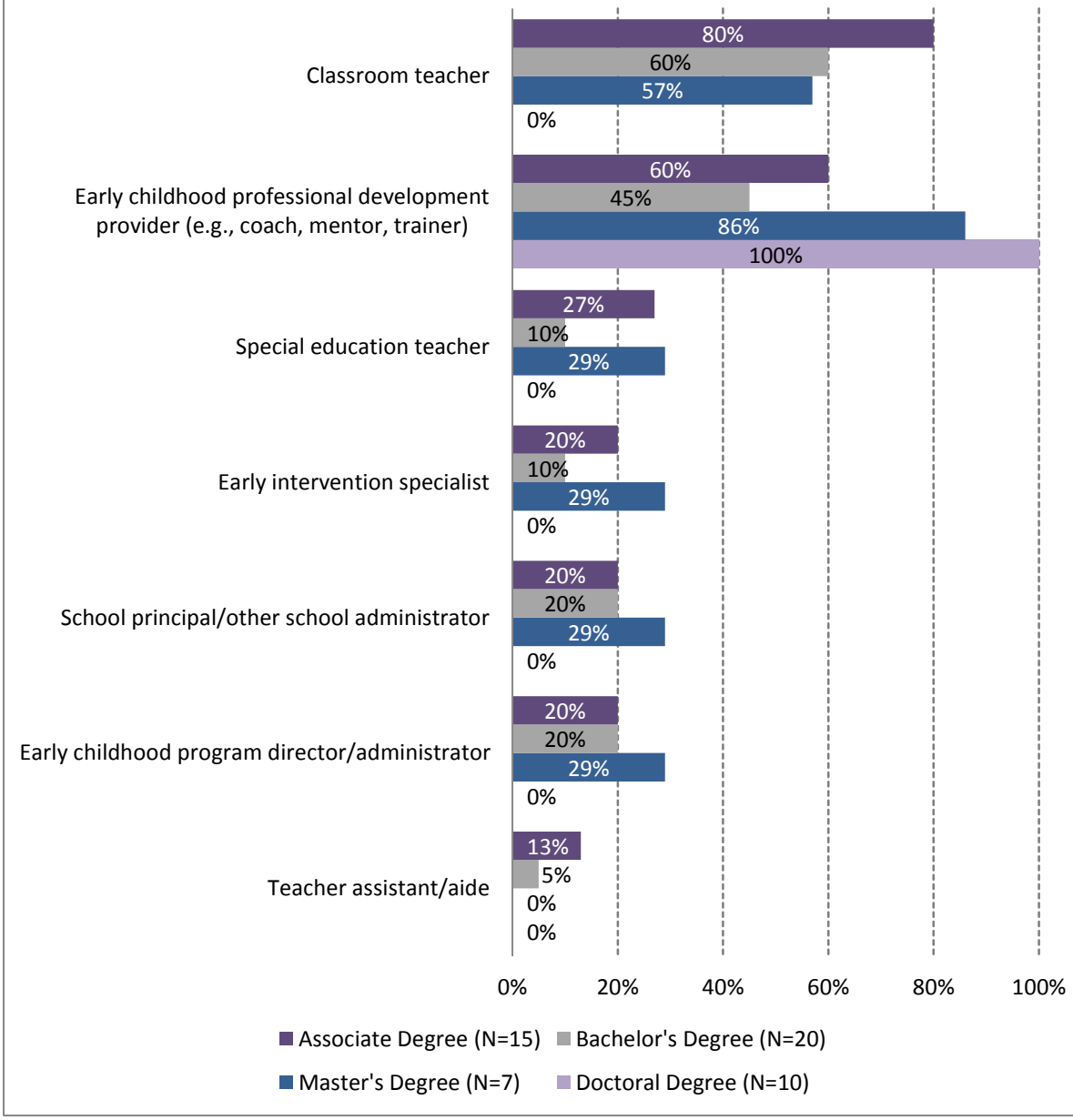


Figure 3.9: Employment Status of Faculty Participating in the Nebraska Early Childhood Higher Education Inventory, by Degree Program

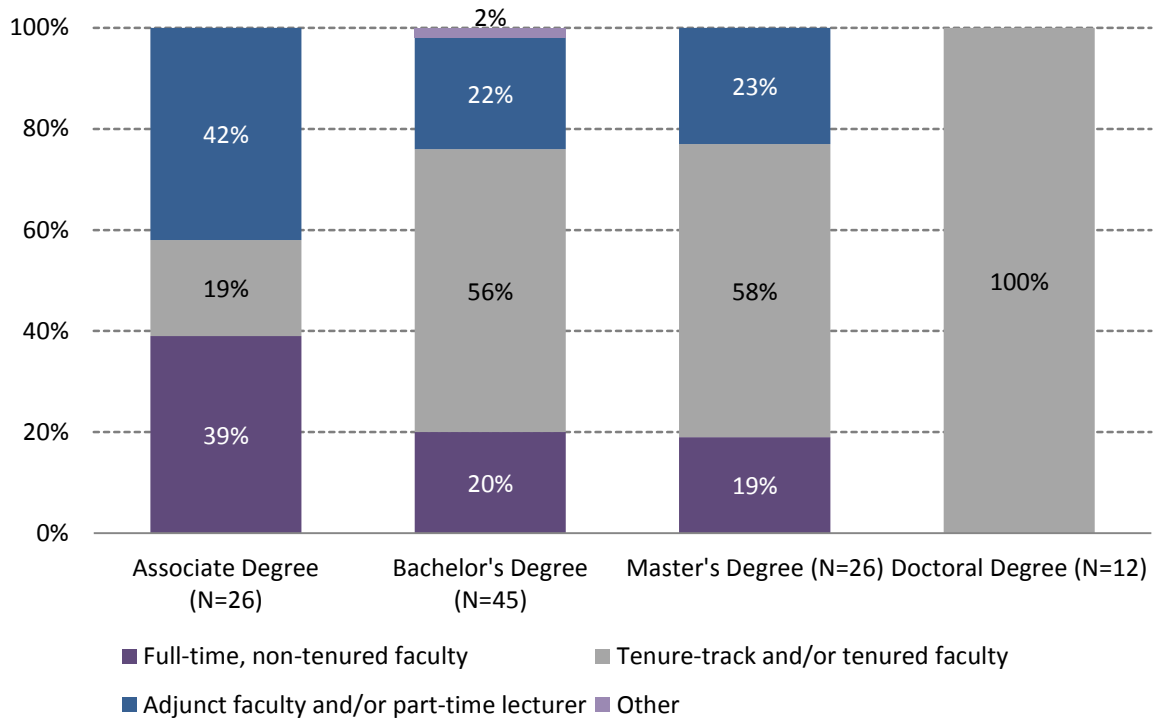


Figure 3.10: Primary Responsibility of Faculty Participating in the Nebraska Early Childhood Higher Education Inventory, by Degree Program

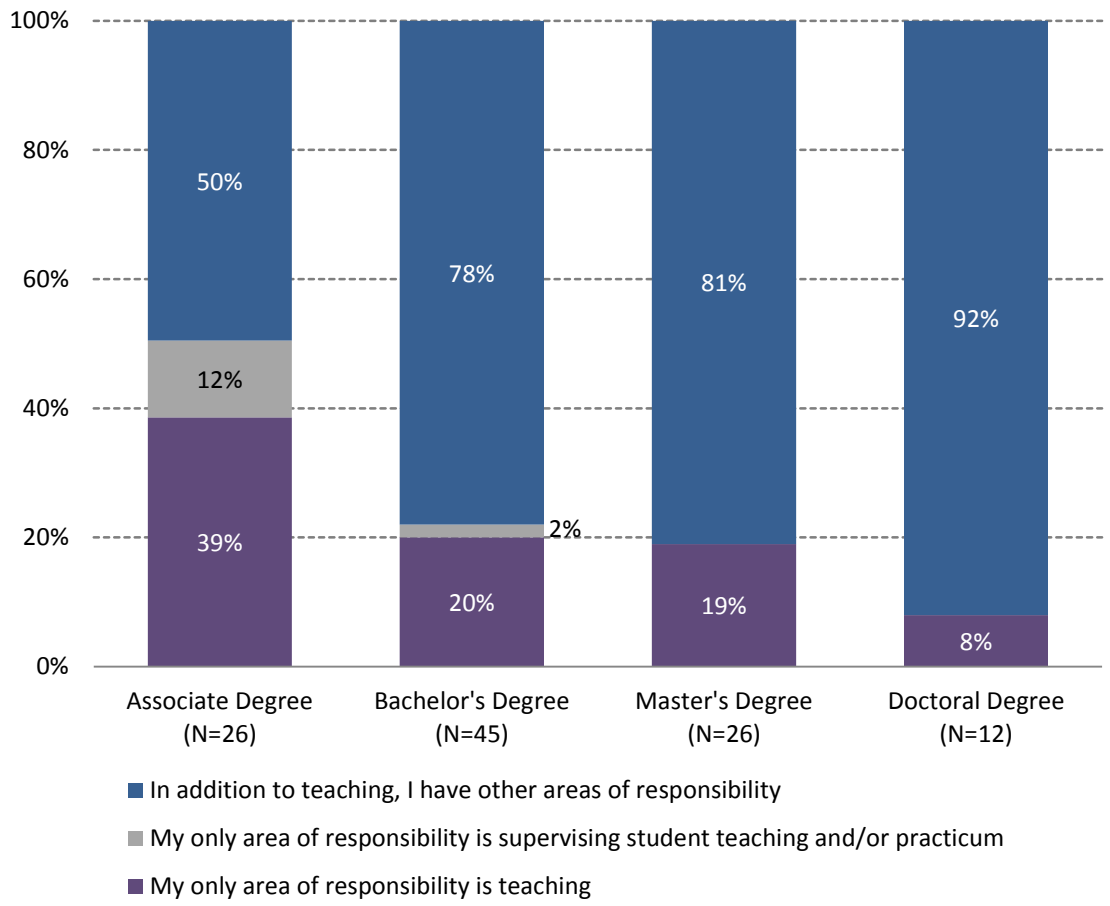


Figure 3.11: Number of Courses Taught in a Typical Academic Year by Faculty Participating in the Nebraska Early Childhood Higher Education Inventory, by Degree Program

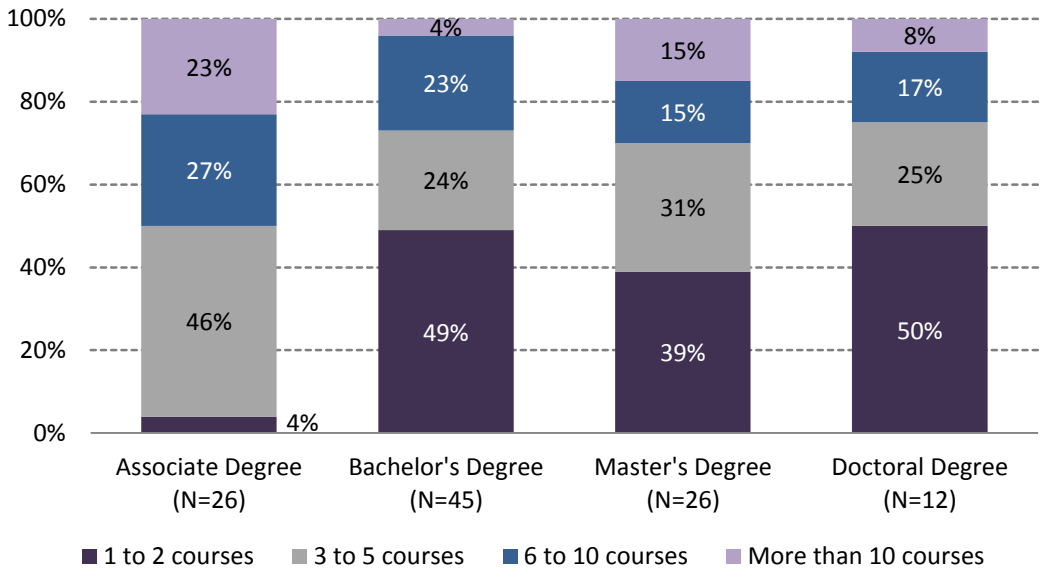
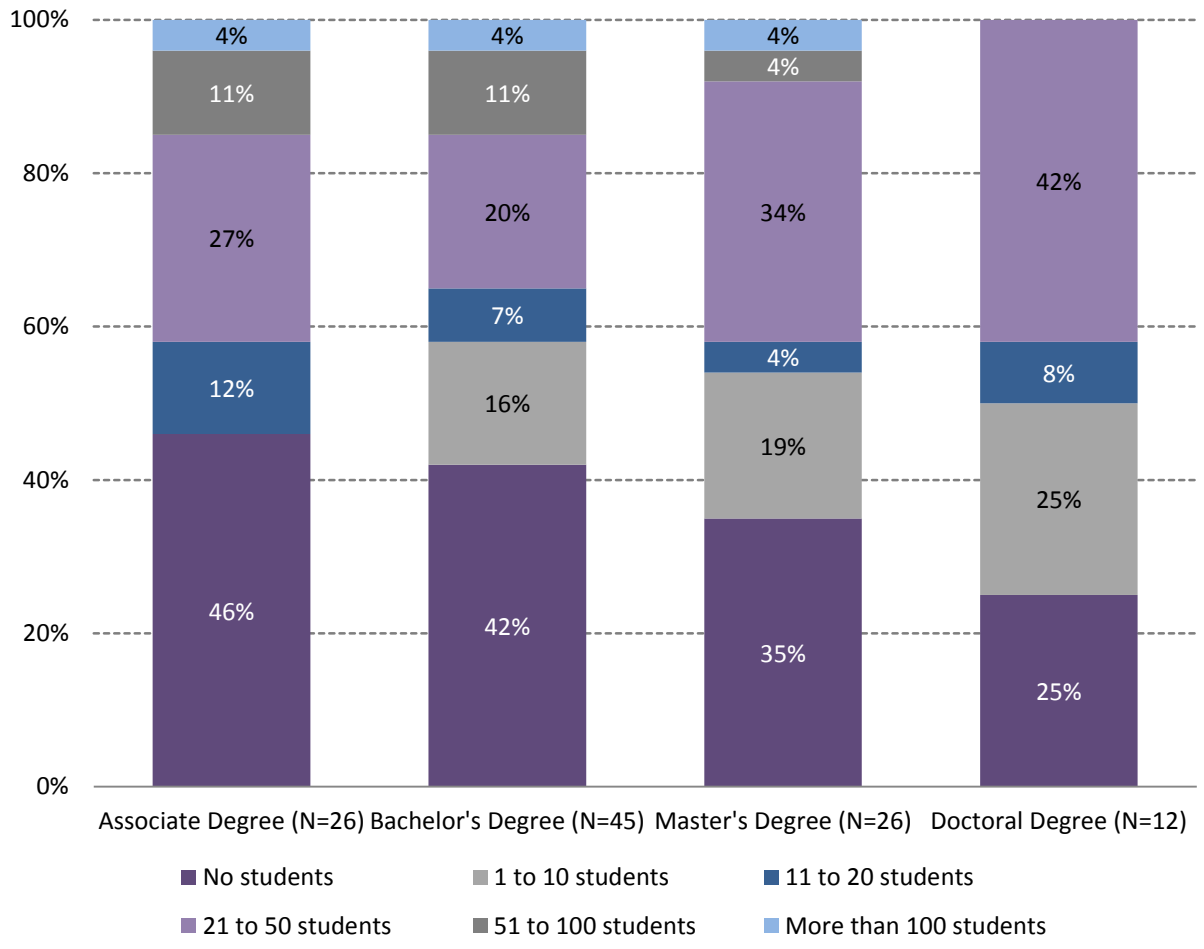


Figure 3.12: Number of Students Advised in a Typical Academic Year by Faculty Participating in the Nebraska Early Childhood Higher Education Inventory, by Degree Program



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

The Inventory asked faculty members to indicate their primary teaching focus as either "child development and learning," "curriculum and teaching methods," or "both equally." They were also asked to indicate their expertise related to various age groups of children, from birth through the early elementary grades.

- The vast majority of faculty at all levels to report focusing on "curriculum and teaching methods," either exclusively or equally with "child development and learning." Almost all master's degree faculty members (92 percent), 88 percent of bachelor's, 83 percent of doctoral, and 80 percent of associate degree faculty members did so. (See **Figure 3.13**.)

- Associate degree (20 percent) and doctoral degree (17 percent) faculty members were the most likely to report focusing exclusively on "child development and learning" compared to 12 percent of bachelor's and 8 percent of master's degree faculty members. (See **Figure 3.13**.)

- Thirty-seven percent of bachelor's degree faculty members and less than one-third of faculty members at all other degree levels reported focusing exclusively on "curriculum and teaching methods." (See **Figure 3.13**.)

- The vast majority of associate and master's, and all doctoral degree faculty members reported expertise related to preschool-age children, either exclusively or in addition to older and younger children. Three-quarters of bachelor's degree faculty members reported expertise related to preschool-age children. (See **Figure 3.14**.)

- Doctoral (60 percent) and master's (52 percent) degree faculty members were more likely to report expertise related to infants and toddlers (either exclusively or in addition to older age groups) than were associate (54 percent) and bachelor's (50 percent) degree faculty members. (See **Figure 3.14**.)

- Associate degree faculty members (46 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 were bachelor's (66 percent), master's (56 percent), and doctoral (50 percent) degree faculty members. (See **Figure 3.14**.)

Figure 3.13: Primary Teaching Focus of Faculty Participating in the Nebraska Early Childhood Higher Education Inventory, by Degree Program

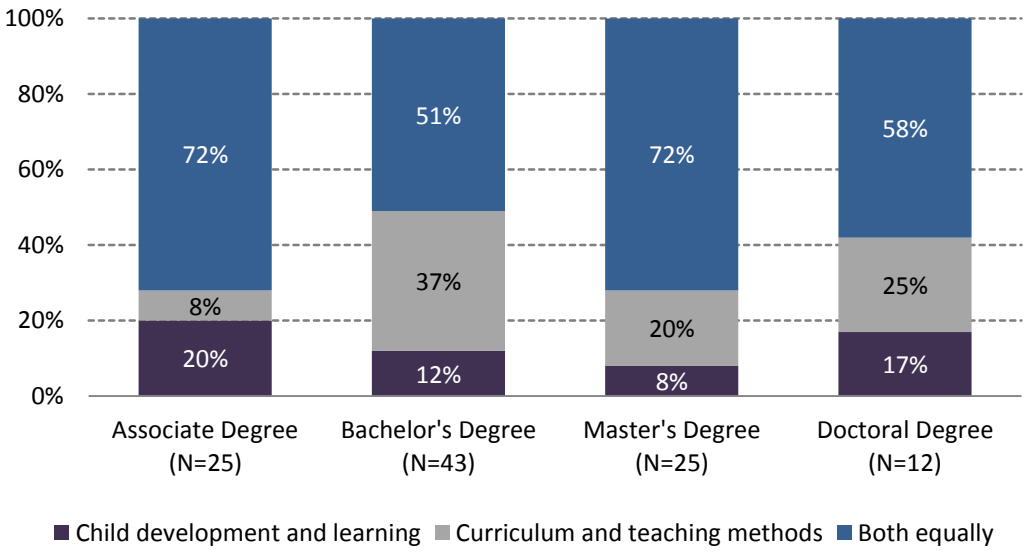
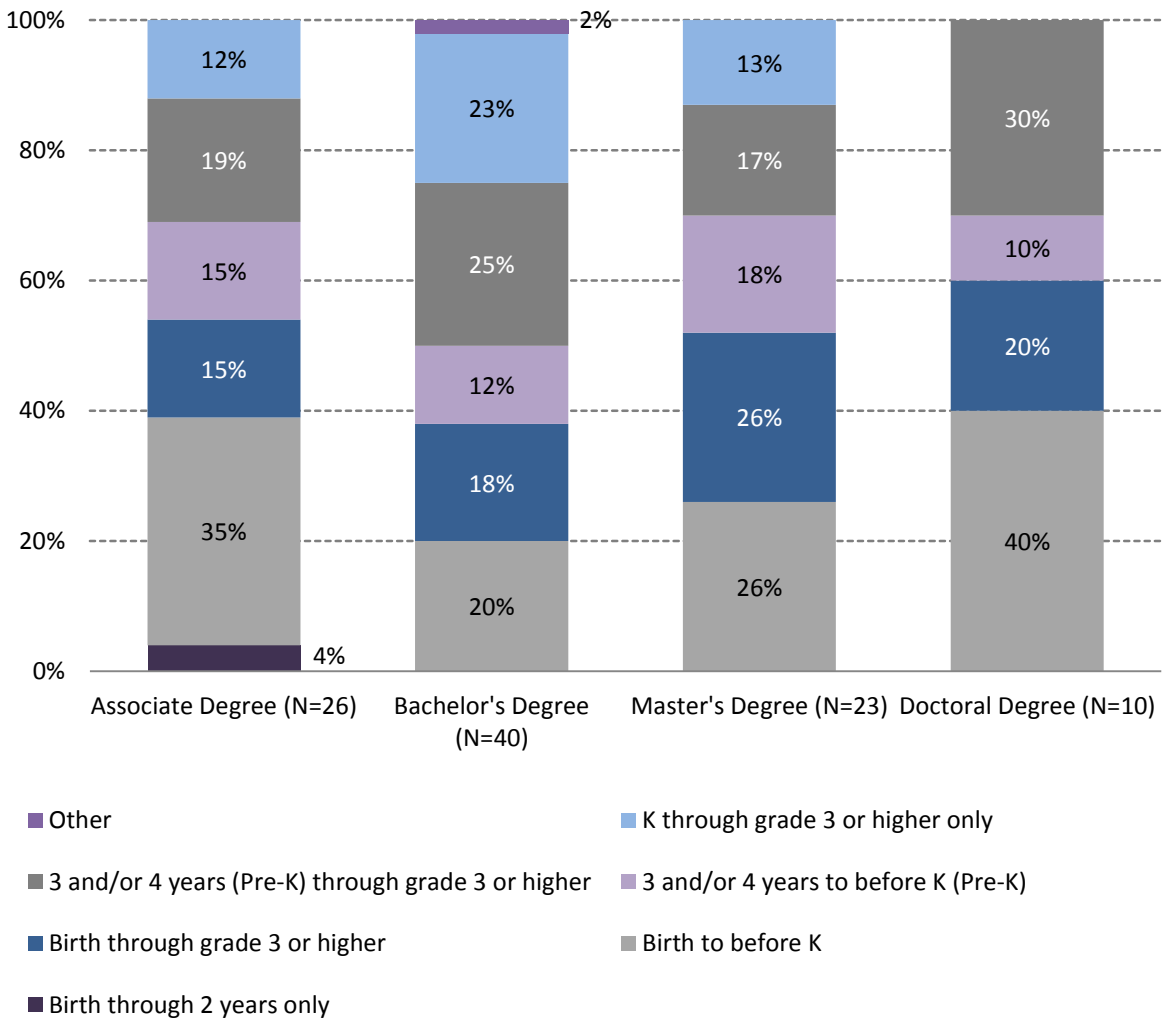


Figure 3.14: Primary Age Group Expertise of Faculty Participating in the Nebraska Early Childhood Higher Education Inventory, by Degree Program



Content and Age-Group Focus of Coursework Taught by Faculty Members Participating in the Inventory

The Inventory asked faculty members to identify the topics covered in the courses they had taught in the past two years. The topics were categorized into broad content areas:

1. Child Development and Learning;
2. Teaching Diverse Child Populations;
3. Teaching and Curriculum;
4. Teaching Skills in Early Childhood Settings;
5. Early Childhood Administration and Leadership; and
6. Early Mathematics.

See **Figures 3.15** through **3.19** for lists of topics.

Faculty members were then asked to specify the age group focus of the topics covered in their coursework. The four age groups were:

1. Infants and toddlers (birth to 2 years);
2. Preschool (3 and/or 4 years); and
3. Kindergarten through 3rd grade or higher.

See **Appendix Tables A3-1** through **A3-4**.

The Early Mathematics content areas were explored in greater depth. These findings are reported in Section 3.

- Approximately two-thirds or more of faculty members at all degree levels reported teaching nearly all topics within the contents areas of:

  ⇒ Child development and learning (see **Figure 3.15** for list of topics);
  ⇒ Teaching diverse child populations (see **Figure 3.16** for list of topics); and
  ⇒ Teaching skills in early childhood settings (see **Figure 3.18** for list of topics).

- The percentage of faculty members reporting teaching all topics in the "teaching and curriculum" content area varied by degree level, with the associate degree faculty most likely to do so. (See **Figure 3.17** for list of topics.)

  ⇒ Approximately three-quarter or more of associate degree faculty members reported teaching all teaching and curriculum topics.
  ⇒ Less than one-half of bachelors and doctoral degree faculty members reported coursework in "teaching art to children" and "teaching social studies to children."

- Faculty members at all degree levels were less likely to report teaching all topics within the early childhood administration and leadership content area than all topics within the other content areas described above. (See **Figure 3.19** for list of topics.)

  ⇒ At least one-half of associate degree faculty members reported teaching eight of the 15 topics listed in the Inventory.
  ⇒ At least one-half of bachelor's degree faculty members reported teaching four of the 15 topics.
  ⇒ At least one-half of master's degree faculty members reported teaching seven of the 15 topics.
  ⇒ At least one-half of doctoral degree faculty members reported teaching six of the 15 topics.

- The largest percentage of faculty members at all levels reported teaching the following early childhood administration and leadership topics:

  ⇒ Assessment and documentation to inform teaching and learning;
  ⇒ Guiding practitioners in implementing curriculum and appropriate teaching strategies; and
  ⇒ Building relationships with other teachers and/or early childhood professionals.

- The topics mentioned least by faculty members included:

  ⇒ Organizational development and change;
  ⇒ Fiscal procedures and management; and
  ⇒ Grant management and proposal writing.

- Overall, faculty members at all degree levels were more likely to report focusing content on working with preschoolers than with children in other age groups. (See **Appendix Tables A3-1** through **A3-4**.)

- Although there were variations by content areas, the associate degree faculty members were the most likely overall to report focusing content on infants and toddlers. (See **Appendix Tables A3-1** through **A3-4**.)

*The following figures display the percentages of faculty members at each degree level who reported teaching the topic within the past two years. See **Appendix Tables A3-1** through **A3-4** for the age-group focus of the content taught.*

Figure 3.15: Coursework on Child Development and Learning Taught by Faculty Participating in the Nebraska Early Childhood Higher Education Inventory, by Degree Program

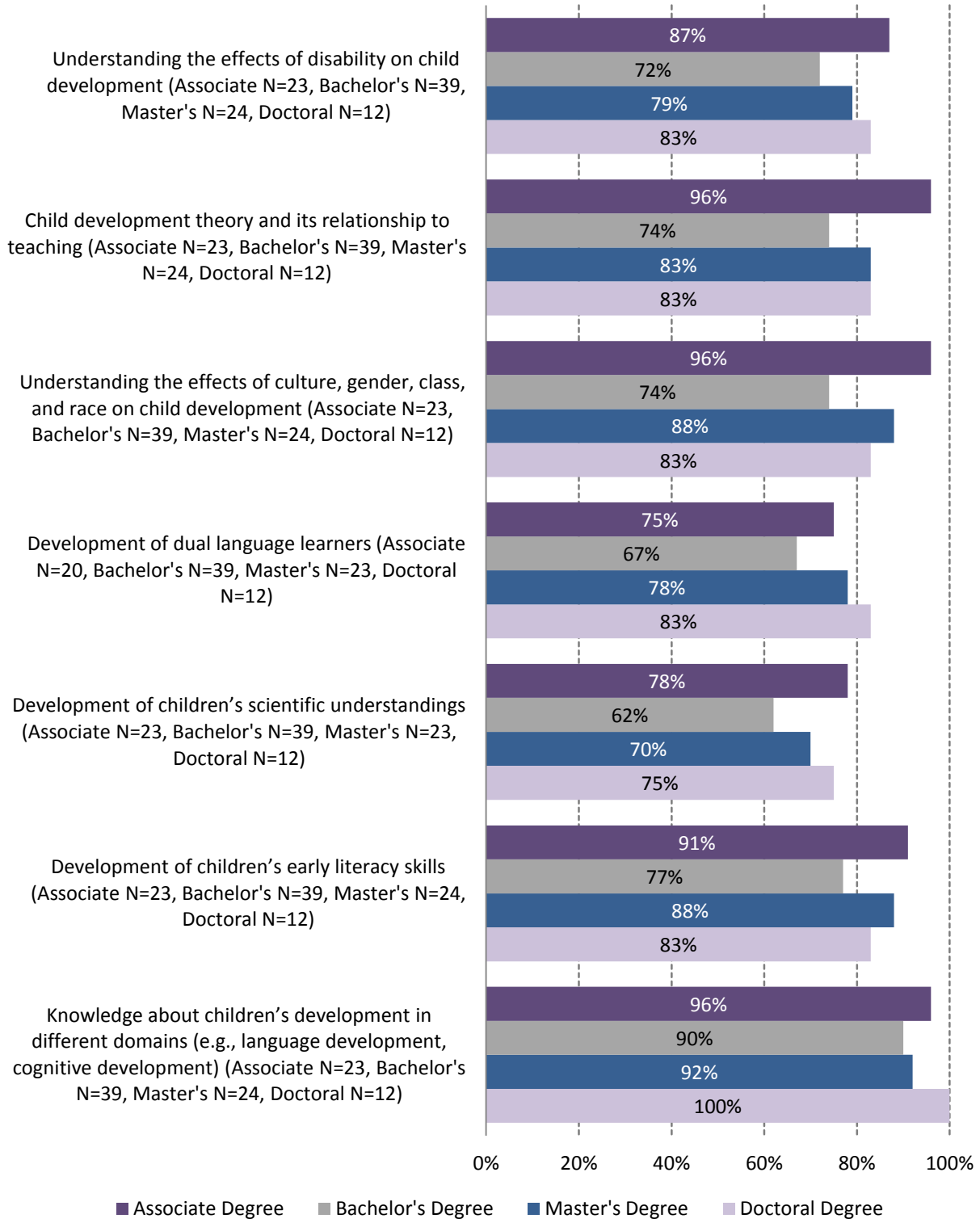


Figure 3.16: Coursework on Teaching Diverse Child Populations Taught by Faculty Participating in the Nebraska Early Childhood Higher Education Inventory, by Degree Program

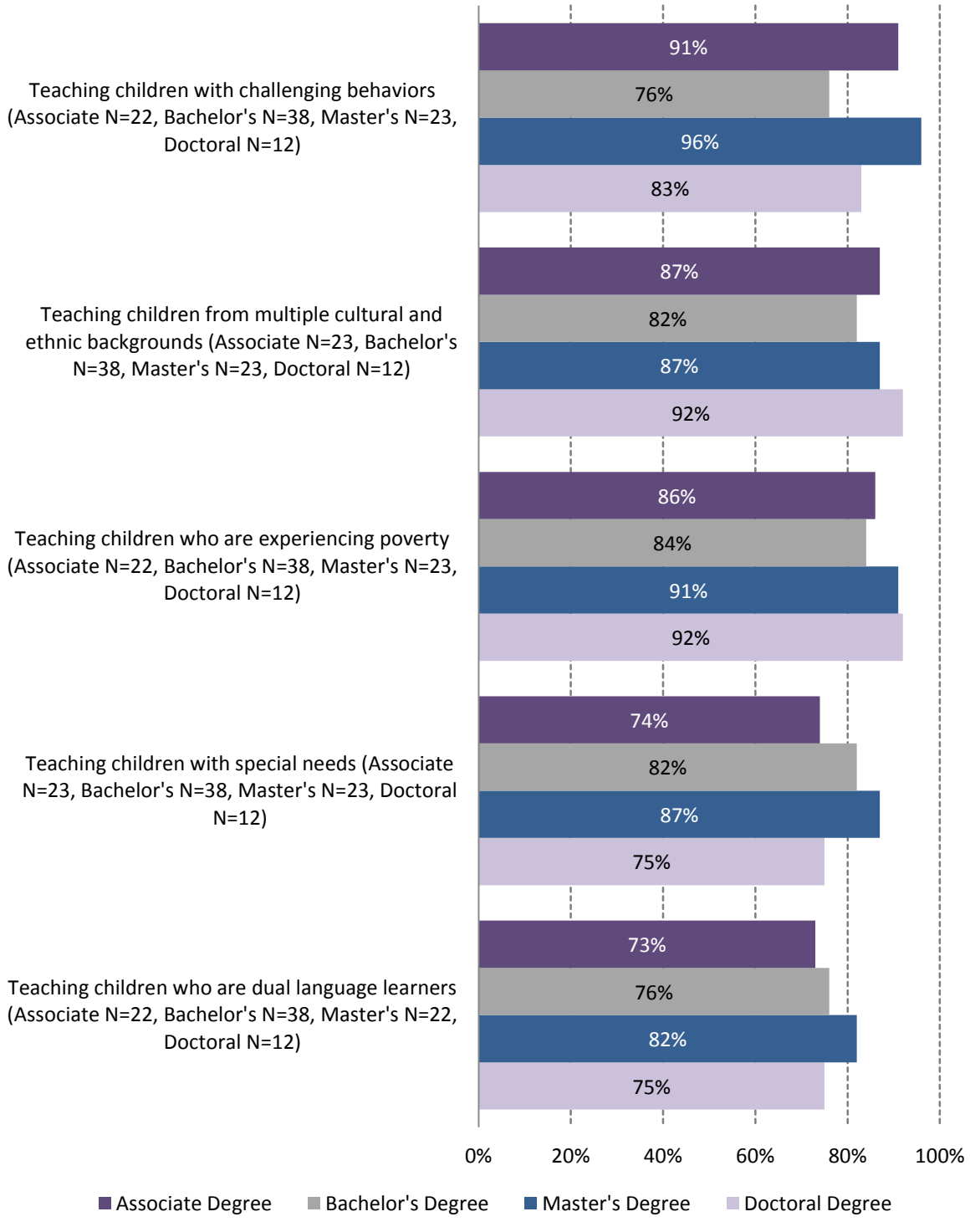


Figure 3.17: Coursework on Teaching and Curriculum Taught by Faculty Participating in the Nebraska Early Childhood Higher Education Inventory, by Degree Program

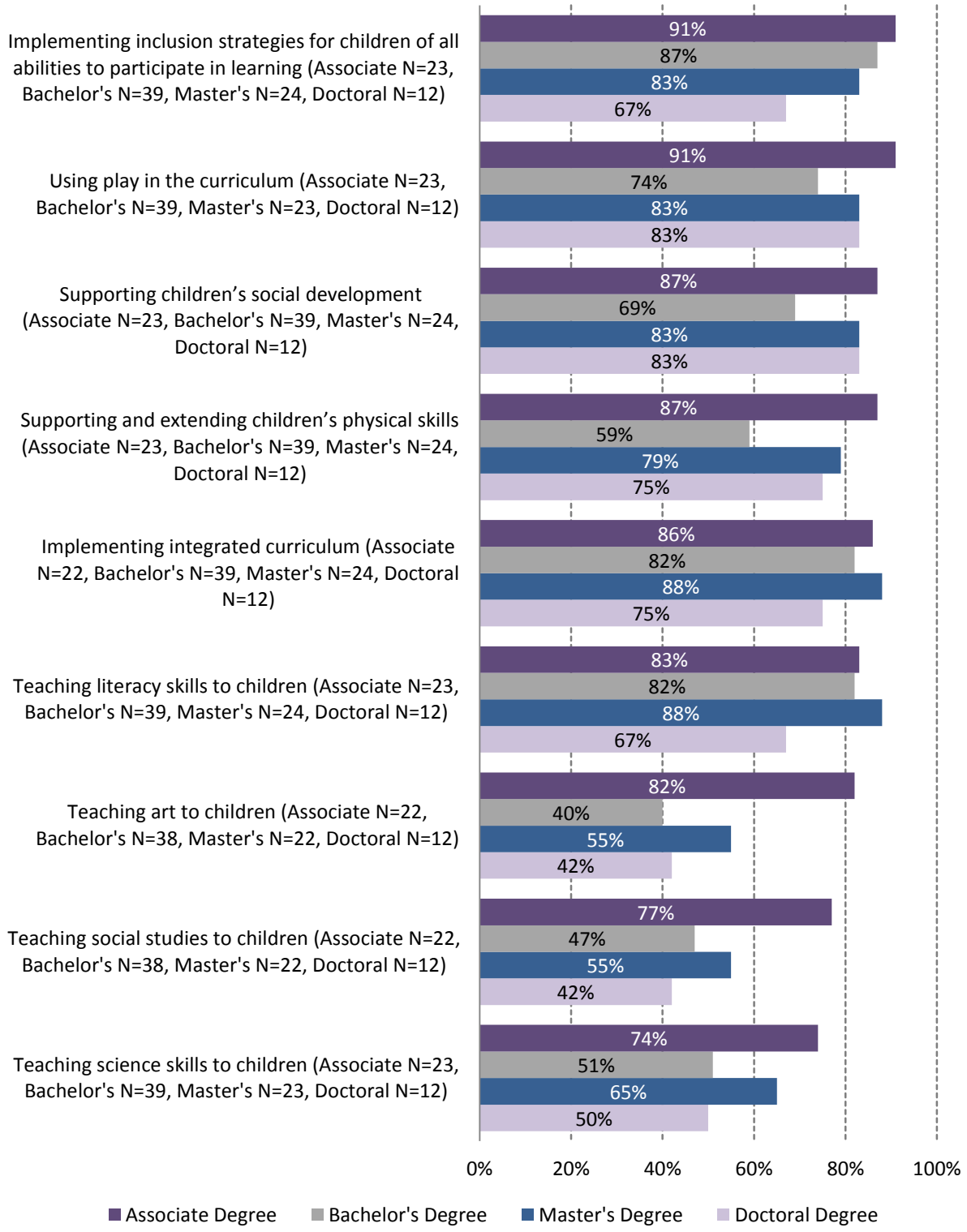


Figure 3.18: Coursework on Teaching Skills in Early Childhood Setting Taught by Faculty Participating in the Nebraska Early Childhood Higher Education Inventory, by Degree Program

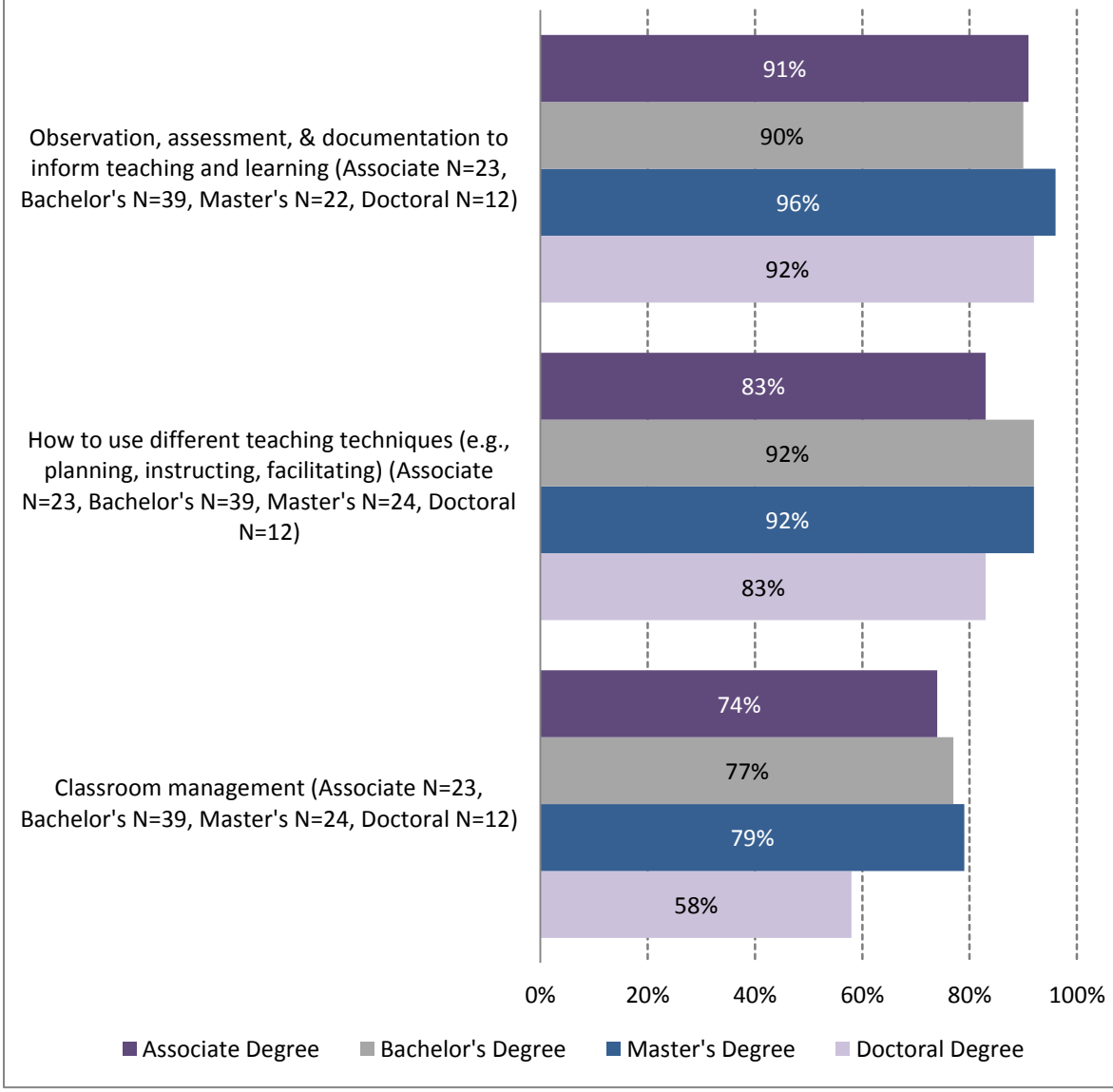


Figure 3.19: Coursework on Administration and Leadership: Supervision and Operations Taught by Faculty Participating in the Nebraska Early Childhood Higher Education Inventory, by Degree Program

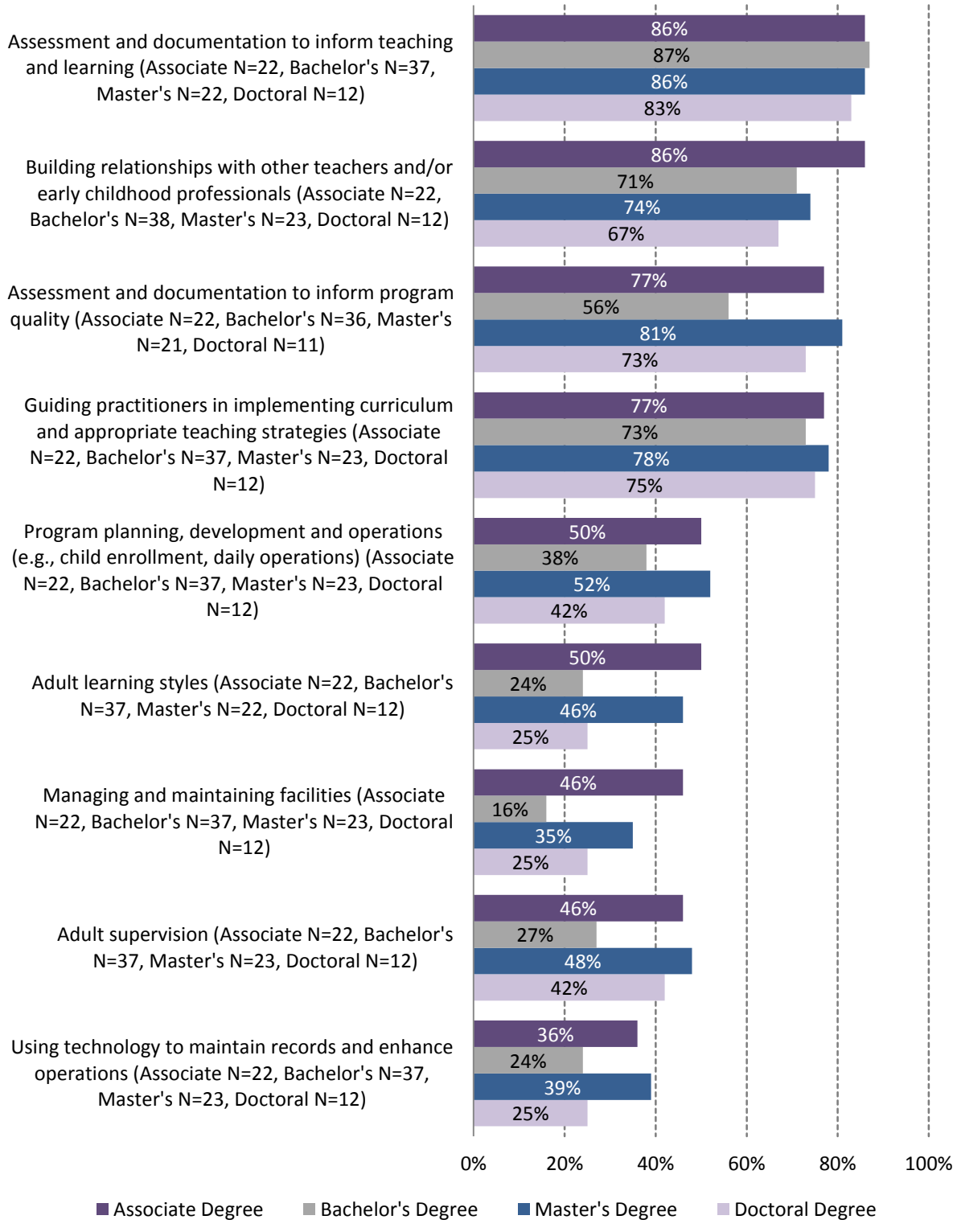
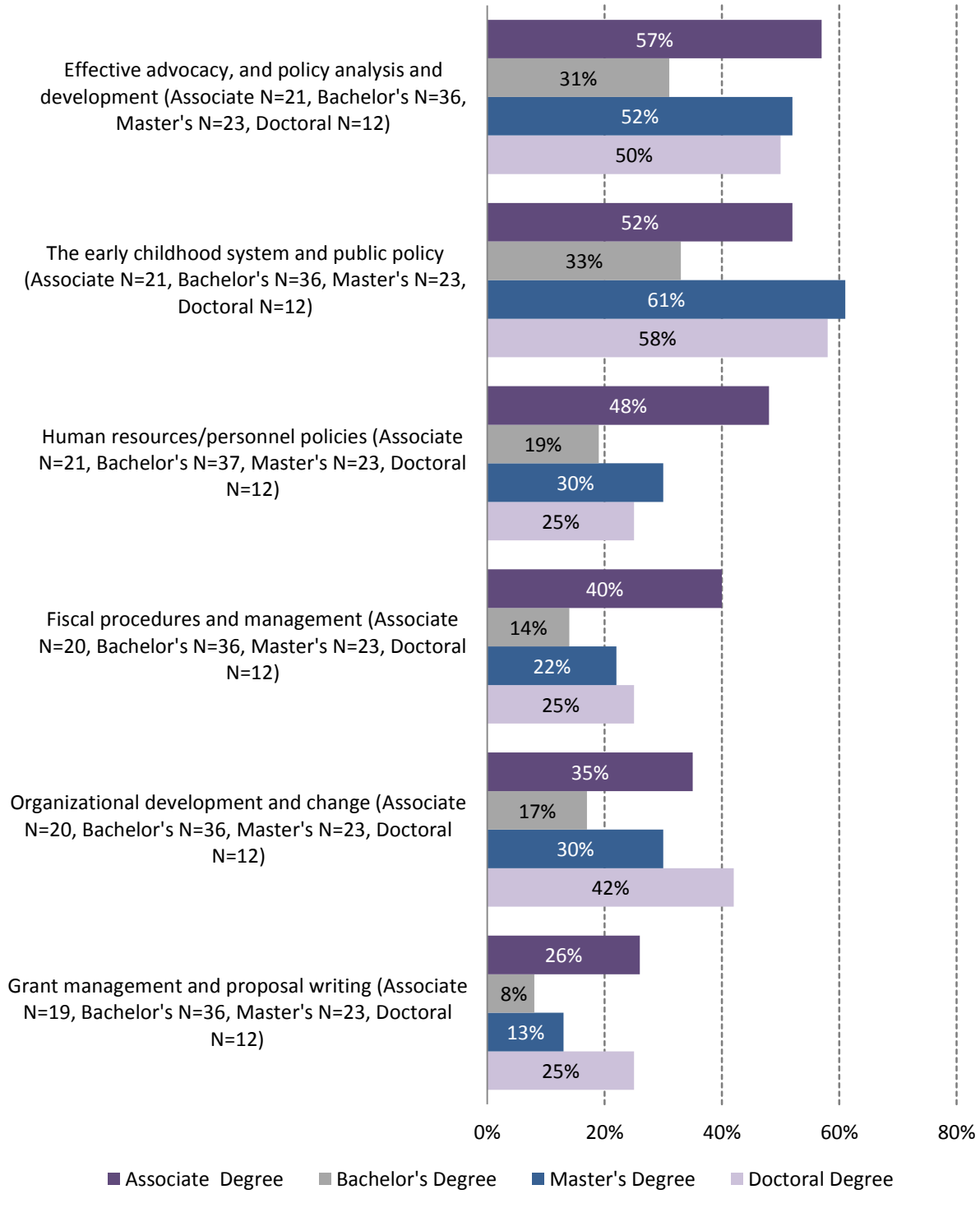


Figure 3.19: Coursework on Administration and Leadership Taught by Faculty Participating in the Nebraska Early Childhood Higher Education Inventory, by Degree Program (Continued)



Professional Development Opportunities and Needs of Faculty Members Participating in the Inventory

The Inventory asked faculty members whether they had participated in professional development opportunities in the past three years. The Inventory then listed 29 topics and asked faculty members who responded "yes" 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 **Appendix Table A3-5** through **A3-8** for lists of topics.

The list also included topics related to the two areas of special interest:

- Family engagement;[1] and
- Early mathematical development.[1]

See **Appendix Table A3-9** and **A3-10** for lists of topics**.**

The next series of questions asked faculty members to indicate areas in which it would be helpful to gain additional knowledge or training. Faculty members were provided with a list of 18 topics, and asked to indicate whether it would be helpful to have additional knowledge or training on these topics. 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 one general topic related to early mathematics, and one general topic related to family engagement.

See **Appendix Table A3-11** through **A3-14** for lists of topics.

[1] In separate questions, the Inventory asked more specifically about faculty members' interest in professional development related to early mathematics and family engagement. These findings are reported in Chapter 5.

Professional Development Opportunities

- The vast majority of faculty members at all degree levels reported having participated in professional development opportunities during the last three years (92 percent of associate degree faculty, 91 percent of bachelor's degree faculty, 96 percent of master's degree faculty, and 92 percent of doctoral degree faculty). (See **Appendix Table A3-5** through **A3-8** for list of topics and participate rates.)

- The three most frequently reported professional development opportunities, participated in by approximately one-third or more of faculty members at all degree levels, were:

  ⇒ Strategies and techniques for mentoring/coaching of adult students;
  ⇒ Using technology to promote adult learning; and
  ⇒ Child assessment (e.g., portfolios, using particular assessment tools such as the Work Sampling System).

- Fewer than one-third of faculty members across degree levels reported that they had participated in any of the topics related to working with diverse college students or any of the topics related to administration and leadership topics. Participation in professional development related to other topics varied by degree level. (See **Appendix Table A3-5** through **A3-8**.)

Professional Development that Faculty Members Indicate Would be Helpful

- Faculty members at all degree levels indicated a number of areas in which it would be helpful to gain additional knowledge or training. Associate degree faculty members were more likely than other faculty members to indicate an interest or need for professional development across most topics. The topics mentioned by at least 40 percent of faculty at each degree level focused on diversity and technology. (See **Appendix Table A3-11** through **A3-14.**) These were:

  ⇒ Teaching practitioners to work with children from diverse cultural backgrounds;
  ⇒ Teaching practitioners to work with children who are dual language learners;
  ⇒ Using technology to promote adult learning; and
  ⇒ Teaching practitioners to work to use technology with children.

- Approximately forty percent or more of associate, bachelor's, and master's degree faculty members also identified the following topics in which it would be helpful to gain additional knowledge or training:
  ⇒ Teaching practitioners to work with children with special needs, and
  ⇒ Teaching culturally and ethnically diverse college students.

CHAPTER 4: CHALLENGES FACING EARLY CHILDHOOD DEGREE PROGRAMS, AND ADDITIONAL RESOURCES NEEDED

Challenges Facing Early Childhood Degree Programs

The Inventory asked program leaders whether their degree programs were facing any challenges. Program leaders who responded "yes" were then asked to identify the challenges from a list of 23 possible responses related to "lack of resources and support" and "need for faculty expertise." (See **Figure 4.1** and **4.2** and **Appendix Table A4-1** and **A4-2** for the list of challenges.)

- All associate and bachelor's degree programs, and 50 percent of master's degree programs, reported facing at least one challenge.

Degree programs reporting at least one challenge:

- The challenges most frequently reported by degree programs at all levels were:

  ⇒ Need for additional faculty expertise in teaching young children who are dual language learners;
  ⇒ Insufficient ability to recruit students; and
  ⇒ Need for additional faculty expertise in working with diverse populations of college students.

- Some of the challenges varied by levels of degree program:

  ⇒ Associate degree programs were more likely to mention:
  - Inequitable distribution of resources compared to other programs in the institution;
  - Faculty administrative responsibilities that interfere with time with students (e.g., lack of time for teaching, advising);
  - Lack of recognition of the value of early childhood from within the department or school;
  - Lack of articulation between 2 year and 4 year college early childhood degree programs; and
  - Need for additional faculty expertise in teaching infants and toddlers.

Figure 4.1: Challenges Related to Lack of Resources and Support Facing Nebraska Early Childhood Higher Education Degree Programs, By Program

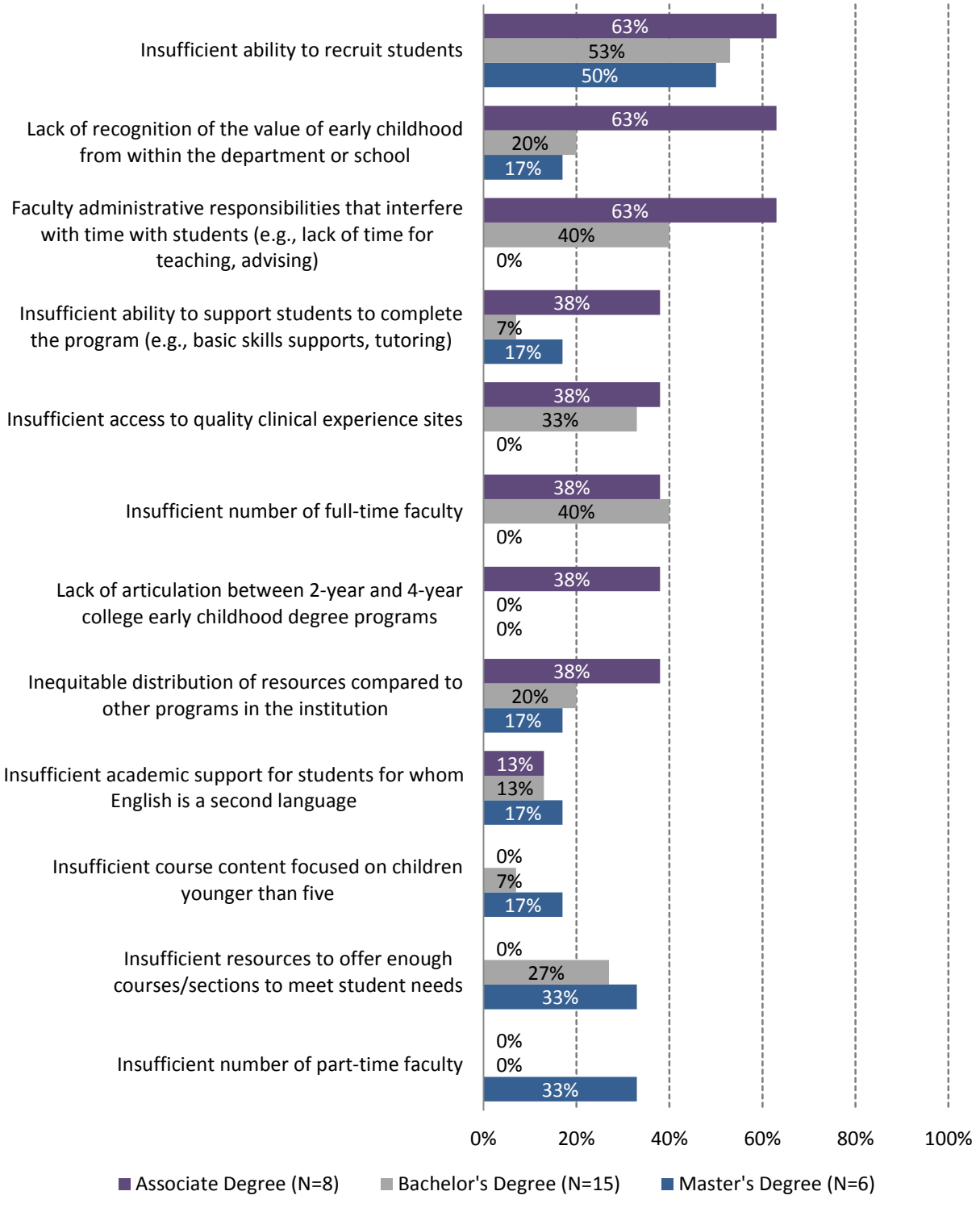
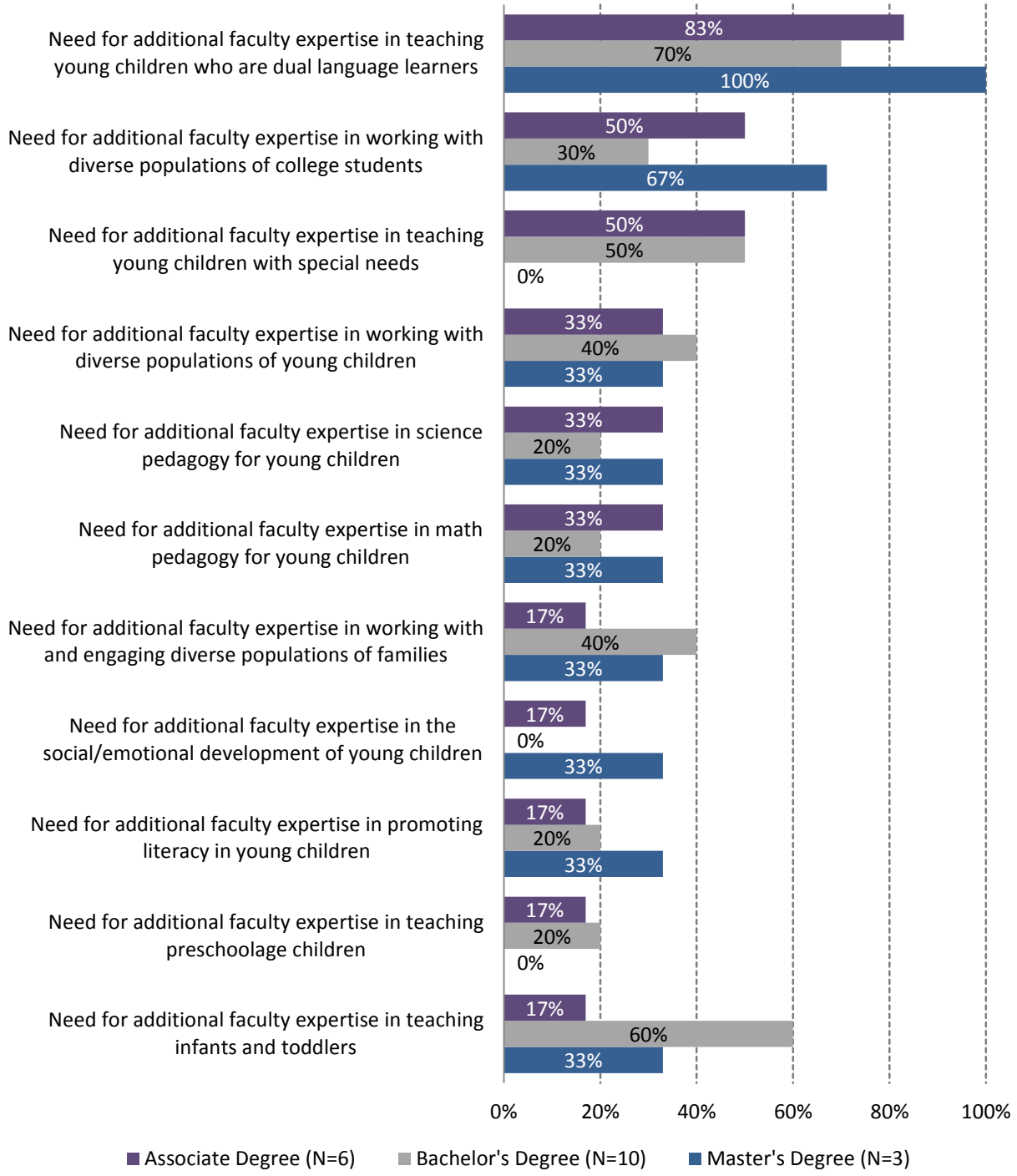


Figure 4.2: Challenges Related to Need for Faculty Expertise Facing Nebraska Early Childhood Higher Education Degree Programs, By Program



Additional Resources Needed for Improving Early Childhood Degree Programs

The Inventory asked faculty members whether resources were needed to improve the early childhood degree program(s) at their college or university. Faculty members who responded "yes" were then asked to identify needed resources related to program resources and faculty resources from a list of 16 possible responses. (See **Figure 4.3** for list of resources.)

- Approximately three-quarters of associate (74 percent) and bachelor's (76 percent) degree faculty and two-thirds of master's (64 percent) and doctoral (67 percent) faculty members reported that additional resources were needed to improve the early childhood degree program at their college or university.

Among faculty members who reported needing at least one additional resource:

- The three most frequently mentioned resources, cited by approximately one-half or more of faculty members at all levels, were:
  - ⇒ Resources for program planning and improvement (e.g., new course development);
  - ⇒ Resources for faculty professional development; and
  - ⇒ Additional full-time faculty.

- More than one-half of doctoral degree faculty members (57 percent), and approximately one-half or associate (44 percent) and master's (46 percent), and one-third of bachelor's (33 percent) degree faculty members identified the need for an "increase in racial/ethnic diversity among faculty."
  - ⇒ Fewer faculty members identified a need for increasing linguistic diversity. Less than one-half of associate (19 percent), bachelor's (19 percent), master's (36 percent), and doctoral (43 percent) degree faculty members mentioned the need for an "increase in linguistic diversity among faculty."

- Other resources mentioned by faculty varied by program degree levels. For example:
  - ⇒ Associate degree faculty members (63 percent) were more likely to mention "increased academic support for students" than were bachelor's (22 percent), master's (36 percent), or doctoral (14 percent) degree faculty members.
  - ⇒ Bachelor's degree faculty members (48 percent) were more likely to mention "effective mentoring of faculty" than were associate (27 percent), master's (31 percent), or doctoral (29 percent) degree faculty members.
  - ⇒ Master's degree faculty members (64 percent) were more likely to mention "increased financial resources for students" than were associate (50 percent), bachelor's (33 percent), or doctoral (43 percent) degree faculty members.
  - ⇒ Doctoral degree faculty members (57 percent) were more likely to mention "funding for travel" than were associate (40 percent), bachelor's (44 percent), or master's (46 percent) degree faculty members.

Figure 4.3: Additional Resources Needed for Improving Early Childhood Degree Programs, as Reported by Faculty Participating in the Nebraska Early Childhood Higher Education Inventory, by Degree Program

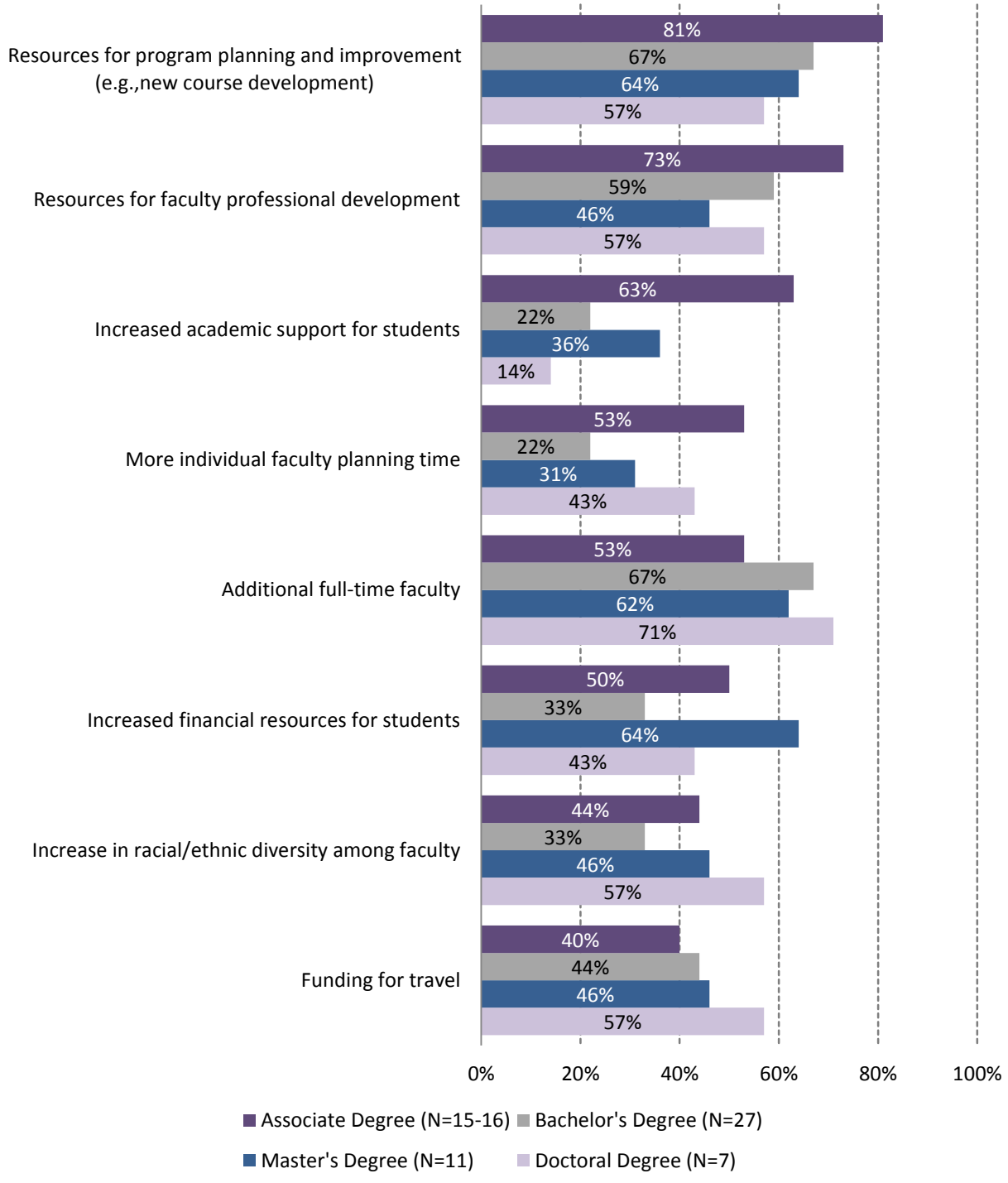
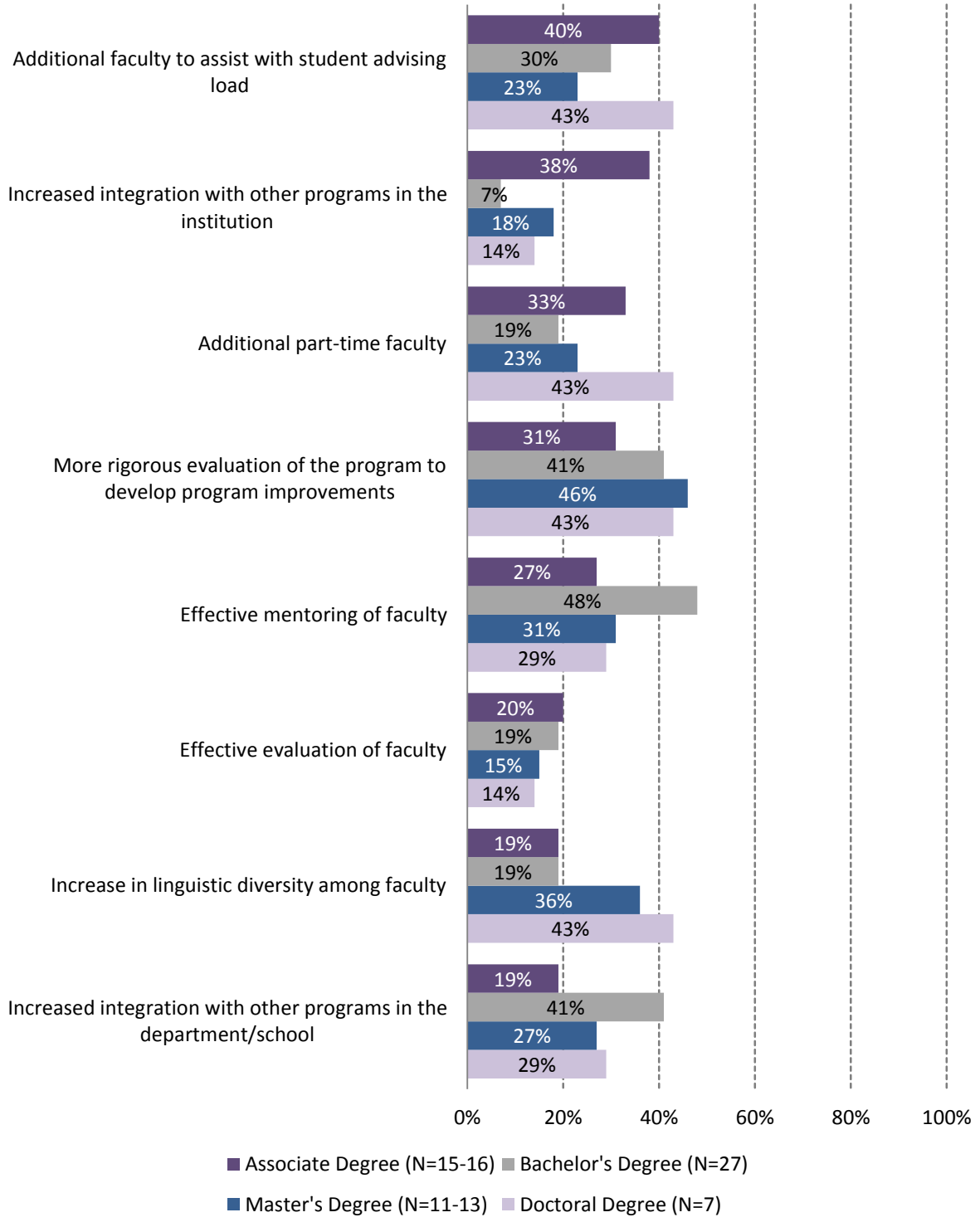


Figure 4.3: Additional Resources Needed for Improving Early Childhood Degree Programs, as Reported by Faculty Participating in the Nebraska Early Childhood Higher Education Inventory, by Program (Continued)



CHAPTER 5: FAMILY ENGAGEMENT AND EARLY MATHEMATICS

Importance of the Inclusion of Various Domains in Teacher Preparation Programs

The Inventory explored how faculty members viewed the importance of including the domains of family engagement and early mathematics, relative to other domains, in higher education teacher preparation programs. 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 how important they considered it for various domains to be included in these degree programs.

The domains included:

- **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.
- **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.
- **Literacy**: Understanding the components and sequence of literacy development in young children, and how to promote their skills related to oral and written language.
- **Social-emotional development**: Understanding socio-emotional development and its relationship to learning, and how to support children's socio-emotional skills.
- **Motor development**: Understanding normal and atypical motor development in young children and its relationship to learning, and how to foster children's motor skill development.

See **Figure 5.1** and **Appendix Table A5-1**.

- Faculty members at all degree levels were less likely to consider it "very important" to include the early mathematics domain than they were for other domains, including family engagement, in teacher preparation programs for practitioners working with infants and toddlers.

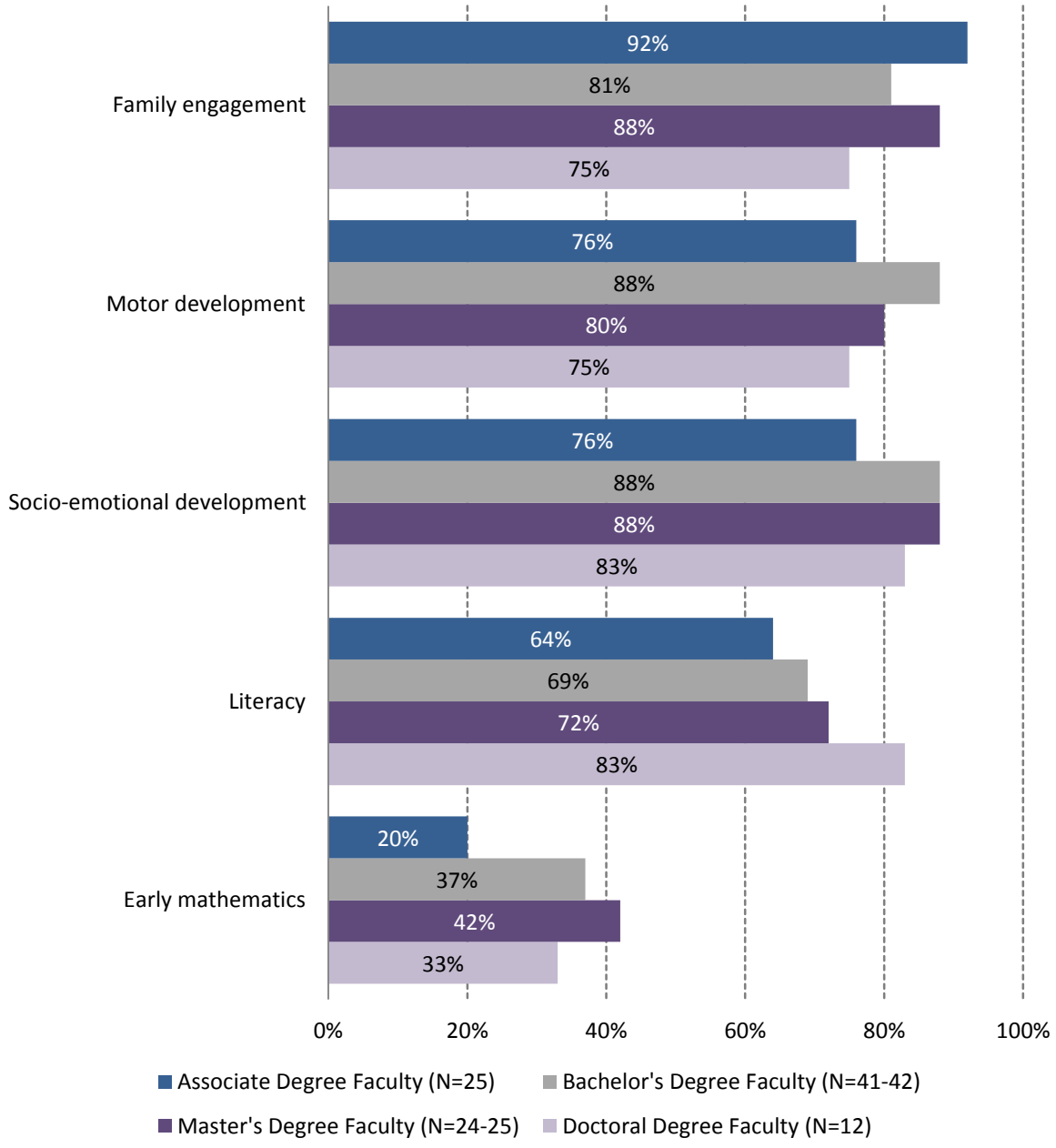
  ⇒ One-fifth of associate, one-third of bachelor's, and two-fifths of master's degree faculty members considered it "very important" to include the math domain for teachers of infants and toddlers.
  ⇒ More than one-half of faculty members at each degree level considered it "very important" to include the literacy domain for teachers of infants and toddlers.
  ⇒ Three-quarters or more of faculty members at each degree level considered it "very important" to include the domains of family engagement, social-emotional development, and motor development for teachers of infants and toddlers.

- 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 preschoolers, than for those working with infants and toddlers.

  ⇒ Sixty percent or more of faculty members at all degree levels considered it "very important" to include the early mathematics domain for preschoolers.
  ⇒ Three-quarters or more of faculty members at each degree level considered the other domains, including family engagement, "very important."

Figure 5.1 *displays the proportion of faculty members who responded that it was "very important" to include a given domain in teacher preparation programs focused on infant and toddlers.* ***Appendix Table A5-1*** *displays the data for all age groups of children.*

Figure 5.1: Importance of Inclusion of Domains in Teacher Preparation Programs: Percentage of Faculty Reporting "Very Important" for Infants and Toddlers, by Degree Program



Teaching Family Engagement

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

The Inventory asked program leaders of degree programs about: 1) the family engagement topics required for the degree; and 2) the age-group focus of the required coursework. (See **Figure 5.2** and **Appendix Table A5-2**.)

The Inventory also asked program leaders about the alignment of family engagement coursework with state and national family engagement standards. (See **Figure 5.3** and **5.4.**)

Required Family Engagement Course Content and Age-Group Focus (See **Figure 5.2** and **Appendix Table A5-2**)

- 80 percent or more of degree programs at all levels required 11 of the 13 "family engagement" topics listed in the Inventory. The two topics required by less than 70 percent were:

  ⇒ "Theories of family engagement;" and
  ⇒ "Working with families of children with special needs."

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

  ⇒ 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 more likely to focus these topics on infants and toddlers than were the master's degree programs.

Figure 5.2 *displays the percentage of degree programs that require the content area of family engagement. See* ***Appendix Table A5-2*** *for the age-group focus of the required content.*

Alignment of family engagement coursework with state and national standards (See **Figures 5.3** and **5.4**)

- The majority of programs (78 percent of associate degree, 64 percent of bachelor's degree, and 67 percent of master's degree), reported incorporating state and national family engagement standards into course content.

- Degree programs at all levels were most likely to report that the "Nebraska Core Competencies for Early Childhood Professionals, Partnerships with Families and Communities" and the "NAEYC Professional Preparation Standards/CAEP: Standard 2 Building Family and Community Partnerships" were incorporated into course content.

- Associate and bachelor's degree programs were more likely than master's degree programs to report that the "NAEYC Program Accreditation Standards: Standard 7: Families" and the "NAEYC: Effective Family Engagement Principles" were incorporated into the course content.

- Bachelor's degree programs were more likely to report that the "Head Start Parent, Family, and Community Engagement Framework" was incorporated into course content.

- Few or no programs incorporated any of the other family engagement standards.

Figure 5.2: : Family Engagement Coursework Required by the Nebraska Early Childhood Higher Education Inventory, by Degree Program

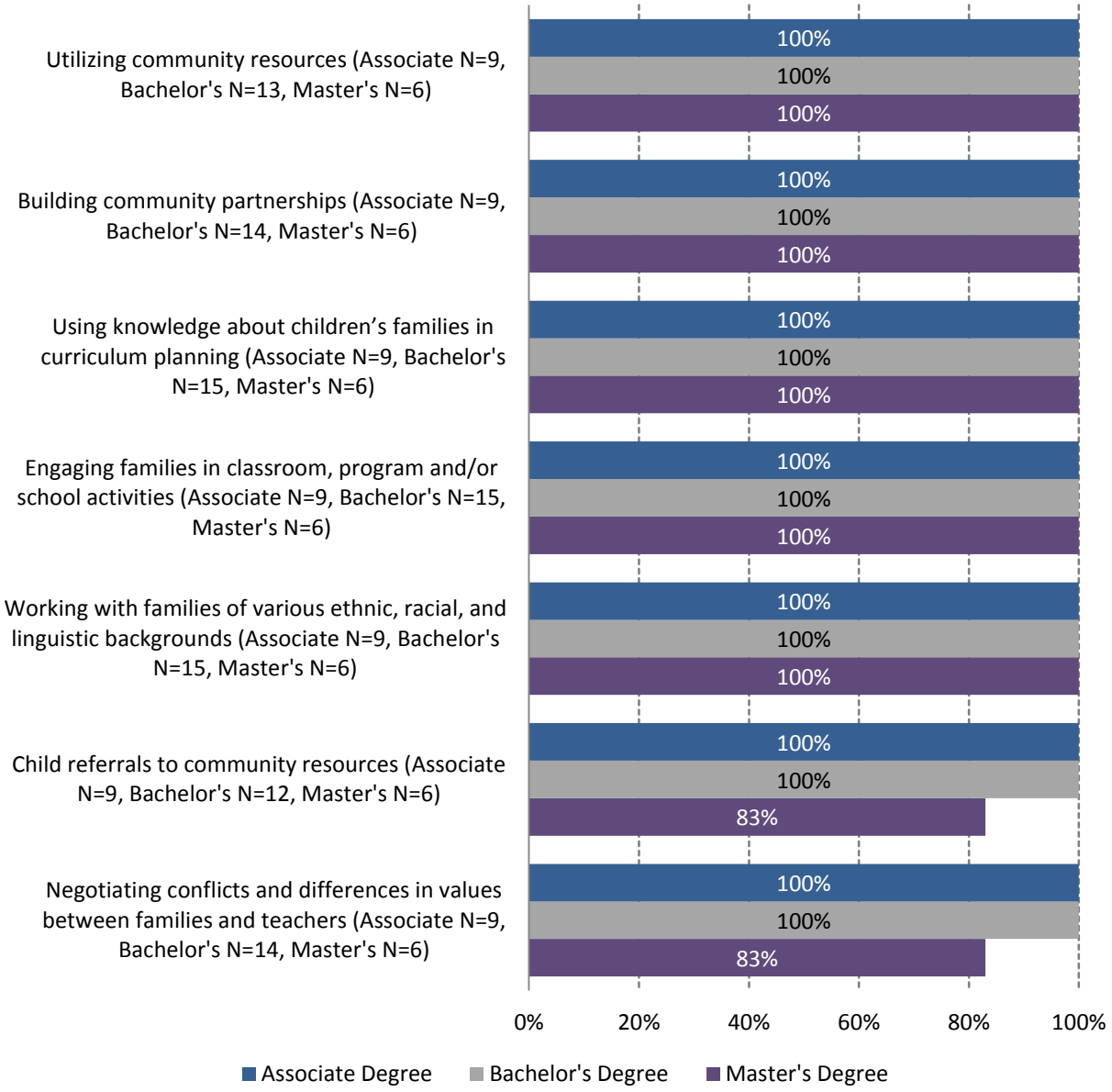


Figure 5.2: : Family Engagement Coursework Required by the Nebraska Early Childhood Higher Education Inventory, by Degree Program (Continued)

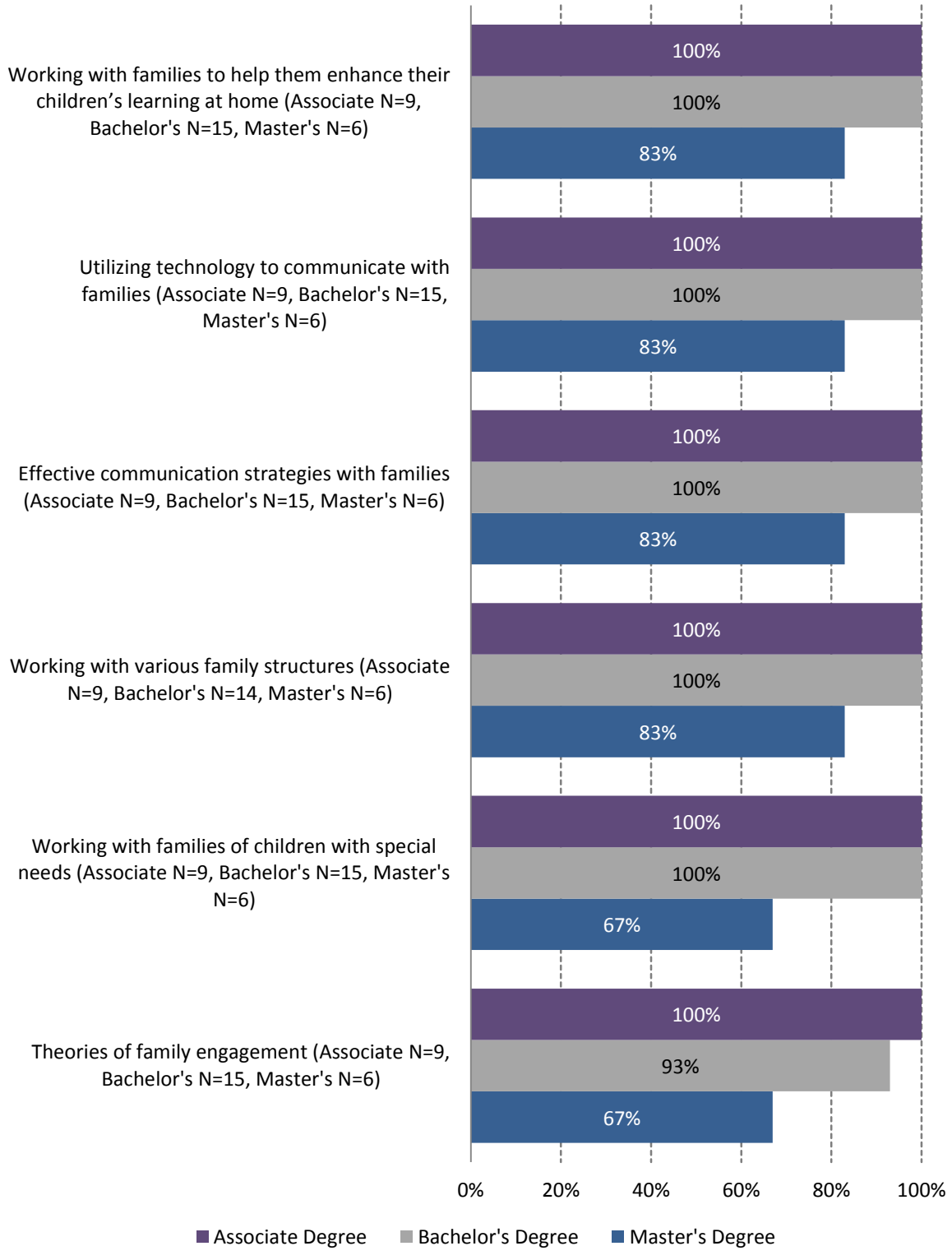


Figure 5.3: State or National Family Engagement Standards Incorporated into Family Engagement Course Content of Nebraska Early Childhood Higher Education Degree Programs, by Program

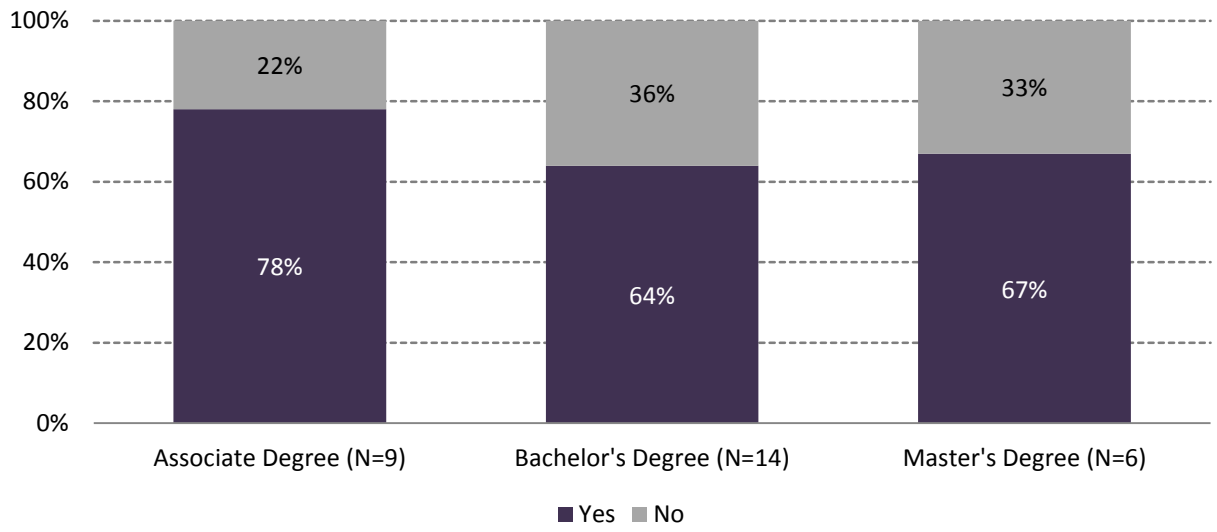
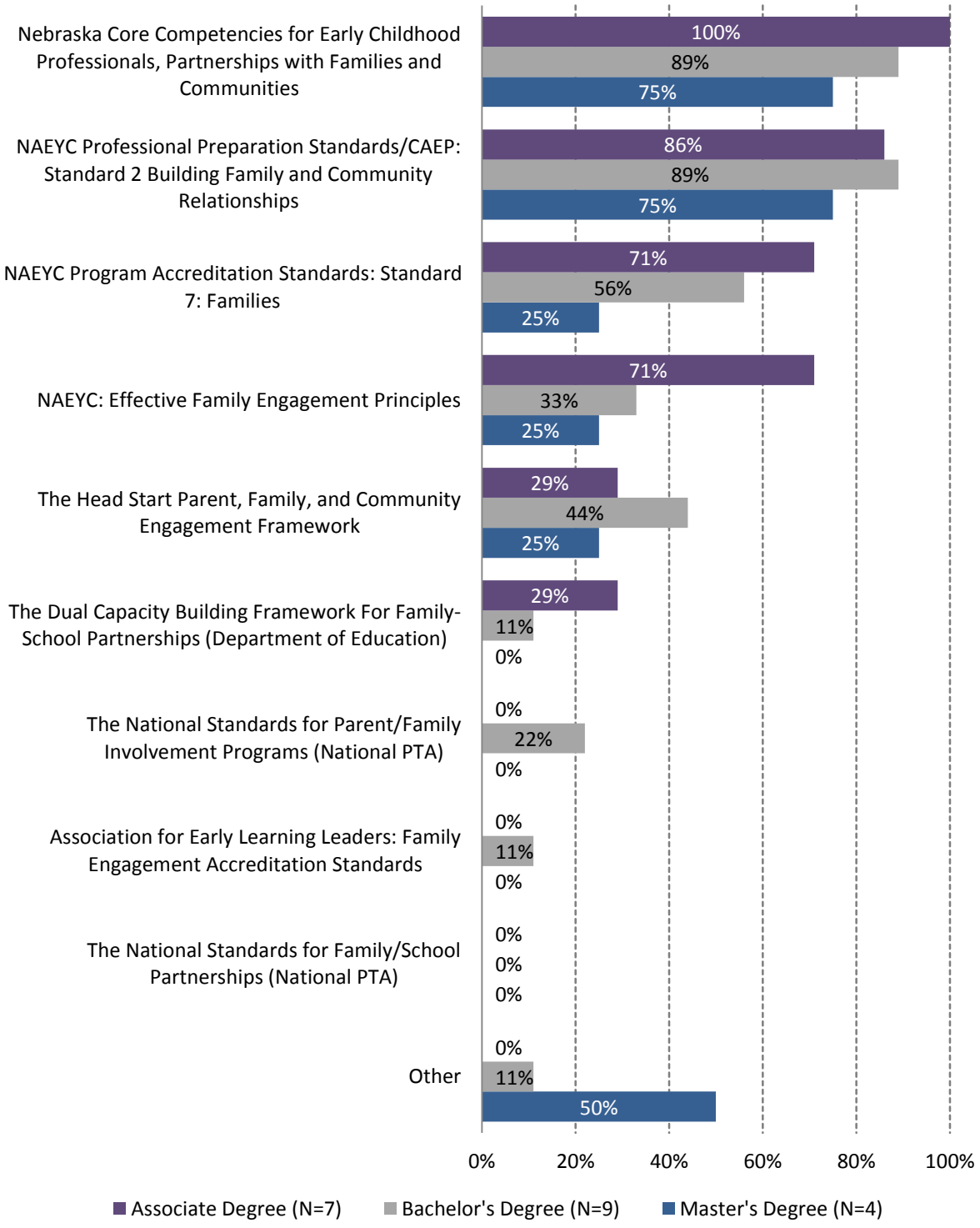


Figure 5.4: State and National Family Engagement Standards Incorporated into Family Engagement Course Content of Nebraska Early Childhood Higher Education Degree Programs, by Program



Teaching Early Mathematics

The Inventory explored the early math content area in depth. This content area was divided into two subject areas, the "Development of Children's Mathematical Understanding" and "Teaching Math Skills to Children."

The Inventory asked degree program leaders about: 1) the topics within these content areas required for the degree; and 2) the age-group focus of the required coursework. (See **Figures 5.5** and **5.6**, and **Appendix Table A5-3** and **A5-4**.)

The Inventory also asked program leaders about the alignment of math coursework with state and national early math standards.

In addition, the Inventory asked about the structure of math-related courses:

1. Whether math content was taught as a separate course or within child development and/or teaching and curriculum courses covering multiple topics. (See **Figure 5.7**.)

2. Whether contextualized math courses (those that relate mathematical concepts to the math that early childhood practitioners need in their profession) were offered to students, and if so, who taught such courses.

3. Whether math content aligned with state or national math standards. (See **Figure 5.8** and **5.9.**)

Teaching Math Skills to Children (See **Figure 5.5** and **Appendix Table A5-3**)

- All associate and bachelor's degree programs reported requiring each of the five topics in the "teaching math skills to children" content area.

- Most master's degree programs required "number sense (counting and cardinality)" for children. The four other topics in the "teaching math skills to children" content area were required by one-half of master's degree programs.

Development of Children's Mathematical Understanding (See **Figure 5.6** and **Appendix Table A5-4**)

- All (100 percent) associate degree programs reported requiring seven of the eight topics in the "development of children's mathematical understanding" content area.

  ⇒ One topic, "supporting English learners in developing mathematical knowledge as they concurrently acquire English" was required by 67 percent of associate degree programs.

- All bachelor's degree programs reported requiring all topics in the "development of children's mathematical understanding" content area.

- All master's degree programs reported requiring three of the eight topics in the "development of children's mathematical understanding" content area.

Age-Group Focus for Early Math

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

  ⇒ Degree programs at all levels were more likely to focus early math topics on preschool-age children than on children in the other age groups.

  ⇒ Associate and master's degree programs were more likely to focus topics related to "teaching math skills" on infants and toddlers than were bachelor's degree programs.

  ⇒ The focus on infants and toddlers for the "development of mathematical understanding" topics was more consistent across degree programs.
  - One-half or more of degree programs at all levels reported a focus on infants and toddlers for six of the eight topics.

  ⇒ Master's degree programs were the least likely of degree programs to focus early math topics on children 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 degree. See* ***Appendix Tables A5-3*** *and* ***A5-4*** *for the age-group focus of each topic.*

Figure 5.5: Coursework on Teaching Math Skills to Children Required by Nebraska Early Childhood Higher Education Degree Programs, by Program

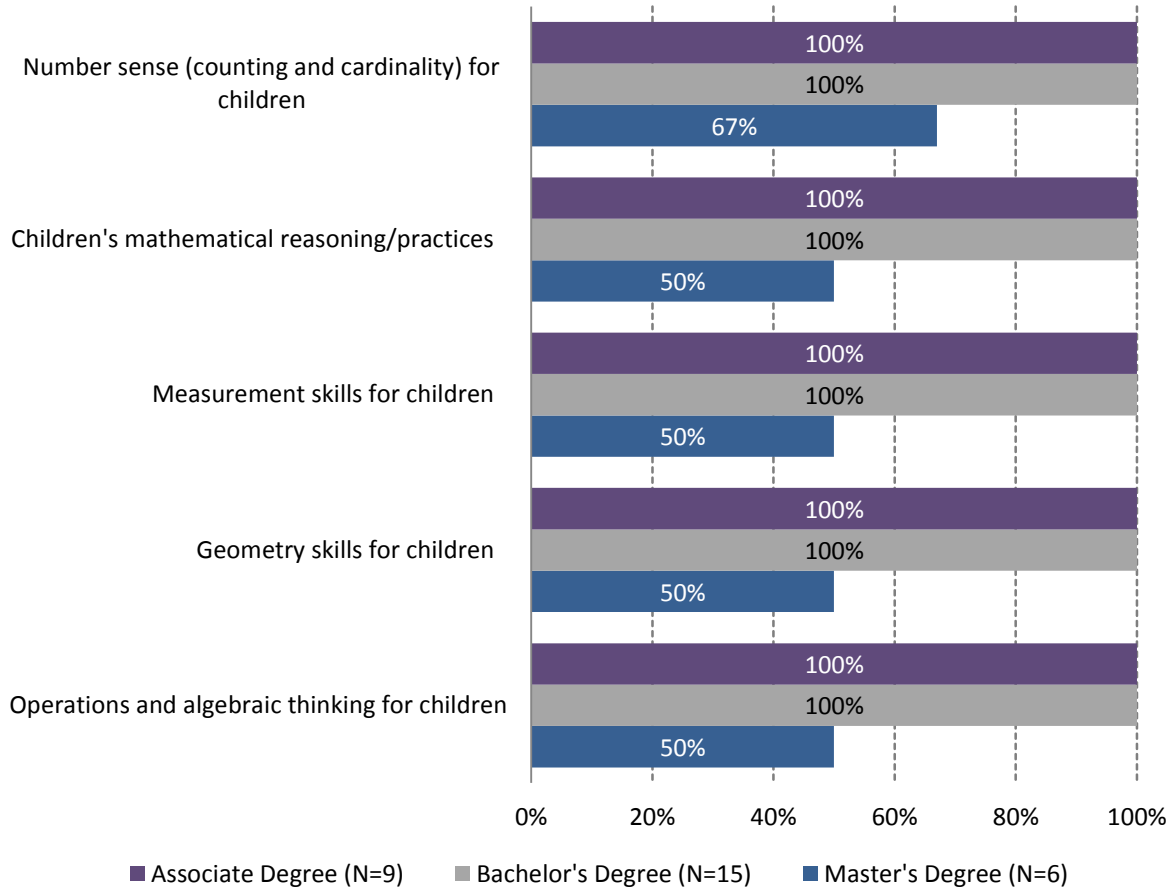
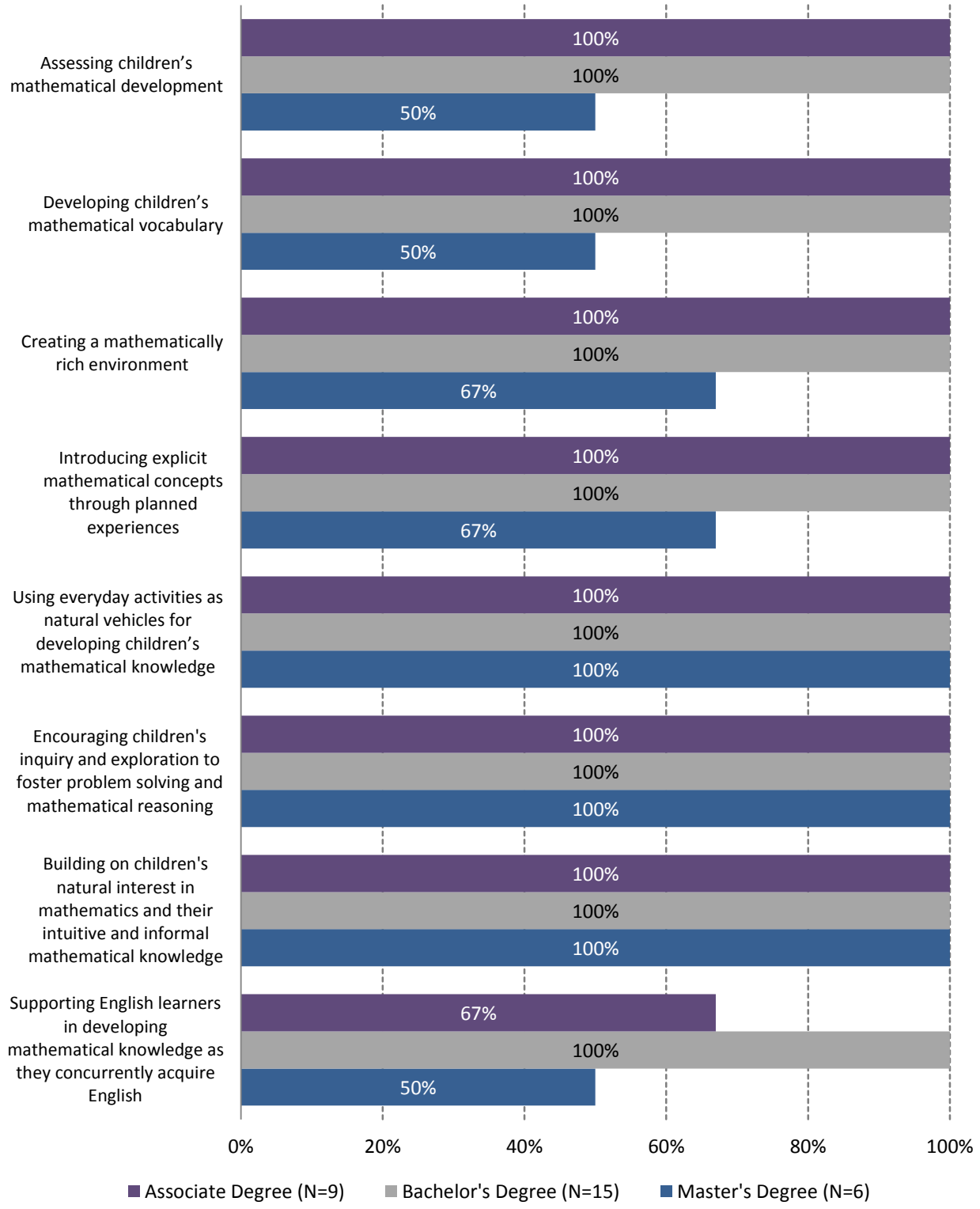


Figure 5.6: Coursework on Development of Children's Mathematical Undrestanding Required by Nebraska Early Childhood Higher Education Degree Programs, by Program



Structure of Early Math Courses (See **Figure 5.7**)

- Overall, degree programs reported that math topics were taught within child development and/or teaching and curriculum courses covering multiple topics, as opposed to being taught as separate courses.

- Approximately three-quarters of bachelor's degree programs, compared to approximately one-quarter of associate, one-third of master's, and one-half of doctoral degree programs, reported that topics related to both the "development of young children's mathematical understanding" and "teaching young children math skills" were taught together in one course.

- Approximately one-third of associate (33 percent) and bachelor's (39 percent) degree programs offered a contextualized math course, most often taught by "a faculty member from the mathematics department without specific early childhood expertise and/or experience."

Alignment of Early Math Coursework with State and National Standards (See **Figures 5.8** and **5.9**)

- The vast majority of programs (78 percent of associate degree, 93 percent of bachelor's degree, and 50 percent of master's degree), reported aligning their math coursework with state and national math standards.

- Degree programs at all levels were most likely to report aligning with the Nebraska Early Learning Guidelines ages 3 to 5, Mathematics and the Nebraska Early Learning Guidelines ages Birth to 3, Mathematics.

- Bachelor's degree programs were more likely than associate and master's degree programs to report aligning with the Nebraska Early Learning Guidelines Kindergarten, Mathematics, the Nebraska Core Competencies for Early Childhood Professionals, Mathematical Thinking, and the Head Start Child Development and Early Learning Framework/Program Performance Standards.

- Bachelor's degree and master's degree programs were more likely than associate degree programs to report aligning with the National Council of Teachers of Mathematics (NCTM) Principles and Standards for School Mathematics.

Figure 5.7: Structure of Early Math Related Coursework in Nebraska Early Childhood Higher Education Degree Programs, by Program

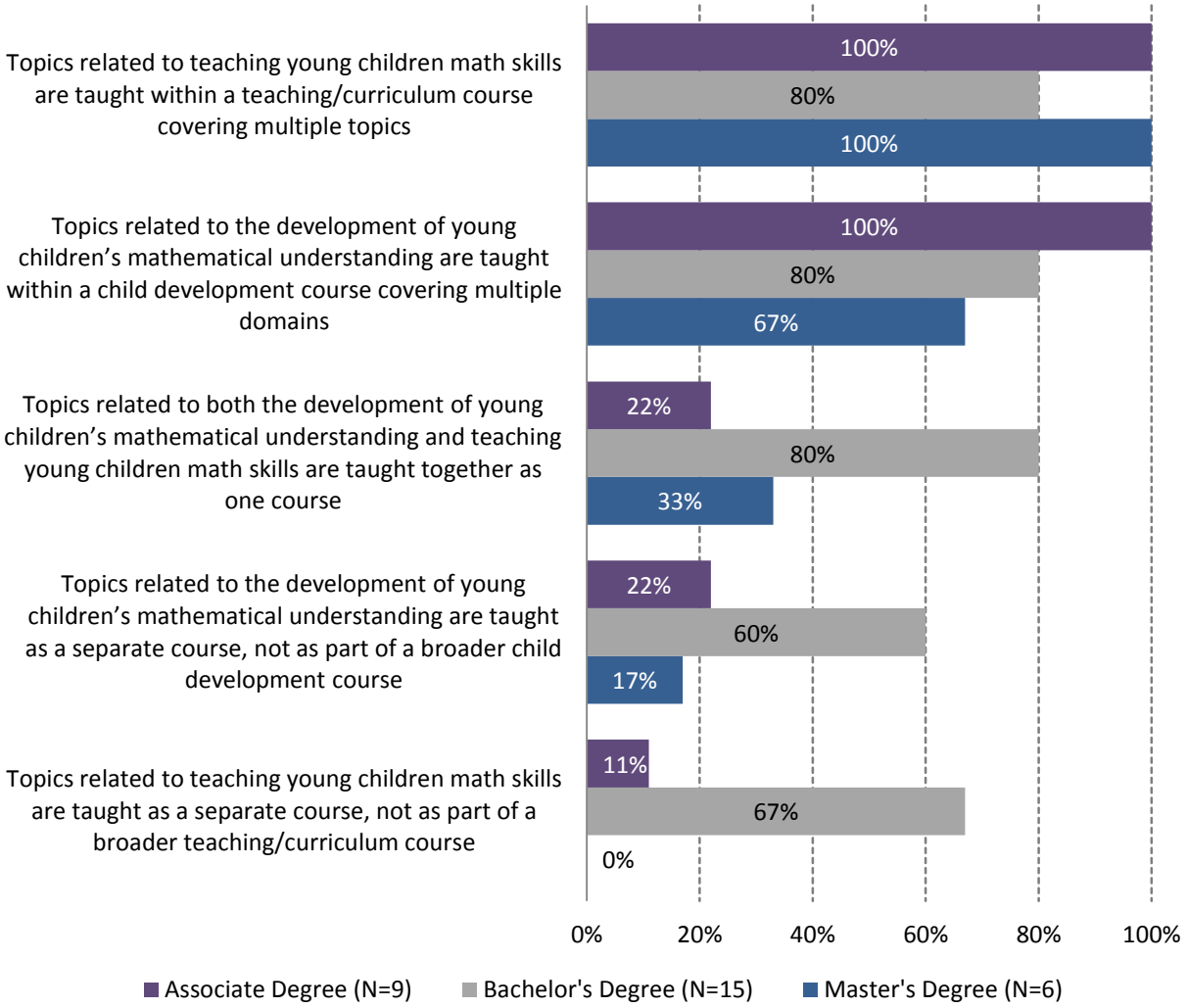


Figure 5.8: State or National Math Standards Incorporated into Early Math Course Content of Nebraska Early Childhood Higher Education Degree Programs, by Program

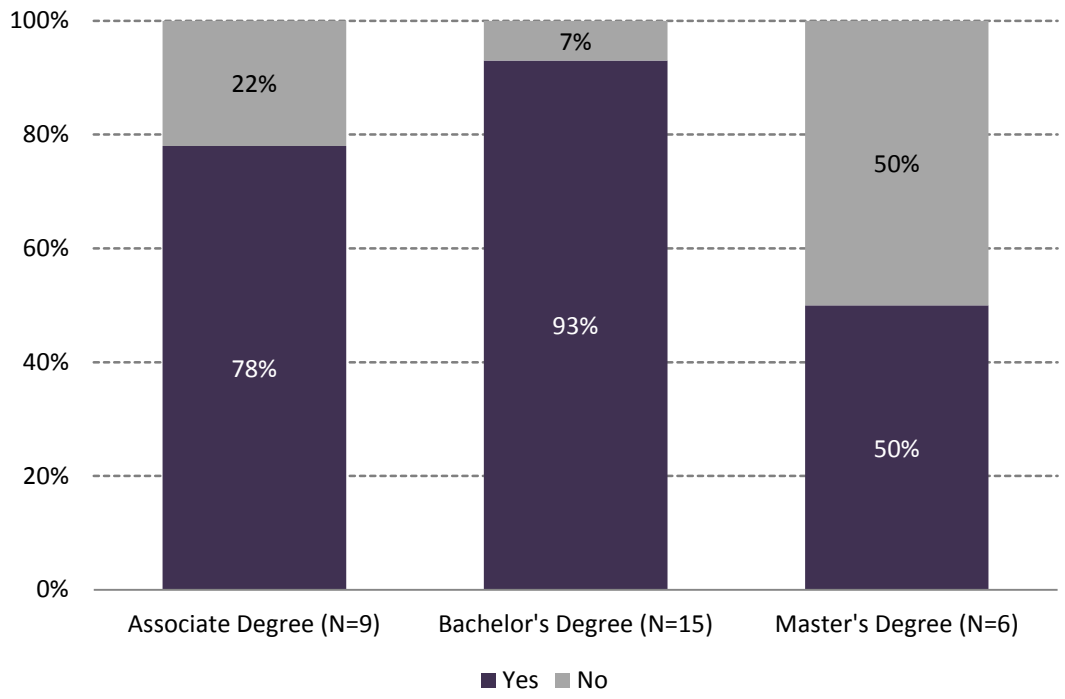
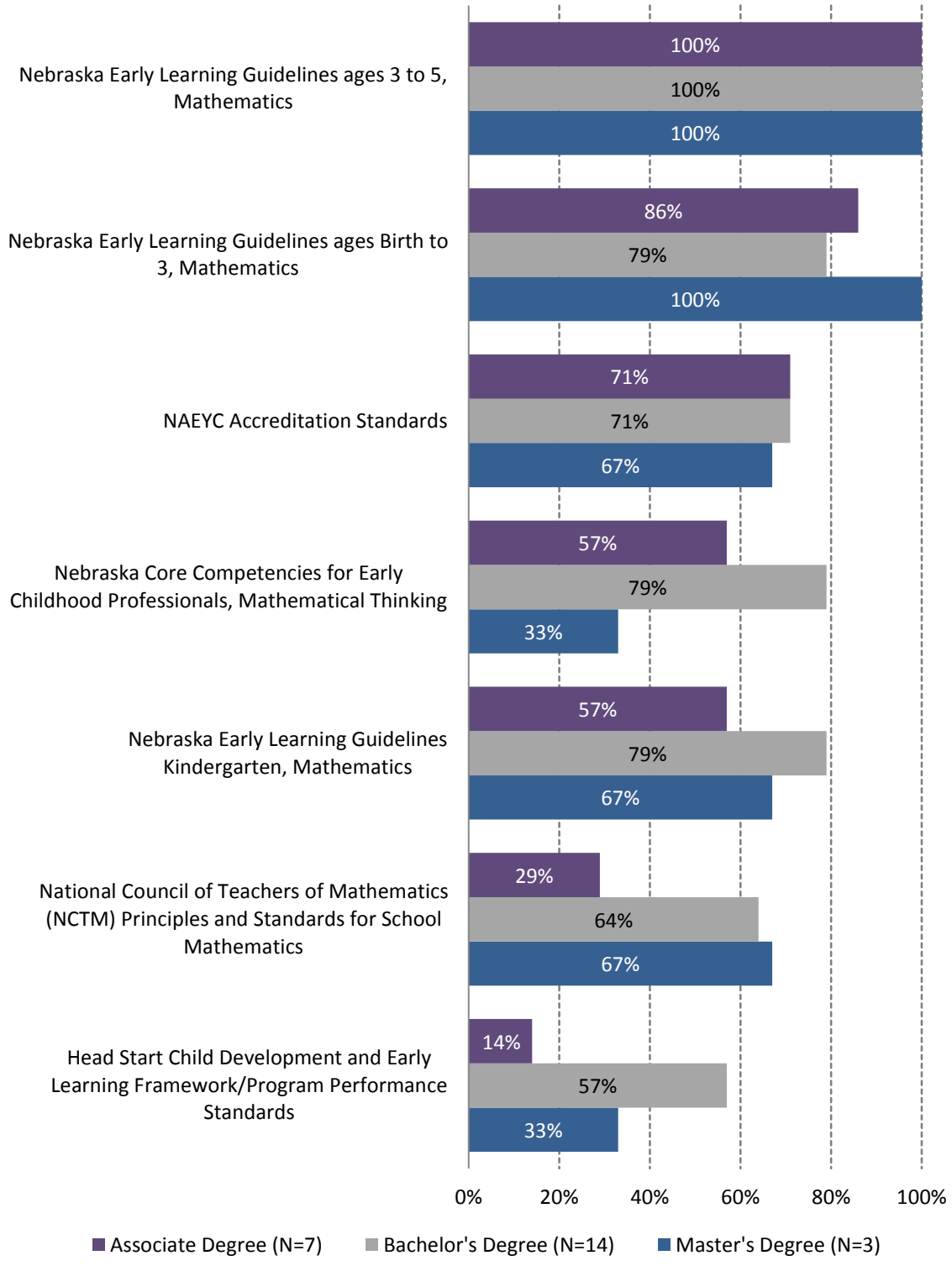


Figure 5.9: State and National Math Standards Incorporated into Early Math Course Content of Nebraska Early Childhood Higher Education Degree Programs, by Degree Program



Faculty Members' Capacity to Teach Early Mathematics (See **Figures 5.10** and **5.11**, and **Appendix Tables A5-5** and **A5-6**)

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 the 13 topics (see **Figure 5.9** and **Appendix Tables A5-5** and **A5-6**), faculty members were asked to identify whether they:

1. Had limited familiarity
2. Were knowledgeable but not prepared to teach others
3. Were capable of preparing teachers working with children:

- Birth through 2 years
- 3 and/or 4 years (Pre-K)
- Transitional Kindergarten
- Grade 3 or higher

The Inventory also asked faculty members to identify the topics they had taught in the past two years in the "Teaching Math Skills to Children" subject area. They were then asked to specify the age-group focus of the topics covered in their coursework. (See **Figure 5.10** and **5.11** and **Appendix Table A5-7** and **A5-8**.)

- Associate degree faculty members were the most likely among faculty at all degree levels to report being capable of preparing practitioners to work with infants and toddlers around promoting mathematical understanding and teaching math skills.

  ⇒ At least one-half of associate degree faculty members reported the capacity to teach 11 of the 13 topics listed in the Inventory.
  ⇒ At least one-half of bachelor's degree faculty members reported the capacity to teach six of the 13 topics.
  ⇒ At least one-half of master's degree faculty members reported the capacity to teach six of the 13 topics.
  ⇒ At least one-half of doctoral degree faculty members reported the capacity to teach seven of the 13 topics.

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

  ⇒ At least two-thirds of associate degree faculty members reported the capacity to teach 12 of the 13 the topics listed in the Inventory.
  ⇒ At least two-thirds of bachelor's degree faculty members reported the capacity to teach 12 of the 13 topics.
  ⇒ At least three-fifths of master's degree faculty members reported the capacity to teach 12 of the 13 topics.

⇒ At least one-half of the doctoral degree faculty members reported the capacity to teach 12 of the 13 topics.

- The two 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:

  ⇒ Supporting English learners in developing mathematical knowledge as they concurrently acquire English, and
  ⇒ Operations and algebraic thinking for children.

Figure 5.10: Capability of Faculty to Prepare Teachers to Work with Infants and Toddlers: Math Skills - Reported by Faculty Participating in the Nebraska Early Childhood Higher Education Inventory, by Degree Program

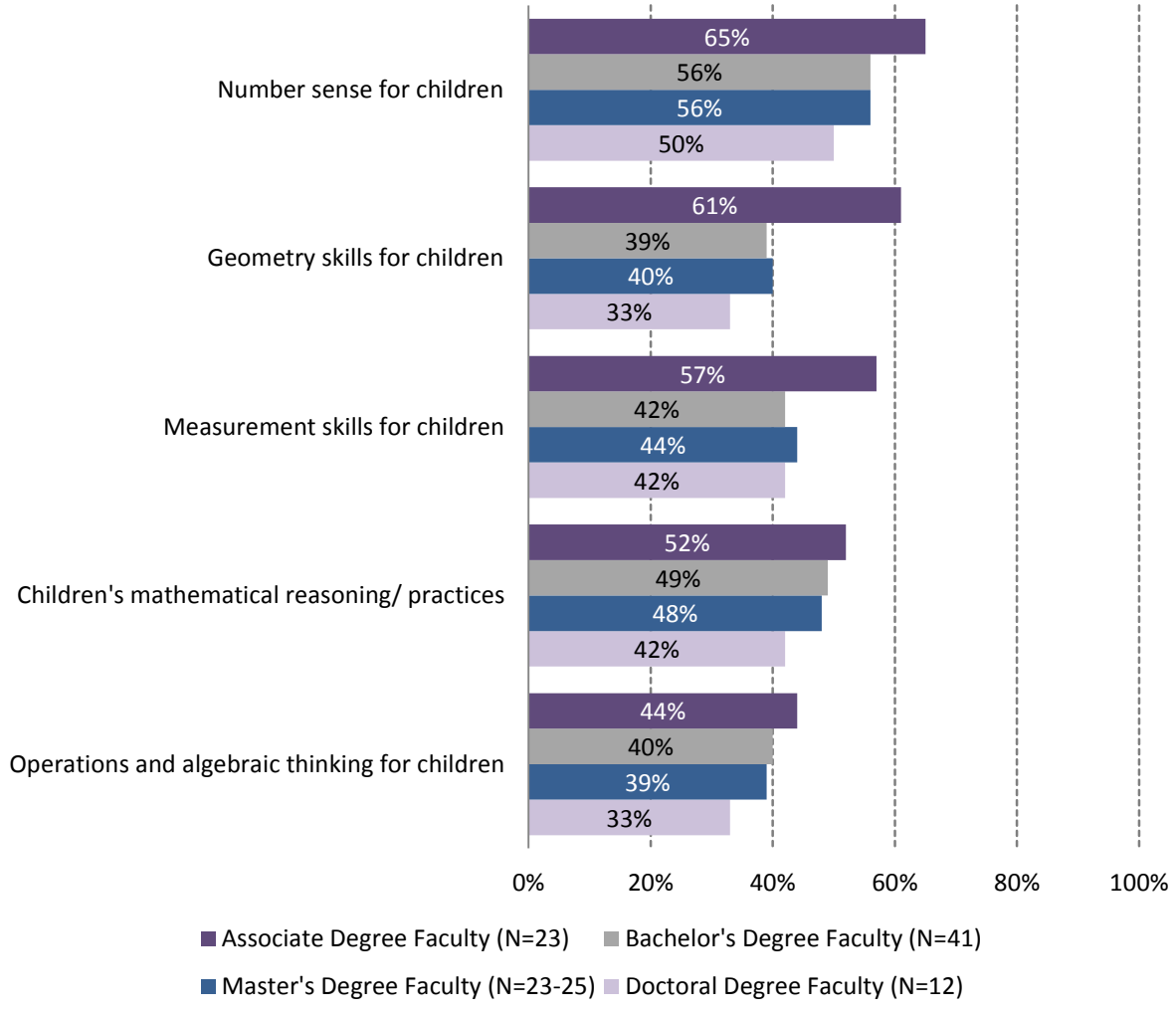
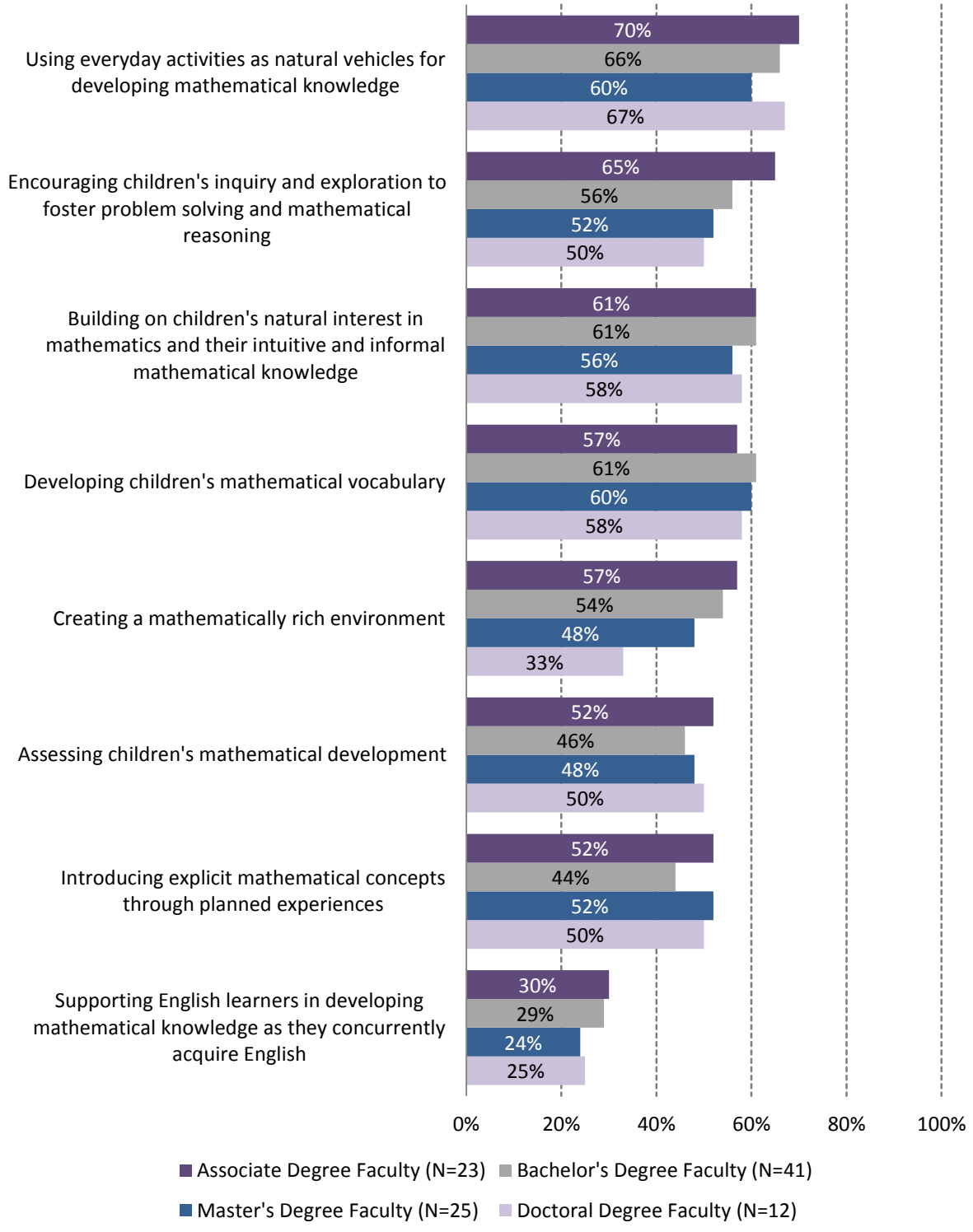


Figure 5.11: Capability of Faculty to Prepare Teachers to Work with Infants and Toddlers: Children's Mathematical Understanding - Reported by Faculty Participating in the Nebraska Early Childhood Higher Education Inventory, by Degree Program



Early Mathematics Course Content Taught in the Past Two Years (See **Figure 5.12** and **5.13** and **Appendix Table A5-7** and **A5-8**)

- Associate and master's degree faculty members were more likely than bachelor's and doctoral degree faculty members to report having taught early math topics during the past two years at their college or university.

  ⇒ At least one-half of associate degree faculty members reported teaching all of the 13 early math topics listed in the Inventory during the past two years at their college or university.
  ⇒ At least one-half of bachelor's degree faculty members reported teaching nine of the 13 topics.
  ⇒ At least one-half of master's degree faculty members reported teaching all of the 13 topics.
  ⇒ At least one-half of doctoral degree faculty members reported teaching 11 of the 13 topics.

- Faculty members (at all degree levels and across age groups of children) were least likely to report having taught the math topic, "supporting English learners in developing mathematical knowledge as they concurrently acquire English."

- Overall, faculty members at all degree levels were more likely to report having taught math topics with a focus on working with preschoolers than on working with children in both older and younger age groups.

- Overall, master's degree faculty members were the most likely to report focusing on math-related topics for infants and toddlers, and the least likely to report focusing on such content for children in the early elementary grades.

Figure 5.12 *and* ***5.13*** *displays the percentages of faculty members at each degree level who reported teaching a given topic within the past two years. See* ***Appendix Table A5-7*** *and* ***A5-8*** *for the age-group focus of the content taught.*

Figure 5.12: Coursework on Teaching Math Skills Taught by Faculty Participating in the Nebraska Early Childhood Higher Education Inventory, by Degree Program

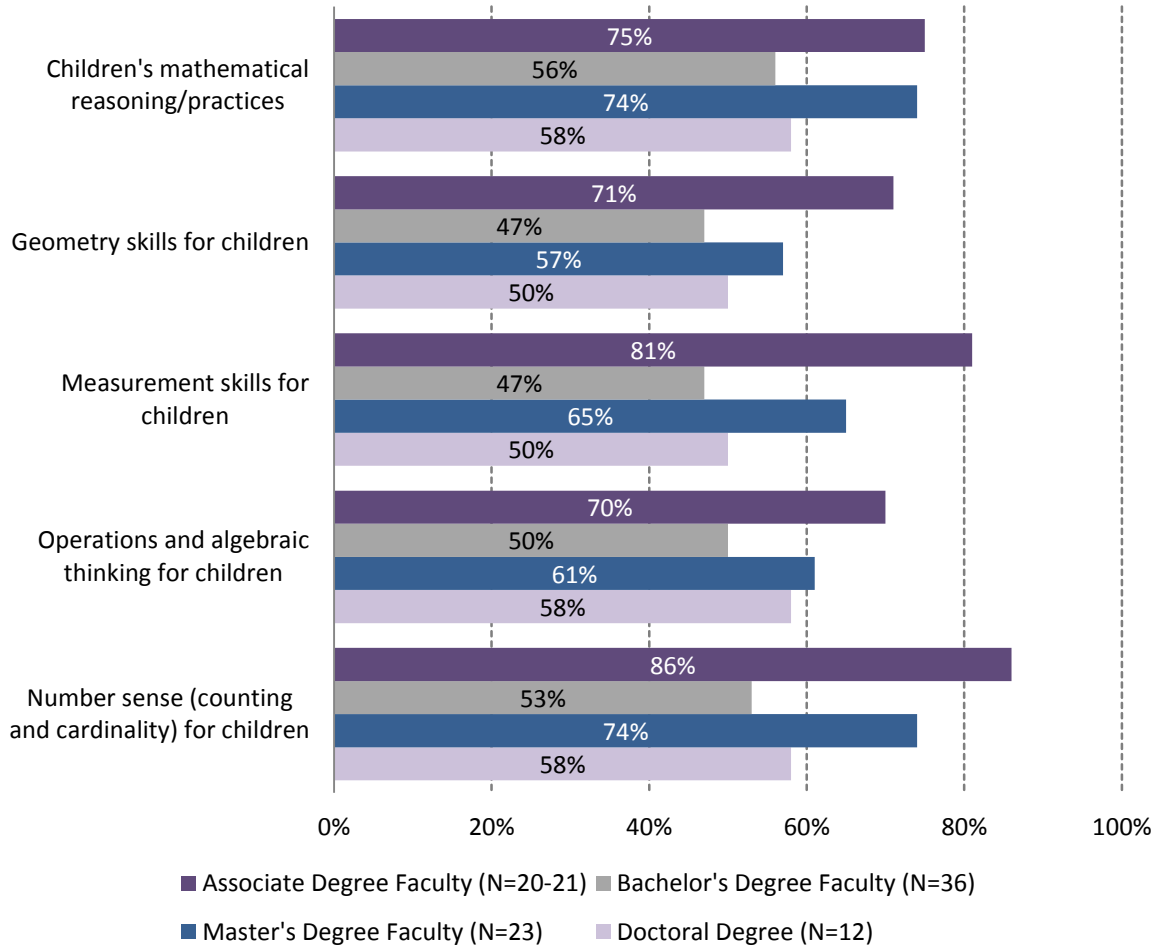
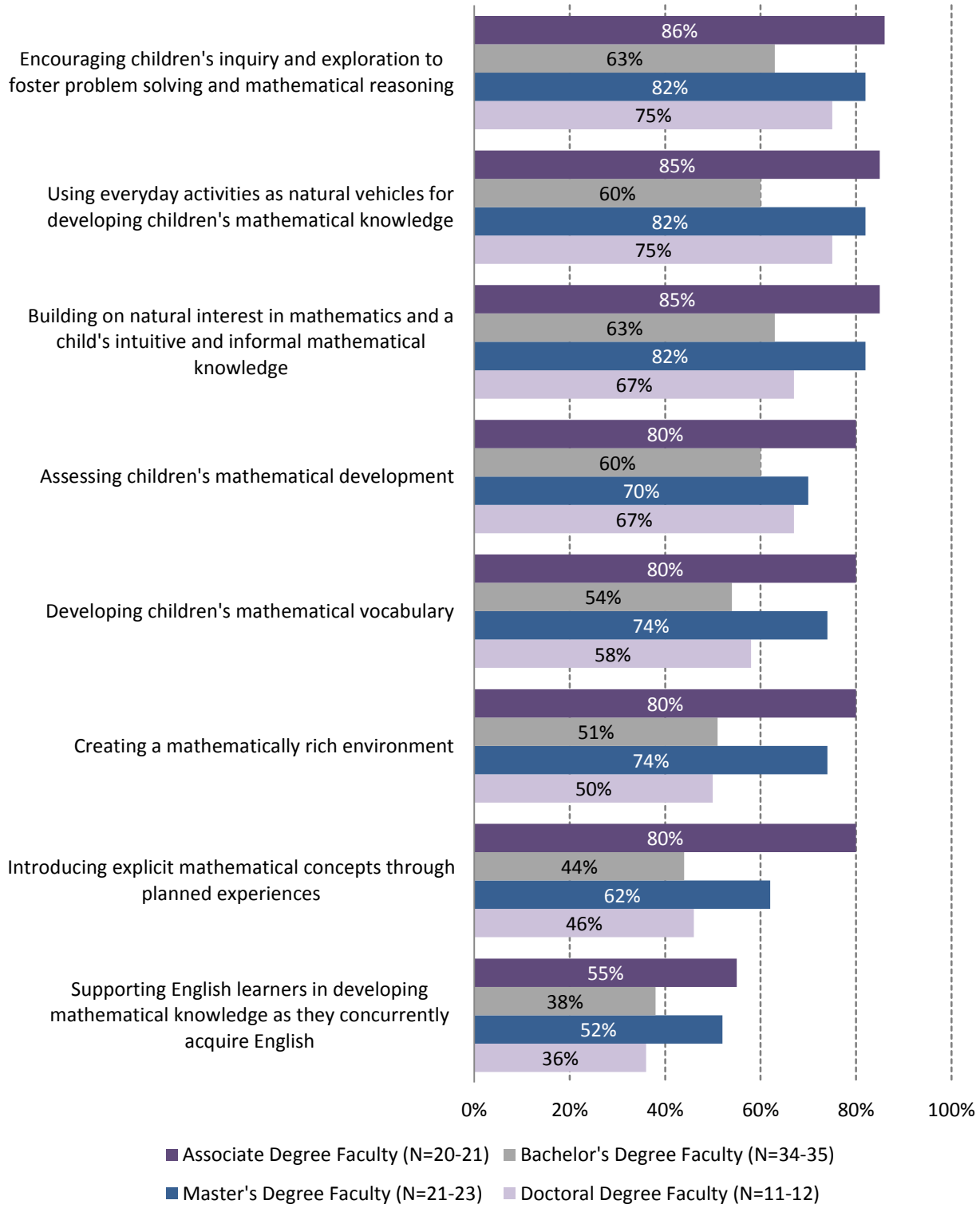


Figure 5.13: Coursework on Development of Children's Math Understanding Taught by Faculty Participating in the Nebraska Early Childhood Higher Education Inventory, by Degree Program



Level of Interest in Professional Development Topics Related to Early Math and Family Engagement

In addition to the professional development questions discussed in Chapter 3, the Inventory asked more specifically about faculty members' interest in professional development related to early mathematics and family engagement. Using a Likert scale of 1 to 5, with 1 being "no interest" and 5 being "very interested," faculty members were asked to rate how interested they would be in 14 topics related to early mathematics and 12 topics related to family engagement.

(See **Figures 5.14** through **5.16** and **Appendix Tables A5-9** through **A5-11**.)

- When asked to rate their interest among a list of math-related topics for professional development, more than one third of associate degree faculty members reported being "very interested" in each of the math related topics:

  ⇒ Faculty members across all other degree levels were less likely to report being "very interested" in the math-related topics. (See **Figure 5.14** and **5.15** and **Appendix Tables A5-9** and **A5-10**.)

- Faculty members at the bachelor' and graduate degree levels were somewhat more interested in family engagement topics than in early math topics. (See **Figure 5.16** and **Appendix Table A5-11**.)

Figure 5.14 *and* ***5.15*** *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 A5-9*** *and* ***A5-10*** *displays the responses for all interest levels.*

Figure 5.16 *displays the percentage of faculty members at all degree levels who reported that they would be "very interested" in a family engagement-related professional development opportunity.* ***Appendix Table A5-11*** *displays the responses for all interest levels.*

Figure 5.14: Level of Interest in Professional Development on Teaching Math Skills Reported by Faculty Participating in the Nebraska Early Childhood Higher Education Inventory: Percentage Reporting "Very Interested", by Degree Program

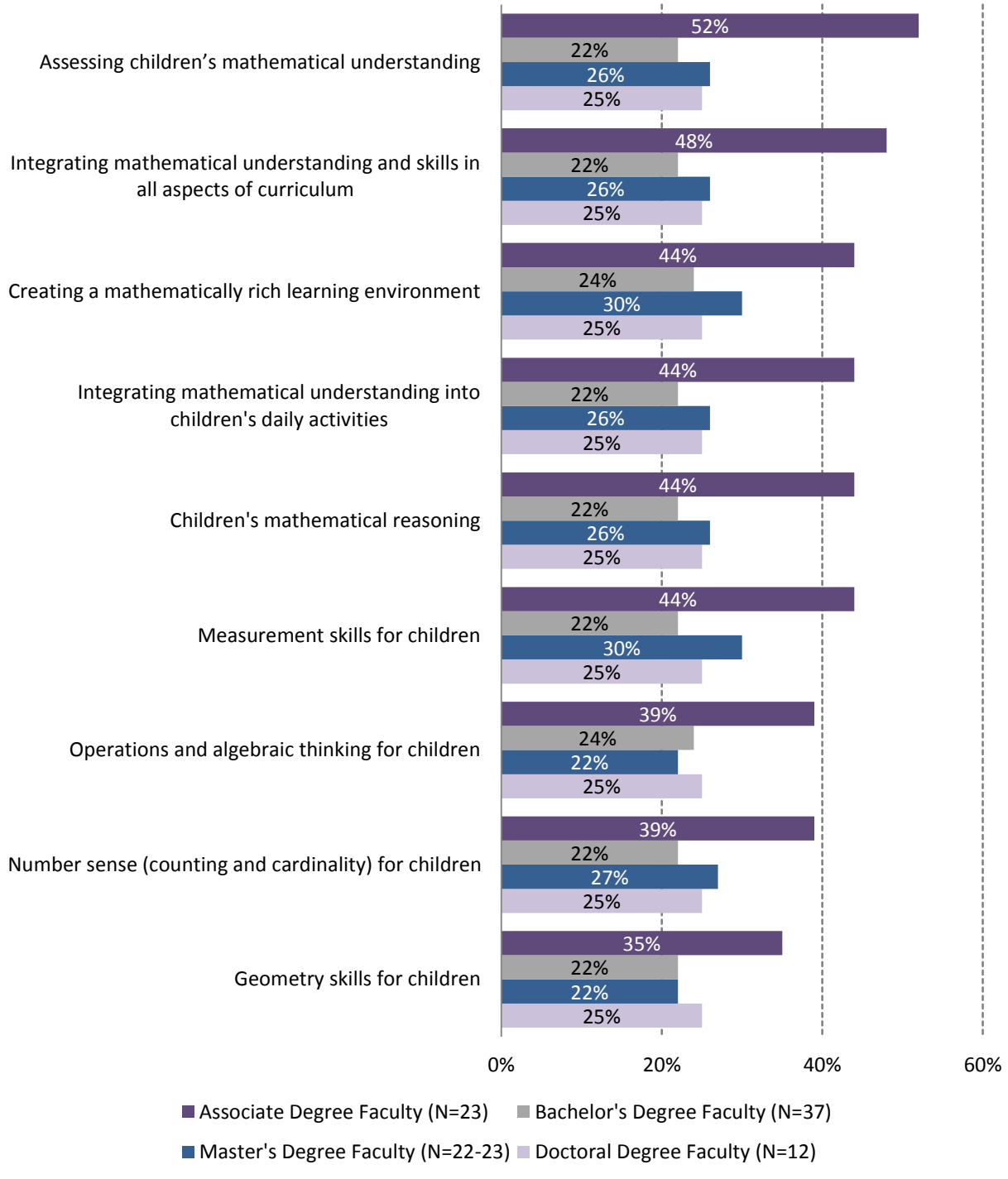


Figure 5.15: Level of Interest in Professional Development on Mathematical Understanding Reported by Faculty Participating in the Nebraska Early Childhood Higher Education Inventory: Percentage Reporting "Very Interested", by Degree Program

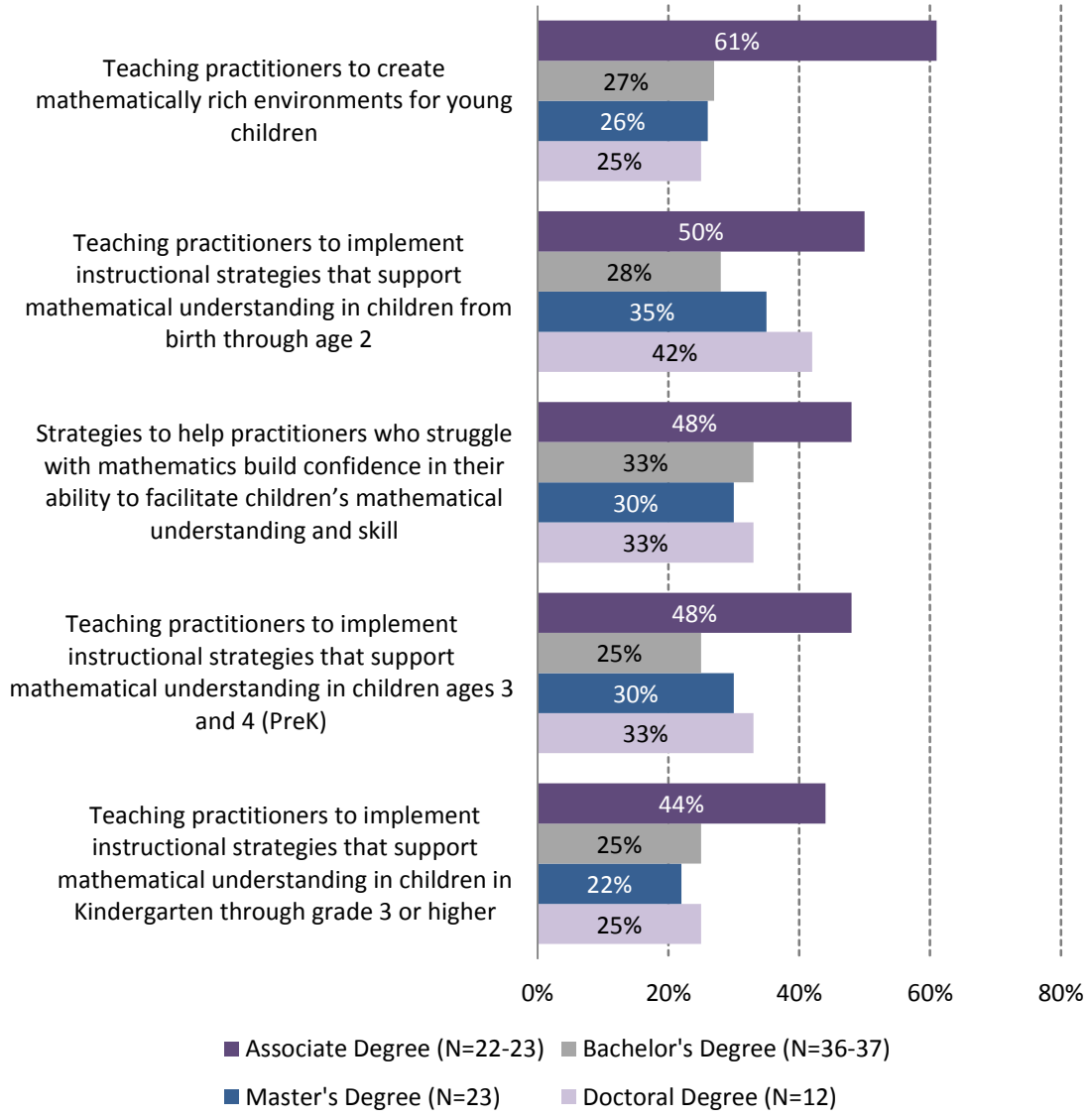


Figure 5.16: Level of Interest in Family Engagement Professional Development Reported by Faculty Participating in the Nebraska Early Childhood Higher Education Inventory: Percentage Reporting "Very Interested", by Degree Program

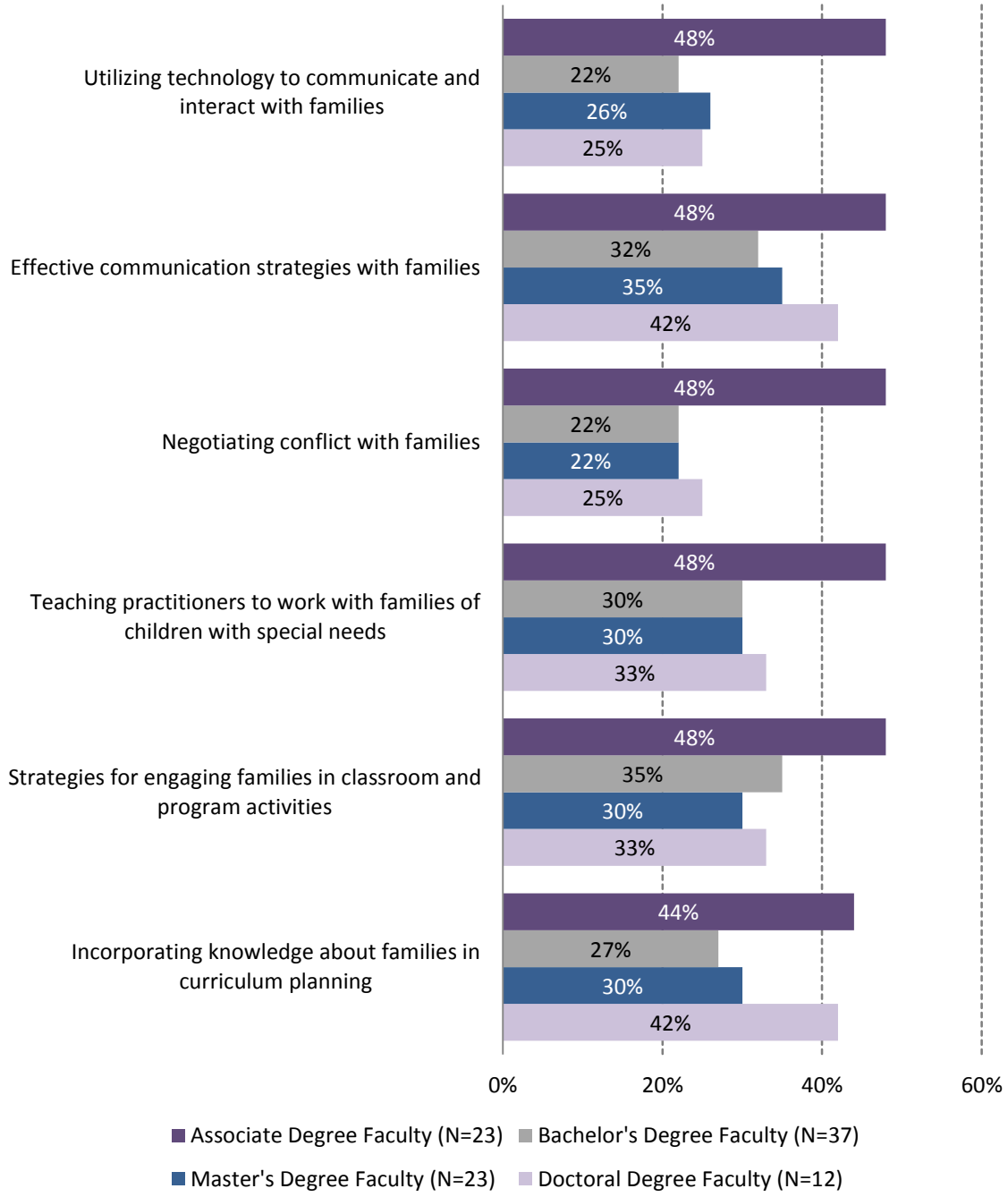
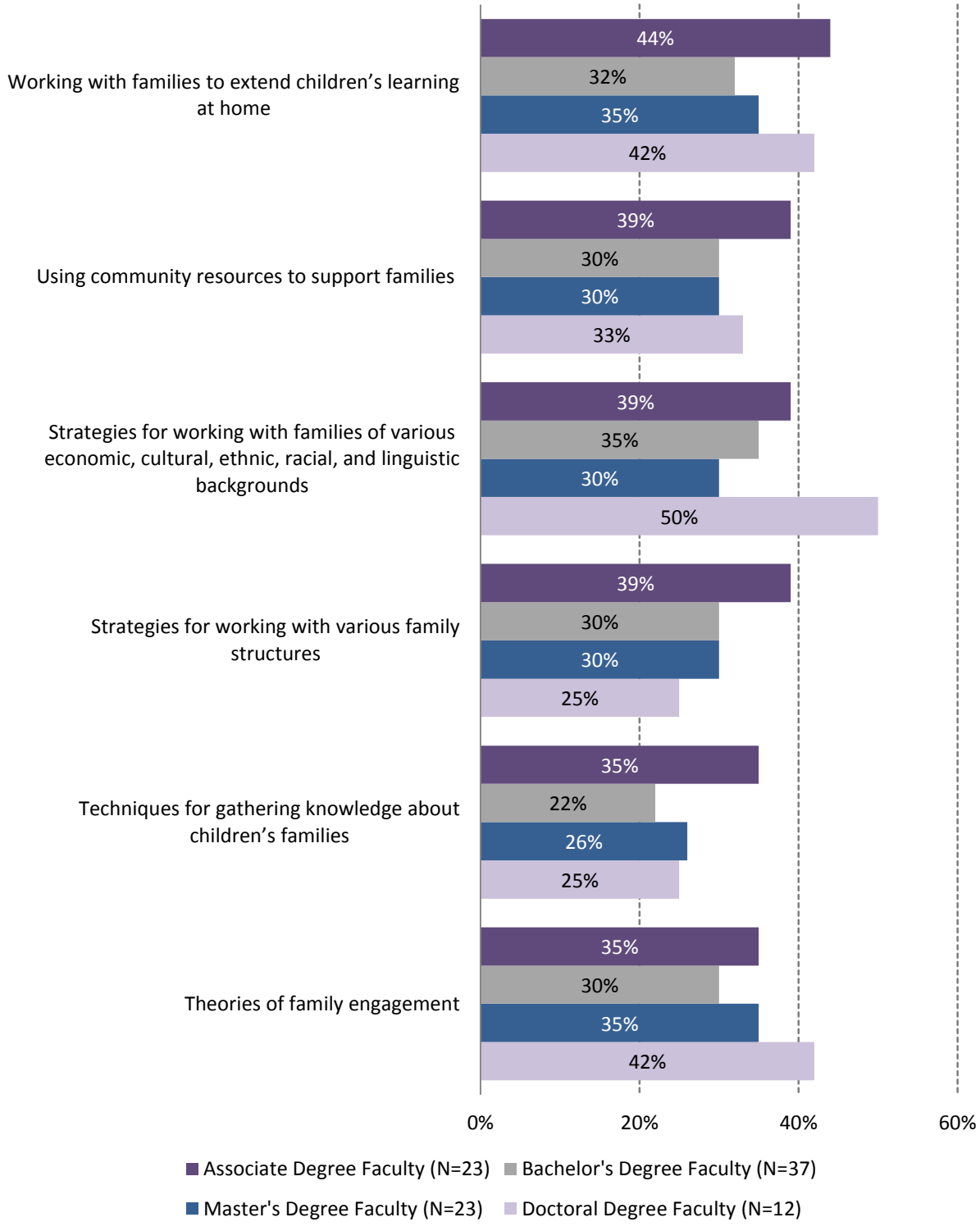


Figure 5.16: Level of Interest in Family Engagement Professional Development Reported by Faculty Participating in the Nebraska Early Childhood Higher Education Inventory: Percentage Reporting "Very Interested", by Degree Program (Continued)



APPENDIX

Appendix 1: Introduction

Table A1-1. Early Childhood Associate Degree Programs in Nebraska

Name of Institution	Associate Degree Program(s)
Central Community College (Columbus, Grand Island, Hastings campuses)	A.A.S., Early Childhood Education
Little Priest Tribal Community College	A.A., Early Childhood Education
Metropolitan Community College (Fort Omaha and South Omaha campuses)	A.A.S., Early Childhood Educator
Mid-Plains Community College, McCook (serves North Platte and Broken Bow, Imperial through distance learning)	A.A.S., Early Childhood Education
Nebraska Indian Community College	A.A., Early Childhood Education (has partnership with UNL for students to take on-line courses toward bachelor's degree)
Northeast Community College	A.A., Early Childhood Education (transfer degree) A.A.S., Early Childhood Education (terminal degree)
Southeast Community College, Lincoln Campus	A.A.S., Early Childhood Education A.A.S., Early Childhood Education – Entrepreneurship focus A.A., for transfer – Inclusive ECE
Western Nebraska Community College (Alliance, Scottsbluff, Sidney campuses)	A.A., Early Childhood Education (transfer degree) A.A.S., Early Childhood Education (terminal degree)

Table A1-2. Early Childhood Bachelor's and Graduate Degree Programs in Nebraska

Name of Institution	Bachelor's Degree Program(s)	Graduate Degree Program(s)
Chadron State College (Public)	B.A., Family and Consumer Sciences B.S., Early Childhood Inclusive B.S., Early Elementary – ECE minor	
College of Saint Mary (Private)	B.S., Early Childhood Education – Special Education Minor (Early Childhood Inclusive) B.S., Elementary Education – Early Childhood Minor (Elementary endorsement, and EC supplemental)	M.S., Education - Early Childhood Emphases (initial EC endorsement)
Concordia University (Private)	B.S., Elementary Education – EC Supplemental endorsement B.S., Birth to 3rd grade inclusive (Age 3 to 3rd grade)	M.Ed., Early Childhood Education
Doane College (Private)	B.A., Elementary Education – Early Childhood endorsement	M.Ed., Early Childhood Education
Grace University (Private)	B.S., Elementary Education and Early Childhood Education Supplemental with ELL Supplemental Endorsement	
Hastings College (Private)	B.A., Elementary Education with ECE Supplemental	
Midland University (Private)	B.A., Early Childhood Education (Birth to 3 years old)	
Peru State College (Public)	B.S., Early Childhood Inclusive B.S., Elementary Education, EC Supplemental	
University of Nebraska-Kearney (Public)	B.A., Education -Early Childhood Inclusive	M.Ed., Curriculum and Instruction – specialization in Early Childhood Education

Name of Institution	Bachelor's Degree Program(s)	Graduate Degree Program(s)
University of Nebraska-Lincoln (Public)	B.S., Elementary Education, Early Childhood Endorsement B.A., Child Development – Early Childhood Education B.A., Early Childhood Inclusive	M.S., Early Childhood Special Education M.S., Child Development – Early Childhood Education Ph.D., Child Development Early Childhood Education Ph.D., Educational Studies – Specialization in Special Education *Educational Specialist – between master's and doctorate*
University of Nebraska-Omaha (Public)	B.S., Elementary Education – Early Childhood endorsement	M.Ed., Early Childhood Endorsement
Wayne State College (Public)	B.A., Early Childhood Inclusive B.A., BA in Elementary Education with ECE	M.S. Education, Curriculum and Instruction - Early Childhood 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 Program

Age Group	Associate Degree	Bachelor's Degree	Master's Degree
Knowledge about children's development in different domains (e.g., language development, cognitive development)			
Birth to two years	100%	87%	83%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	89%	100%	83%
N	9	15	6
Development of children's early literacy skills			
Birth to two years	89%	73%	40%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	100%	100%	80%
N	9	15	5
Development of children's scientific understandings			
Birth to two years	56%	53%	50%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	89%	100%	100%
N	9	15	4
Development of dual language learners			
Birth to two years	56%	71%	67%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	100%	100%	67%
N	9	15	3
Understanding the effects of culture, gender, class, and race on child development			
Birth to two years	78%	73%	60%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	89%	100%	80%
N	9	15	5
Child development theory and its relationship to teaching			
Birth to two years	89%	80%	60%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	100%	100%	80%
N	9	15	5

Age Group	Associate Degree	Bachelor's Degree	Master's Degree
Understanding the effects of disability on child development			
Birth to two years	89%	80%	67%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	89%	100%	67%
N	9	15	3

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

Age-Group Focus	Associate Degree	Bachelor's Degree	Master's Degree
Teaching children who are experiencing poverty			
Birth to two years	100%	73%	67%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	89%	87%	83%
N	9	15	6
Teaching children with challenging behaviors			
Birth to two years	100%	57%	60%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	89%	100%	80%
N	9	14	5
Teaching children with special needs			
Birth to two years	89%	64%	75%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	89%	100%	75%
N	9	14	4
Teaching children from multiple cultural and ethnic backgrounds			
Birth to two years	100%	67%	67%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	89%	93%	83%
N	9	15	6
Teaching children who are dual language learners			
Birth to two years	78%	69%	67%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	89%	92%	67%
N	9	13	3

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

Age-Group Focus	Associate Degree	Bachelor's Degree	Master's Degree
Teaching children science skills			
Birth to two years	44%	60%	40%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	89%	100%	80%
N	9	15	5
Teaching children math skills			
Birth to two years	67%	60%	40%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	89%	100%	80%
N	9	15	5
Teaching children literacy skills			
Birth to two years	89%	60%	40%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	100%	100%	80%
N	9	15	5
Teaching children art			
Birth to two years	89%	67%	40%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	100%	100%	80%
N	9	15	5
Teaching children social studies			
Birth to two years	56%	53%	50%
3 and/or 4 years (Pre-K)	89%	100%	100%
K-grade 3 or higher	89%	100%	100%
N	9	15	4
Using play in the curriculum			
Birth to two years	100%	80%	50%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	89%	93%	67%
N	*9*	*15*	*6*
Supporting and extending children's physical skills			
Birth to two years	78%	80%	50%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	100%	100%	67%
N	9	15	6

Age-Group Focus	Associate Degree	Bachelor's Degree	Master's Degree
Supporting children's social development			
Birth to two years	89%	73%	50%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	100%	93%	67%
N	9	15	6
Implementing integrated curriculum			
Birth to two years	67%	53%	50%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	89%	93%	67%
N	9	15	6
Implementing inclusion strategies for children of all abilities to participate in learning			
Birth to two years	89%	53%	60%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	89%	100%	60%
N	9	15	5

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

Age-Group Focus	Associate Degree	Bachelor's Degree	Master's Degree
Observation, assessment, and documentation to inform teaching and learning			
Birth to two years	100%	73%	60%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	89%	100%	60%
N	9	15	5
Classroom management			
Birth to two years	100%	60%	60%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	88%	93%	60%
N	8	15	5
How to use different teaching techniques			
Birth to two years	89%	67%	67%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	89%	100%	67%
N	9	15	6

Appendix 3: Early Childhood Higher Education Faculty: Detailed Tables

Table A3-1: Coursework Taught Related to Child Development and Learning: Age-Group Focus, by Degree Program

If topic taught in past two years, age-group focus of the coursework:

Topic	Associate Degree Faculty	Bachelor's Degree Faculty	Master's Degree Faculty	Doctoral Degree Faculty
Knowledge about children's development in different domains (e.g., language development, cognitive development)				
Birth to 2 years	73%	66%	86%	83%
3 to 4 years	96%	80%	91%	92%
K-3 or above	64%	74%	68%	67%
N	*22*	*35*	*22*	*12*
Development of children's early literacy skills				
Birth to 2 years	76%	58%	77%	82%
3 to 4 years	95%	68%	82%	82%
K-3 or above	62%	74%	64%	73%
N	*21*	*31*	*22*	*11*
Development of children's scientific understandings				
Birth to 2 years	61%	42%	56%	56%
3 to 4 years	94%	75%	94%	100%
K-3 or above	67%	71%	56%	67%
N	*18*	*24*	*16*	*9*
Development of dual language learners				
Birth to 2 years	53%	39%	61%	50%
3 to 4 years	93%	81%	83%	100%
K-3 or above	40%	65%	50%	50%
N	*15*	*26*	*18*	*10*
Understanding the effects of culture, gender, class, and race on child development				
Birth to 2 years	68%	59%	76%	80%
3 to 4 years	96%	83%	91%	100%
K-3 or above	68%	72%	67%	70%
N	*22*	*29*	*21*	*10*
Child development theory and its relationship to teaching				
Birth to 2 years	77%	59%	85%	80%
3 to 4 years	96%	79%	95%	100%
K-3 or above	73%	72%	60%	70%
N	*22*	*29*	*20*	*10*

Topic	Associate Degree Faculty	Bachelor's Degree Faculty	Master's Degree Faculty	Doctoral Degree Faculty
Understanding the effects of disability on child development				
Birth to 2 years	75%	54%	79%	70%
3 to 4 years	95%	75%	90%	80%
K-3 or above	70%	68%	58%	70%
N	*20*	*28*	*19*	*10*

Table A3-2: Coursework Taught Related to Teaching Diverse Child Populations: Age-Group Focus, by Degree Program

If topic taught in past two years, age-group focus of the coursework:

Topic	Associate Degree Faculty	Bachelor's Degree Faculty	Master's Degree Faculty	Doctoral Degree Faculty
Teaching children who are experiencing poverty				
Birth to 2 years	74%	50%	71%	55%
3 to 4 years	95%	78%	91%	100%
K-3 or above	79%	69%	57%	46%
N	*19*	*32*	*21*	*11*
Teaching children with challenging behaviors				
Birth to 2 years	70%	41%	59%	40%
3 to 4 years	95%	79%	86%	90%
K-3 or above	80%	69%	64%	50%
N	*20*	*29*	*22*	*10*
Teaching children with special needs				
Birth to 2 years	77%	52%	70%	56%
3 to 4 years	94%	71%	85%	89%
K-3 or above	71%	71%	65%	56%
N	*17*	*31*	*20*	*9*
Teaching children from multiple cultural and ethnic backgrounds				
Birth to 2 years	75%	44%	65%	36%
3 to 4 years	95%	72%	85%	91%
K-3 or above	75%	72%	50%	55%
N	*20*	*32*	*20*	*11*
Teaching children who are dual language learners				
Birth to 2 years	56%	35%	56%	33%
3 to 4 years	94%	69%	83%	100%
K-3 or above	56%	69%	44%	44%
N	*16*	*29*	*18*	*9*

Table A3-3: Coursework Taught Related to Teaching and Curriculum: Age-Group Focus, by Degree Program

If topic taught in past two years, age-group focus of the coursework:

Topic	Associate Degree Faculty	Bachelor's Degree Faculty	Master's Degree Faculty	Doctoral Degree Faculty
Teaching science skills to children				
Birth to 2 years	53%	40%	53%	33%
3 to 4 years	100%	85%	93%	100%
K-3 or above	65%	60%	53%	50%
N	*17*	*20*	*15*	*6*
Teaching literacy skills to children				
Birth to 2 years	84%	44%	67%	38%
3 to 4 years	100%	72%	86%	88%
K-3 or above	74%	72%	62%	63%
N	*19*	*32*	*21*	*8*
Teaching art to children				
Birth to 2 years	78%	47%	58%	40%
3 to 4 years	100%	87%	83%	100%
K-3 or above	72%	53%	50%	60%
N	*18*	*15*	*12*	*5*
Teaching social studies to children				
Birth to 2 years	53%	44%	58%	20%
3 to 4 years	100%	72%	83%	80%
K-3 or above	71%	61%	50%	60%
N	*17*	*18*	*12*	*5*
Using play in the curriculum				
Birth to 2 years	86%	52%	68%	60%
3 to 4 years	100%	83%	90%	100%
K-3 or above	81%	62%	53%	60%
N	*21*	*29*	*19*	*10*
Supporting and extending children's physical skills				
Birth to 2 years	70%	57%	63%	67%
3 to 4 years	100%	91%	84%	100%
K-3 or above	70%	61%	63%	67%
N	*20*	*23*	*19*	*9*
Supporting children's social development				
Birth to 2 years	85%	56%	75%	50%
3 to 4 years	100%	85%	95%	100%
K-3 or above	80%	63%	60%	70%
N	*20*	*27*	*20*	*10*

Topic	Associate Degree Faculty	Bachelor's Degree Faculty	Master's Degree Faculty	Doctoral Degree Faculty
Implementing integrated curriculum				
Birth to 2 years	58%	47%	67%	44%
3 to 4 years	100%	75%	86%	89%
K-3 or above	74%	69%	62%	67%
N	*19*	*32*	*21*	*9*
Implementing inclusion strategies for children of all abilities to participate in learning				
Birth to 2 years	67%	38%	65%	38%
3 to 4 years	100%	65%	80%	75%
K-3 or above	71%	71%	65%	63%
N	*21*	*34*	*20*	*8*

Table A3-4: Coursework Taught Related to Teaching Skills in Early Childhood Settings: Age-Group Focus, by Degree Program

If topic taught in past two years, age-group focus of the coursework:

Topic	Associate Degree Faculty	Bachelor's Degree Faculty	Master's Degree Faculty	Doctoral Degree Faculty
Observation, assessment, and documentation to inform teaching and learning				
Birth to 2 years	71%	46%	67%	64%
3 to 4 years	100%	80%	95%	100%
K-3 or above	71%	69%	57%	64%
N	*21*	*35*	*21*	*11*
Classroom management				
Birth to 2 years	71%	33%	42%	14%
3 to 4 years	100%	70%	79%	71%
K-3 or above	71%	73%	68%	57%
N	*17*	*30*	*19*	*7*
How to use different teaching techniques (e.g., planning, instructing, facilitating)				
Birth to 2 years	74%	42%	59%	50%
3 to 4 years	100%	75%	91%	100%
K-3 or above	74%	69%	64%	60%
N	*19*	*36*	*22*	*10*

Table A3-5: Professional Development Experiences Related to Diverse Child Populations in Last Three Years, by Degree Program

If participated in any professional development, topic of experience:

Topic of Professional Development Experience	Associate Degree Faculty	Bachelor's Degree Faculty	Master's Degree Faculty	Doctoral Degree Faculty
Teaching practitioners to work with children from diverse cultural backgrounds	46%	37%	36%	18%
Teaching practitioners to work with children who are dual language learners	21%	17%	16%	27%
Teaching practitioners to work with children with special needs	42%	29%	32%	55%
N	*24*	*41*	*25*	*11*

Table A3-6: Professional Development Experiences Related to Adult Learners in Last Three Years, by Degree Program

If participated in any professional development, topic of experience:

Topic of Professional Development Experience	Associate Degree Faculty	Bachelor's Degree Faculty	Master's Degree Faculty	Doctoral Degree Faculty
Strategies and techniques for mentoring/coaching of adult students	46%	32%	40%	46%
Strategies to supervise adult students in clinical/field experiences	21%	17%	12%	18%
Strategies to provide quality academic/career advising to adult students	42%	17%	20%	36%
Using technology to promote adult learning	42%	39%	48%	55%
Teaching adult students who are English language learners	4%	7%	12%	18%
Teaching culturally and ethnically diverse college students	21%	24%	24%	18%
Teaching economically diverse college students	21%	12%	16%	18%
N	*24*	*41*	*25*	*11*

Table A3-7: Professional Development Experiences Related to Teaching Skills and Assessment in Last Three Years, by Degree Program

If participated in any professional development, topic of experience:

Topic of Professional Development Experience	Associate Degree Faculty	Bachelor's Degree Faculty	Master's Degree Faculty	Doctoral Degree Faculty
Teaching practitioners to use technology with children	13%	27%	32%	46%
Child assessment (e.g., portfolios, using particular assessment tools such as the Work Sampling System)	54%	42%	40%	46%
Early childhood program assessment (e.g., Environmental Rating Scale)	42%	22%	32%	18%
Early childhood teacher assessment (e.g., CLASS)	25%	22%	24%	36%
Teaching practitioners developmentally appropriate practice in infant and toddler settings	29%	15%	32%	18%
N	*24*	*41*	*25*	*11*

Table A3-8: Professional Development Experiences Related to Administration and Leadership in Last Three Years, by Degree Program

If participated in any professional development, topic of experience:

Topic of Professional Development Experience	Associate Degree Faculty	Bachelor's Degree Faculty	Master's Degree Faculty	Doctoral Degree Faculty
Early childhood systems and policy	29%	17%	28%	27%
Organizational development	13%	15%	16%	18%
Theories of leadership	25%	22%	24%	18%
N	*24*	*41*	*25*	*11*

Table A3-9: Professional Development Experiences Related to Early Mathematical Development in Last Three Years, by Degree Program

If participated in any professional development, topic of experience:

Topic of Professional Development Experience	Associate Degree Faculty	Bachelor's Degree Faculty	Master's Degree Faculty	Doctoral Degree Faculty
Teaching practitioners to create mathematically rich environments for young children	23%	20%	33%	22%
Teaching practitioners to implement instructional strategies that support mathematical understanding in children from birth through age 2	5%	9%	19%	11%
Teaching practitioners to implement instructional strategies that support mathematical understanding in children ages 3 and 4 (Pre-K)	9%	26%	33%	33%
Teaching practitioners to implement instructional strategies that support mathematical understanding in children in Kindergarten through grade 3 or higher	5%	17%	24%	11%
Strategies to help practitioners who struggle with mathematics build confidence in their ability to facilitate children's mathematical understanding and skill	0%	9%	14%	0%
N	*22*	*35*	*21*	*9*

Table A3-10: Professional Development Experiences Related to Family Engagement in Last Three Years, by Degree Program

If participated in any professional development, topic of experience:

Topic of Professional Development Experience	Associate Degree Faculty	Bachelor's Degree Faculty	Master's Degree Faculty	Doctoral Degree Faculty
Theories of family engagement	23%	17%	30%	11%
Strategies for working with various family structures (e.g. single parent, same-sex parents, biracial, foster, extended/multigenerational families)	27%	23%	30%	22%
Strategies for working with families of various economic, cultural, ethnic, racial, and linguistic backgrounds	32%	34%	35%	33%
Working with families to extend children's learning at home	27%	23%	35%	44%
Strategies for engaging families in classroom and program activities	41%	23%	45%	33%
Teaching practitioners to work with families of children with special needs	23%	14%	20%	33%
N	*22*	*35*	*20*	*9*

Table A3-11: Professional Development Topics Related to Diverse Child Populations that would be Helpful, by Degree Program

Topic of Professional Development Experience	Associate Degree Faculty	Bachelor's Degree Faculty	Master's Degree Faculty	Doctoral Degree Faculty
Teaching practitioners to work with children from diverse cultural backgrounds	57%	55%	55%	40%
Teaching practitioners to work with children who are dual language learners	78%	70%	73%	60%
Teaching practitioners to work with children with special needs	61%	46%	50%	30%
N	*23*	*33*	*22*	*10*

Table A3-12: Professional Development Experiences Related to Adult Learners that would be Helpful, by Degree Program

Topic of Professional Development Experience	Associate Degree Faculty	Bachelor's Degree Faculty	Master's Degree Faculty	Doctoral Degree Faculty
Strategies and techniques for mentoring/coaching of adult students	30%	39%	41%	30%
Strategies to supervise adult students in clinical/field experiences	52%	33%	36%	50%
Strategies to provide quality academic/career advising to adult students	26%	30%	41%	10%
Using technology to promote adult learning	52%	42%	41%	40%
Teaching adult students who are English language learners	65%	27%	23%	20%
Teaching culturally and ethnically diverse college students	57%	39%	50%	30%
Teaching economically diverse college students	44%	39%	36%	30%
N	*23*	*33*	*22*	*10*

Table A3-13: Professional Development Experiences Related to Teaching Skills and Assessment that would be Helpful, by Degree Program

Topic of Professional Development Experience	Associate Degree Faculty	Bachelor's Degree Faculty	Master's Degree Faculty	Doctoral Degree Faculty
Teaching practitioners to use technology with children	52%	42%	55%	50%
Child assessment (e.g., portfolios, using particular assessment tools such as the Work Sampling System)	35%	33%	32%	20%
Early childhood program assessment (e.g., Environmental Rating Scale)	39%	24%	27%	30%
Early childhood teacher assessment (e.g., CLASS)	52%	33%	32%	30%
Teaching practitioners developmentally appropriate practice in infant and toddler settings	26%	15%	23%	20%
N	*23*	*33*	*22*	*10*

Table A3-14: Professional Development Experiences Related to Administration and Leadership that would be Helpful, by Degree Program

Topic of Professional Development Experience	Associate Degree Faculty	Bachelor's Degree Faculty	Master's Degree Faculty	Doctoral Degree Faculty
Early childhood systems and policy	57%	33%	32%	30%
Organizational development	30%	12%	18%	20%
Theories of leadership	39%	24%	27%	40%
N	*23*	*33*	*22*	*10*

Appendix 4: Challenges Facing Early Childhood Degree Programs, and Additional Resources Needed: Family Engagement and Early Math

Table A4-1: Challenges Related to Lack of Resources and Support Facing Nebraska Early Childhood Degree Programs, by Program

Challenges	Associate Degree	Bachelor's Degree	Master's Degree
Inequitable distribution of resources compared to other programs in the institution	38%	20%	17%
Faculty administrative responsibilities that interfere with time with students (e.g., lack of time for teaching, advising)	63%	40%	0%
Lack of recognition of the value of early childhood from within the department or school	63%	20%	17%
Lack of articulation between 2-year and 4-year college early childhood degree programs	38%	0%	0%
Insufficient ability to recruit students	63%	53%	50%
Insufficient number of full-time faculty	38%	40%	0%
Insufficient number of part-time faculty	0%	0%	33%
Insufficient resources to offer enough courses/sections to meet student needs	0%	27%	33%
Insufficient access to quality clinical experience sites	38%	33%	0%
Insufficient course content focused on children younger than five	0%	7%	17%
Insufficient ability to support students to complete the program (e.g., basic skills supports, tutoring)	38%	7%	17%
Insufficient academic support for students for whom English is a second language	13%	13%	17%
N	*8*	*15*	*6*

Table A4-2: Challenges Related to the Need for Faculty Expertise Facing Nebraska Early Childhood Degree Programs, by Program

Challenges	Associate Degree	Bachelor's Degree	Master's Degree
Need for additional faculty expertise in teaching infants and toddlers	17%	60%	33%
Need for additional faculty expertise in teaching preschool-age children	17%	20%	0%
Need for additional faculty expertise in math pedagogy for young children	33%	20%	33%
Need for additional faculty expertise in science pedagogy for young children	33%	20%	33%
Need for additional faculty expertise in promoting literacy in young children	17%	20%	33%
Need for additional faculty expertise in the social/emotional development of young children	17%	0%	33%
Need for additional faculty expertise in teaching young children who are dual language learners	83%	70%	100%
Need for additional faculty expertise in teaching young children with special needs	50%	50%	0%
Need for additional faculty expertise in working with diverse populations of young children	33%	40%	33%
Need for additional faculty expertise in working with diverse populations of college students	50%	30%	67%
Need for additional faculty expertise in working with and engaging diverse populations of families	17%	40%	33%
N	*6*	*10*	*3*

Appendix 5: Family Engagement and Early Math

Table A5-1: Importance of Including Selected Topics in Early Childhood Higher Education Degree Programs: Percentages of Faculty Members Reporting "Very Important," by Age Group and Program

Topic	Birth to 2 years	3 and/or 4 years	K-grade 3 or higher
Associate Degree Faculty			
Understanding the domains and sequences of mathematical knowledge in young children and how to promote their mathematical understanding and ability to solve problems (N=25)	20%	60%	96%
Understanding the components and sequences of literacy development in young children and how to promote their skills related to oral and written language (N=25)	64%	96%	100%
Understanding socio-emotional development, its relationship to learning and how to support children's socio-emotional skills (N=25)	76%	96%	96%
Understanding normal and atypical motor development in young children and its relationship to learning and how to facilitate their motor skills (N=25)	76%	76%	50%
Understanding and implementing an integrated strategy to engage families in on-going and reciprocal partnerships and its relationship to outcomes for children (N=25)	92%	92%	84%
Bachelor's Degree Faculty			
Understanding the domains and sequences of mathematical knowledge in young children and how to promote their mathematical understanding and ability to solve problems (N=41)	37%	76%	91%
Understanding the components and sequences of literacy development in young children and how to promote their skills related to oral and written language (N=42)	69%	88%	98%

Topic	Birth to 2 years	3 and/or 4 years	K-grade 3 or higher
Understanding socio-emotional development, its relationship to learning and how to support children's socio-emotional skills (N=42)	88%	95%	98%
Understanding normal and atypical motor development in young children and its relationship to learning and how to facilitate their motor skills (N=42)	88%	83%	69%
Understanding and implementing an integrated strategy to engage families in on-going and reciprocal partnerships and its relationship to outcomes for children (N=42)	81%	85%	83%
Master's Degree Faculty			
Understanding the domains and sequences of mathematical knowledge in young children, and how to promote their mathematical understanding and ability to solve problems (N=25)	42%	76%	88%
Understanding the components and sequences of literacy development in young children and how to promote their skills related to oral and written language (N=25)	72%	88%	100%
Understanding socio-emotional development, its relationship to learning and how to support children's socio-emotional skills (N=25)	88%	88%	92%
Understanding normal and atypical motor development in young children and its relationship to learning and how to facilitate their motor skills (N=25)	80%	76%	60%
Understanding and implementing an integrated strategy to engage families in on-going and reciprocal partnerships and its relationship to outcomes for children (N=25)	88%	92%	84%

Table A5-2: Family Engagement: Age-Group Focus, by Degree Program

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

Age-Group Focus	Associate Degree	Bachelor's Degree	Master's Degree
Theories of family engagement			
Birth to two years	100%	71%	75%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	89%	93%	75%
N	*9*	*14*	*4*
Working with various family structures			
Birth to two years	100%	71%	60%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	89%	93%	60%
N	*9*	*14*	*5*
Working with families of children with special needs			
Birth to two years	100%	67%	75%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	89%	93%	50%
N	*9*	*15*	*4*
Working with families of various ethnic, racial, and linguistic backgrounds			
Birth to two years	100%	73%	67%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	89%	93%	67%
N	*9*	*15*	*6*
Engaging families in classroom, program and/or school activities			
Birth to two years	78%	67%	67%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	100%	93%	67%
N	*9*	*15*	*6*
Effective communication strategies with families			
Birth to two years	100%	67%	60%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	89%	93%	60%
N	*9*	*15*	*5*
Utilizing technology to communicate with families			
Birth to two years	100%	67%	60%
3 and/or 4 years (Pre-K)	100%	93%	100%
K-grade 3 or higher	100%	100%	60%
N	*9*	*15*	*5*

Age-Group Focus	Associate Degree	Bachelor's Degree	Master's Degree
Working with families to help them enhance their children's learning at home			
Birth to two years	100%	73%	60%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	89%	93%	60%
N	*9*	*15*	*5*
Using knowledge about children's families in curriculum planning			
Birth to two years	100%	67%	67%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	89%	93%	67%
N	*9*	*15*	*6*
Negotiating conflicts and differences between families and teachers			
Birth to two years	100%	71%	60%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	89%	93%	60%
N	*9*	*14*	*5*
Building community partnerships			
Birth to two years	100%	79%	67%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	89%	86%	67%
N	*9*	*14*	*6*
Child referrals to community resources			
Birth to two years	100%	83%	60%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	89%	92%	60%
N	*9*	*12*	*5*
Utilizing community resources			
Birth to two years	100%	85%	67%
3 and/or 4 years (Pre-K)	89%	100%	100%
K-grade 3 or higher	89%	85%	67%
N	*9*	*13*	*6*

Table A5-3: Teaching Math Skills to Children: Age-Group Focus, by Degree Program

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

Age-Group Focus	Associate Degree	Bachelor's Degree	Master's Degree
Number sense for children			
Birth to two years	78%	60%	50%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	89%	100%	25%
N	*9*	*15*	*4*
Operations and algebraic thinking for children			
Birth to two years	22%	13%	33%
3 and/or 4 years (Pre-K)	89%	93%	67%
K-grade 3 or higher	78%	100%	33%
N	*9*	*15*	*3*
Measurement skills for children			
Birth to two years	44%	27%	33%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	78%	100%	33%
N	*9*	*15*	*3*
Geometry skills for children			
Birth to two years	44%	27%	33%
3 and/or 4 years (Pre-K)	89%	87%	100%
K-grade 3 or higher	89%	100%	33%
N	*9*	*15*	*3*
Children's mathematical reasoning/practices			
Birth to two years	33%	47%	67%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	89%	100%	33%
N	*9*	*15*	*3*

Table A5-4: Development of Children's Mathematical Understanding: Age-Group Focus, by Degree Program

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

Age-Group Focus	Associate Degree	Bachelor's Degree	Master's Degree
Building on children's natural interest in mathematics and their intuitive and informal mathematical knowledge			
Birth to two years	56%	67%	67%
3 and/or 4 years (Pre-K)	89%	100%	100%
K-grade 3 or higher	78%	100%	50%
N	*9*	*15*	*6*
Encouraging children's inquiry and exploration to foster problem solving and mathematical reasoning			
Birth to two years	44%	53%	67%
3 and/or 4 years (Pre-K)	89%	100%	100%
K-grade 3 or higher	78%	100%	50%
N	*9*	*15*	*6*
Using everyday activities as natural vehicles for developing children's mathematical knowledge			
Birth to two years	56%	73%	67%
3 and/or 4 years (Pre-K)	89%	100%	100%
K-grade 3 or higher	78%	100%	50%
N	*9*	*15*	*6*
Introducing explicit mathematical concepts through planned experiences			
Birth to two years	22%	40%	75%
3 and/or 4 years (Pre-K)	89%	100%	100%
K-grade 3 or higher	78%	100%	50%
N	*9*	*15*	*4*
Creating a mathematically rich environment			
Birth to two years	56%	67%	75%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	78%	100%	50%
N	*9*	*15*	*4*
Supporting English learners in developing mathematical knowledge as they concurrently acquire English			
Birth to two years	50%	62%	67%
3 and/or 4 years (Pre-K)	67%	85%	100%
K-grade 3 or higher	67%	100%	33%
N	*6*	*13*	*3*

Age-Group Focus	Associate Degree	Bachelor's Degree	Master's Degree
Developing children's mathematical vocabulary			
Birth to two years	67%	67%	67%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	78%	100%	33%
N	*9*	*15*	*3*
Assessing children's mathematical development			
Birth to two years	56%	60%	67%
3 and/or 4 years (Pre-K)	100%	100%	100%
K-grade 3 or higher	78%	100%	33%
N	*9*	*15*	*3*

Table A5-5: Capability of Teaching Coursework on Teaching Math Skills to Children, as Reported by Faculty Members, by Age Group and Degree Program

Early Math Topic	Birth to 2 years	3 to 4 years	K-grade 3 or higher
Associate Degree Faculty			
Number sense for children (N=23)	65%	91%	52%
Operations and algebraic thinking for children (N=23)	44%	74%	39%
Measurement skills for children (N=23)	57%	78%	61%
Geometry skills for children (N=23)	61%	78%	52%
Children's mathematical reasoning/ practices (N=23)	52%	83%	48%
Bachelor's Degree Faculty			
Number sense for children (N=41)	56%	78%	63%
Operations and algebraic thinking for children (N=41)	40%	70%	60%
Measurement skills for children (N=41)	42%	68%	61%
Geometry skills for children (N=41)	39%	71%	59%
Children's mathematical reasoning/ practices (N=41)	49%	73%	61%
Master's Degree Faculty			
Number sense for children (N=25)	56%	72%	56%
Operations and algebraic thinking for children (N=23)	39%	61%	44%
Measurement skills for children (N=25)	44%	68%	56%
Geometry skills for children (N=25)	40%	72%	52%
Children's mathematical reasoning/ practices (N=25)	48%	64%	52%
Doctoral Degree Faculty			
Number sense for children (N=12)	50%	67%	42%
Operations and algebraic thinking for children (N=12)	33%	50%	25%
Measurement skills for children (N=12)	42%	67%	25%
Geometry skills for children (N=12)	33%	67%	33%
Children's mathematical reasoning/ practices (N=12)	42%	67%	42%

Table A5-6: Capability of Teaching Coursework on Development of Children's Mathematical Understanding, as Reported by Faculty Members, by Age Group and Degree Level

Early Math Topic	Birth to 2 years	3 -4 years	K-grade 3 or higher
Associate Degree Faculty (N=23)			
Building on children's natural interest in mathematics and their intuitive and informal mathematical knowledge	61%	87%	52%
Encouraging children's inquiry and exploration to foster problem solving and mathematical reasoning	65%	87%	52%
Using everyday activities as natural vehicles for developing mathematical knowledge	70%	87%	52%
Introducing explicit mathematical concepts through planned experiences	52%	83%	52%
Creating a mathematically rich environment	57%	87%	52%
Supporting English learners in developing mathematical knowledge as they concurrently acquire English	30%	48%	17%
Developing children's mathematical vocabulary	57%	83%	44%
Assessing children's mathematical development	52%	78%	39%
Bachelor's Degree Faculty (N=41)			
Building on children's natural interest in mathematics and their intuitive and informal mathematical knowledge	61%	76%	63%
Encouraging children's inquiry and exploration to foster problem solving and mathematical reasoning	56%	76%	61%
Using everyday activities as natural vehicles for developing mathematical knowledge	66%	76%	66%
Introducing explicit mathematical concepts through planned experiences	44%	71%	51%
Creating a mathematically rich environment	54%	76%	63%
Supporting English learners in developing mathematical knowledge as they concurrently acquire English	29%	44%	49%
Developing children's mathematical vocabulary	61%	76%	66%
Assessing children's mathematical development	46%	71%	54%

Early Math Topic	Birth to 2 years	3 -4 years	K-grade 3 or higher
Master's Degree Faculty (N=25)			
Building on children's natural interest in mathematics and their intuitive and informal mathematical knowledge	56%	76%	52%
Encouraging children's inquiry and exploration to foster problem solving and mathematical reasoning	52%	76%	52%
Using everyday activities as natural vehicles for developing mathematical knowledge	60%	80%	56%
Introducing explicit mathematical concepts through planned experiences	52%	76%	48%
Creating a mathematically rich environment	48%	68%	48%
Supporting English learners in developing mathematical knowledge as they concurrently acquire English	24%	40%	32%
Developing children's mathematical vocabulary	60%	76%	48%
Assessing children's mathematical development	48%	72%	40%
Doctoral Degree Faculty (N=12)			
Building on children's natural interest in mathematics and their intuitive and informal mathematical knowledge	58%	67%	50%
Encouraging children's inquiry and exploration to foster problem solving and mathematical reasoning	50%	67%	50%
Using everyday activities as natural vehicles for developing mathematical knowledge	67%	75%	50%
Introducing explicit mathematical concepts through planned experiences	50%	67%	33%
Creating a mathematically rich environment	33%	58%	33%
Supporting English learners in developing mathematical knowledge as they concurrently acquire English	25%	33%	25%
Developing children's mathematical vocabulary	58%	67%	42%
Assessing children's mathematical development	50%	67%	33%

Table A5-7: Coursework Taught Related to Teaching Math Skills to Children: Age-Group Focus

If topic taught in past two years, age-group focus of the coursework:

Topic	Associate Degree Faculty	Bachelor's Degree Faculty	Master's Degree Faculty	Doctoral Degree Faculty
Number sense (counting and cardinality) for children				
Birth to 2 years	56%	42%	59%	57%
3 to 4 years	100%	79%	88%	100%
K-3 or above	56%	53%	35%	43%
N	*18*	*19*	*17*	*7*
Operations and algebraic thinking for children				
Birth to 2 years	29%	33%	36%	43%
3 to 4 years	100%	78%	79%	100%
K-3 or above	57%	50%	43%	43%
N	*14*	*18*	*14*	*7*
Measurement skills for children				
Birth to 2 years	29%	35%	33%	50%
3 to 4 years	100%	82%	87%	100%
K-3 or above	59%	53%	40%	50%
N	*17*	*17*	*15*	*6*
Geometry skills for children				
Birth to 2 years	47%	35%	31%	50%
3 to 4 years	93%	77%	77%	100%
K-3 or above	60%	53%	46%	50%
N	*15*	*17*	*13*	*6*
Children's mathematical reasoning/practices				
Birth to 2 years	40%	35%	47%	43%
3 to 4 years	100%	75%	82%	100%
K-3 or above	53%	55%	41%	43%
N	*15*	*20*	*17*	*7*

Table A5-8: Coursework Taught Related to Development of Children's Mathematical Understanding: Age-Group Focus

If topic taught in past two years, age-group focus of the coursework:

Topic	Associate Degree Faculty	Bachelor's Degree Faculty	Master's Degree Faculty	Doctoral Degree Faculty
Building on natural interest in mathematics and a child's intuitive and informal mathematical knowledge				
Birth to 2 years	59%	46%	61%	50%
3 to 4 years	94%	77%	89%	100%
K-3 or above	59%	50%	39%	50%
N	*17*	*22*	*18*	*8*
Encouraging children's inquiry and exploration to foster problem solving and mathematical reasoning				
Birth to 2 years	61%	46%	61%	56%
3 to 4 years	94%	77%	83%	100%
K-3 or above	67%	50%	39%	56%
N	*18*	*22*	*18*	*9*
Using everyday activities as natural vehicles for developing children's mathematical knowledge				
Birth to 2 years	59%	48%	61%	56%
3 to 4 years	94%	86%	94%	100%
K-3 or above	59%	48%	39%	56%
N	*17*	*21*	*18*	*9*
Introducing explicit mathematical concepts through planned experiences				
Birth to 2 years	31%	33%	46%	40%
3 to 4 years	94%	73%	85%	80%
K-3 or above	38%	53%	39%	60%
N	*16*	*15*	*13*	*5*
Creating a mathematically rich environment				
Birth to 2 years	31%	39%	53%	33%
3 to 4 years	100%	67%	77%	83%
K-3 or above	69%	50%	41%	50%
N	*16*	*18*	*17*	*6*
Supporting English learners in developing mathematical knowledge as they concurrently acquire English				
Birth to 2 years	27%	23%	36%	25%
3 to 4 years	100%	69%	82%	100%
K-3 or above	36%	54%	46%	25%
N	*11*	*13*	*11*	*4*

Topic	Associate Degree Faculty	Bachelor's Degree Faculty	Master's Degree Faculty	Doctoral Degree Faculty
Developing children's mathematical vocabulary				
Birth to 2 years	50%	42%	59%	43%
3 to 4 years	100%	84%	94%	100%
K-3 or above	50%	47%	41%	43%
N	*16*	*19*	*17*	*7*
Assessing children's mathematical development				
Birth to 2 years	38%	43%	56%	50%
3 to 4 years	100%	81%	94%	100%
K-3 or above	50%	48%	44%	50%
N	*16*	*21*	*16*	*8*

Table A5-9: Interest in Professional Development Related to Teaching Math Skills and Strategies

Professional Development Topic	1-Not Interested	2	3	4	5-Very Interested	Total
Associate Degree Faculty (N=23)						
Number sense (counting and cardinality) for children	9%	0%	13%	39%	39%	100%
Operations and algebraic thinking for children	9%	4%	13%	35%	39%	100%
Measurement skills for children	9%	0%	21%	26%	44%	100%
Geometry skills for children	9%	0%	26%	30%	35%	100%
Children's mathematical reasoning	9%	0	8%	39%	44%	100%
Assessing children's mathematical understanding	9%	0%	4%	35%	52%	100%
Integrating mathematical understanding and skills in all aspects of curriculum	9%	0%	13%	30%	48%	100%
Integrating mathematical understanding into children's daily activities	9%	0%	8%	39%	44%	100%
Creating a mathematically rich learning environment	9%	0%	17%	30%	44%	100%
Bachelor's Degree Faculty (N=37)						
Number sense (counting and cardinality) for children	5%	35%	16%	22%	22%	100%
Operations and algebraic thinking for children	8%	33%	19%	16%	24%	100%
Measurement skills for children	8%	32%	19%	19%	22%	100%
Geometry skills for children	11%	30%	21%	16%	22%	100%
Children's mathematical reasoning	8%	24%	19%	27%	22%	100%
Assessing children's mathematical understanding	11%	21%	27%	19%	22%	100%
Integrating mathematical understanding and skills in all aspects of curriculum	5%	19%	27%	27%	22%	100%
Integrating mathematical understanding into children's daily activities	5%	16%	27%	30%	22%	100%

Professional Development Topic	1- Not Interested	2	3	4	5-Very Interested	Total
Creating a mathematically rich learning environment	5%	16%	22%	33%	24%	100%
Master's Degree Faculty (N=22-23)						
Number sense (counting and cardinality) for children	9%	28%	18%	18%	27%	100%
Operations and algebraic thinking for children	4%	30%	22%	22%	22%	100%
Measurement skills for children	4%	26%	22%	18%	30%	100%
Geometry skills for children	4%	26%	26%	22%	22%	100%
Children's mathematical reasoning	4%	26%	26%	18%	26%	100%
Assessing children's mathematical understanding	4%	26%	26%	18%	26%	100%
Integrating mathematical understanding and skills in all aspects of curriculum	4%	26%	26%	18%	26%	100%
Integrating mathematical understanding into children's daily activities	4%	26%	26%	18%	26%	100%
Creating a mathematically rich learning environment	4%	18%	30%	18%	30%	100%
Doctoral Degree Faculty (N=12)						
Number sense (counting and cardinality) for children	17%	25%	8%	25%	25%	100%
Operations and algebraic thinking for children	17%	25%	8%	25%	25%	100%
Measurement skills for children	17%	25%	8%	25%	25%	100%
Geometry skills for children	17%	17%	16%	25%	25%	100%
Children's mathematical reasoning	17%	17%	16%	25%	25%	100%
Assessing children's mathematical understanding	17%	17%	16%	25%	25%	100%
Integrating mathematical understanding and skills in all aspects of curriculum	17%	17%	16%	25%	25%	100%
Integrating mathematical understanding into children's daily activities	17%	17%	16%	25%	25%	100%
Creating a mathematically rich learning environment	17%	17%	16%	25%	25%	100%

Table A5-10: Interest in Professional Development Related to Mathematical Understanding

Professional Development Topic	1-Not Interested	2	3	4	5-Very Interested	Total
Associate Degree Faculty (N=22-23)						
Teaching practitioners to create mathematically rich environments for young children	9%	0%	13%	17%	61%	100%
Teaching practitioners to implement instructional strategies that support mathematical understanding in children from birth through age 2	14%	0%	23%	13%	50%	100%
Teaching practitioners to implement instructional strategies that support mathematical understanding in children ages 3 and 4 (Pre-K)	9%	0%	17%	26%	48%	100%
Teaching practitioners to implement instructional strategies that support mathematical understanding in children in Kindergarten through grade 3 or higher	13%	4%	22%	17%	44%	100%
Strategies to help practitioners who struggle with mathematics build confidence in their ability to facilitate children's mathematical understanding and skill	9%	9%	17%	17%	48%	100%
Bachelor's Degree Faculty (N=36-37)						
Teaching practitioners to create mathematically rich environments for young children	8%	16%	19%	30%	27%	100%
Teaching practitioners to implement instructional strategies that support mathematical understanding in children from birth through age 2	11%	33%	8%	20%	28%	100%
Teaching practitioners to implement instructional strategies that support mathematical understanding in children ages 3 and 4 (Pre-K)	11%	17%	22%	25%	25%	100%

Professional Development Topic	1-Not Interested	2	3	4	5-Very Interested	Total
Teaching practitioners to implement instructional strategies that support mathematical understanding in children in Kindergarten through grade 3 or higher	8%	28%	20%	19%	25%	100%
Strategies to help practitioners who struggle with mathematics build confidence in their ability to facilitate children's mathematical understanding and skill	8%	14%	20%	25%	33%	100%
Master's Degree Faculty (N=23)						
Teaching practitioners to create mathematically rich environments for young children	9%	22%	17%	26%	26%	100%
Teaching practitioners to implement instructional strategies that support mathematical understanding in children from birth through age 2	9%	35%	4%	17%	35%	100%
Teaching practitioners to implement instructional strategies that support mathematical understanding in children ages 3 and 4 (Pre-K)	9%	22%	13%	26%	30%	100%
Teaching practitioners to implement instructional strategies that support mathematical understanding in children in Kindergarten through grade 3 or higher	9%	26%	21%	22%	22%	100%
Strategies to help practitioners who struggle with mathematics build confidence in their ability to facilitate children's mathematical understanding and skill	9%	18%	13%	30%	30%	100%
Doctoral Degree Faculty (N=12)						
Teaching practitioners to create mathematically rich environments for young children	17%	17%	16%	25%	25%	100%
Teaching practitioners to implement instructional strategies that support mathematical understanding in children from birth through age 2	17%	25%	8%	8%	42%	100%

Professional Development Topic	1-Not Interested	2	3	4	5-Very Interested	Total
Teaching practitioners to implement instructional strategies that support mathematical understanding in children ages 3 and 4 (Pre-K)	17%	17%	8%	25%	33%	100%
Teaching practitioners to implement instructional strategies that support mathematical understanding in children in Kindergarten through grade 3 or higher	17%	42%	8%	8%	25%	100%
Strategies to help practitioners who struggle with mathematics build confidence in their ability to facilitate children's mathematical understanding and skill	25%	25%	9%	8%	33%	100%

Table A5-11: Interest in Professional Development on Family Engagement

Professional Development Topic	1-Not Interested	2	3	4	5-Very Interested	Total
Associate Degree Faculty (N=23)						
Theories of family engagement	4%	9%	17%	35%	35%	100%
Strategies for working with various family structures (e.g. single-parent, same-sex parents, bi-racial, foster, extended/multigenerational families)	4%	4%	22%	31%	39%	100%
Strategies for working with families of various economic, cultural, ethnic, racial, and linguistic backgrounds	4%	0%	13%	44%	39%	100%
Working with families to extend children's learning at home	4%	0%	13%	39%	44%	100%
Strategies for engaging families in classroom and program activities	4%	0%	17%	31%	48%	100%
Teaching practitioners to work with families of children with special needs	4%	0%	17%	31%	48%	100%

Professional Development Topic	1-Not Interested	2	3	4	5-Very Interested	Total
Negotiating conflict with families	4%	9%	13%	26%	48%	100%
Effective communication strategies with families	4%	0%	17%	31%	48%	100%
Techniques for gathering knowledge about children's families	4%	4%	22%	35%	35%	100%
Using community resources to support families	4%	4%	22%	31%	39%	100%
Incorporating knowledge about families in curriculum planning	4%	9%	13%	30%	44%	100%
Utilizing technology to communicate and interact with families	4%	4%	18%	26%	48%	100%
Bachelor's Degree Faculty (N=37)						
Theories of family engagement	13%	11%	16%	30%	30%	100%
Strategies for working with various family structures (e.g. single-parent, same-sex parents, bi-racial, foster, extended/multigenerational families)	13%	11%	16%	30%	30%	100%
Strategies for working with families of various economic, cultural, ethnic, racial, and linguistic backgrounds	5%	14%	16%	30%	35%	100%
Working with families to extend children's learning at home	11%	11%	16%	30%	32%	100%
Strategies for engaging families in classroom and program activities	6%	11%	16%	32%	35%	100%
Teaching practitioners to work with families of children with special needs	13%	8%	19%	30%	30%	100%
Negotiating conflict with families	19%	16%	11%	32%	22%	100%
Effective communication strategies with families	14%	5%	22%	27%	32%	100%
Techniques for gathering knowledge about children's families	11%	13%	13%	41%	22%	100%
Using community resources to support families	11%	11%	16%	32%	30%	100%

Professional Development Topic	1-Not Interested	2	3	4	5-Very Interested	Total
Incorporating knowledge about families in curriculum planning	13%	8%	14%	38%	27%	100%
Utilizing technology to communicate and interact with families	16%	5%	16%	41%	22%	100%
Master's Degree Faculty (N=23)						
Theories of family engagement	8%	9%	13%	35%	35%	100%
Strategies for working with various family structures (e.g. single-parent, same-sex parents, bi-racial, foster, extended/multigenerational families)	9%	9%	9%	43%	30%	100%
Strategies for working with families of various economic, cultural, ethnic, racial, and linguistic backgrounds	9%	9%	17%	35%	30%	100%
Working with families to extend children's learning at home	9%	13%	13%	30%	35%	100%
Strategies for engaging families in classroom and program activities	9%	9%	17%	35%	30%	100%
Teaching practitioners to work with families of children with special needs	13%	13%	13%	31%	30%	100%
Negotiating conflict with families	9%	9%	17%	43%	22%	100%
Effective communication strategies with families	9%	4%	17%	35%	35%	100%
Techniques for gathering knowledge about children's families	9%	9%	13%	43%	26%	100%
Using community resources to support families	13%	9%	17%	31%	30%	100%
Incorporating knowledge about families in curriculum planning	13%	4%	18%	35%	30%	100%
Utilizing technology to communicate and interact with families	22%	4%	17%	31%	26%	100%
Doctoral Degree Faculty (N=12)						
Theories of family engagement	25%	0%	16%	17%	42%	100%

Professional Development Topic	1-Not Interested	2	3	4	5-Very Interested	Total
Strategies for working with various family structures (e.g. single-parent, same-sex parents, bi-racial, foster, extended/multigenerational families)	25%	0%	0%	50%	25%	100%
Strategies for working with families of various economic, cultural, ethnic, racial, and linguistic backgrounds	8%	0%	8%	34%	50%	100%
Working with families to extend children's learning at home	25%	0%	0%	33%	42%	100%
Strategies for engaging families in classroom and program activities	17%	0%	8%	42%	33%	100%
Teaching practitioners to work with families of children with special needs	25%	0%	0%	42%	33%	100%
Negotiating conflict with families	33%	0%	0%	42%	25%	100%
Effective communication strategies with families	25%	0%	0%	33%	42%	100%
Techniques for gathering knowledge about children's families	25%	0%	8%	42%	25%	100%
Using community resources to support families	25%	0%	8%	34%	33%	100%
Incorporating knowledge about families in curriculum planning	25%	0%	8%	25%	42%	100%
Utilizing technology to communicate and interact with families	42%	0%	0%	33%	25%	100%

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