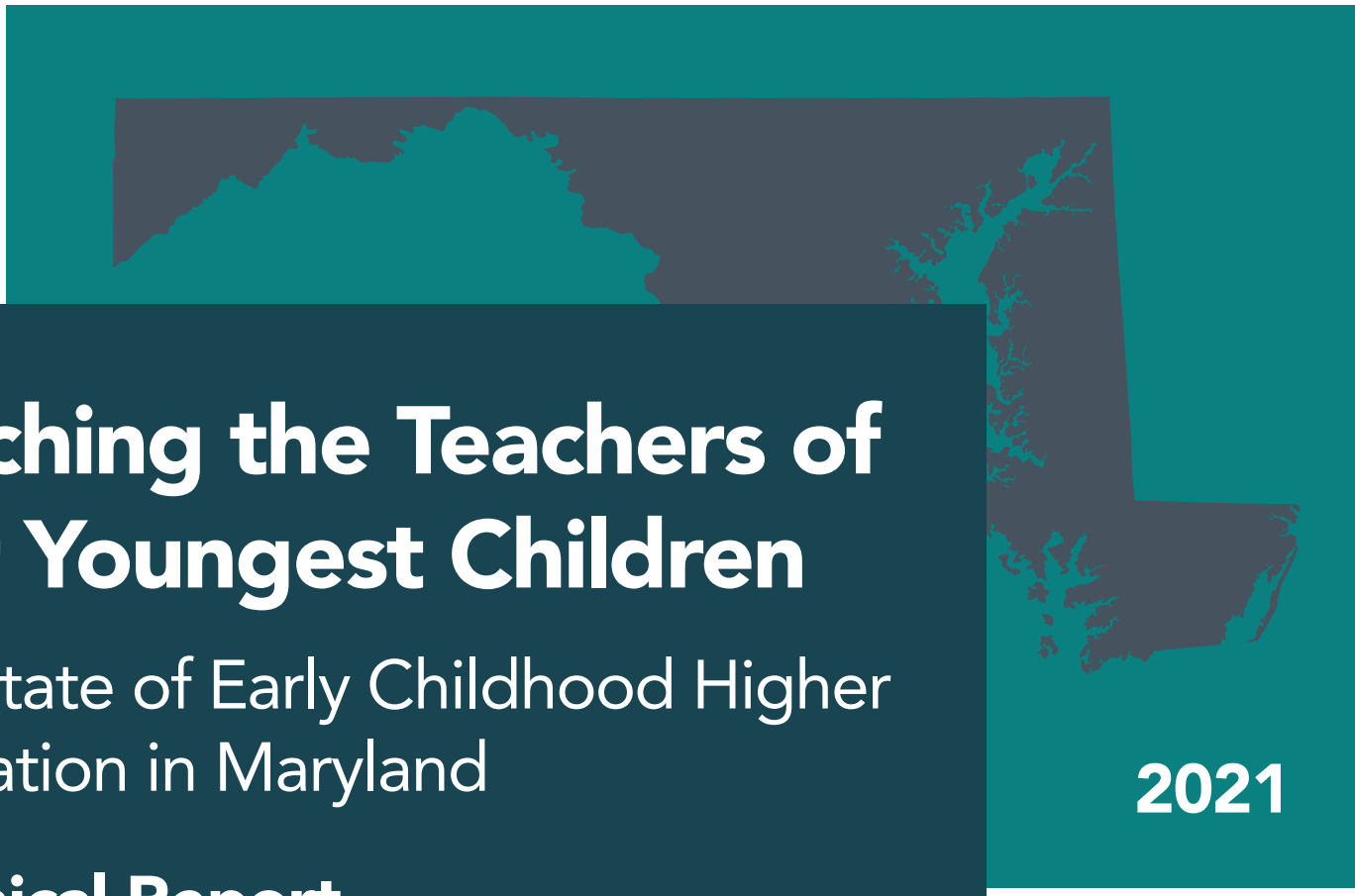

Teaching the Teachers of Our Youngest Children

The State of Early Childhood Higher Education in Maryland

2021

Technical Report

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

Acknowledgements

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Special thanks to the program leads and faculty members who gave generously of their time to participate in the *Maryland Early Childhood Higher Education Inventory*.

We are also grateful to Da-yup Kim and Tomeko Wyrick for their assistance in preparing this report.

The views presented in this report are those of the authors.

Editor: Deborah Meacham

Table of Contents

Chapter 1: Introduction

Through research and practice, the early care and education (ECE) field has demonstrated that early educators play a central and critical role in the development and learning of infants, toddlers, and preschool-age children. In 2015, the Institute of Medicine and the National Research Council of the National Academies of Sciences, Engineering, and Medicine asserted that teaching young children requires knowledge and skills just as complex as those needed to teach older children and issued several recommendations to strengthen professional preparation standards for early childhood practitioners and the institutions responsible for their preparation and ongoing learning. *Transforming the Workforce for Children Birth Through Age 8: A Unifying Foundation* (Institute of Medicine [IOM] & National Research Council [NRC], 2015) includes among its recommendations: 1) the strengthening of competency-based qualifications for all early educators and transition to a minimum requirement of a bachelor's degree, with specialized knowledge and competencies, for all lead teachers working with children from birth to age eight; and 2) the development and enhancement of interdisciplinary higher education programs for ECE professionals, including practice-based and supervised learning opportunities.

Despite these acknowledgements, there has been no significant movement to advance state policies to align minimum education requirements with the recommendations set forth by the committee, nor has there been widespread progress in higher education systems to ensure the availability and accessibility of high-quality interdisciplinary degree programs tasked with preparing early educators. Teacher preparation in the field of ECE has historically included a variety of degree programs in various child-related disciplines, all of which have generally been considered equally acceptable. Too often, these highly diverse degree programs — many of which share the title of "early childhood education" — 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.

Maryland is home to more than 430,000 children under the age of six; 73 percent of these young children have all available parents in the labor force and thus potentially need child care (Annie E. Casey Foundation, 2019). Stakeholders and advocates in Maryland are committed to advancing strategies that improve ECE services, including workforce preparation and development, in order to ensure that early educators have what they need to meet the complex needs of young children. Critical to these efforts is the establishment of a well-coordinated, comprehensive professional preparation and development system that can prepare and support an incoming generation of educators, while also strengthening the skills of the existing early education workforce. Institutions of higher education are crucial to meeting the evolving and increasing demands identified as improving developmental and learning outcomes for the state's young child population.

As noted in the *Early Childhood Workforce Index* (Whitebook, McLean, Austin, & Edwards, 2018), progress toward an equitable, efficient, and effective early childhood system requires advancing preparation, workplace supports, and compensation of the workforce simultaneously. Adequate preparation for teachers, workplace supports that allow for ongoing reflection and development, and appropriate compensation are all variables that are necessary to attract and retain a skilled workforce. Making progress in each of these three areas additionally requires building solid foundations for these policies by securing sufficient financial resources and collecting quality, comprehensive workforce data.

The *Early Childhood Higher Education Inventory II* (CSCCE, 2016) is a tool designed to collect baseline data and inform the workforce preparation aspect of quality ECE. The *Inventory* is a research tool used to describe the landscape of a state's early childhood degree program offerings at the associate, bachelor's, and graduate degree levels and to provide a portrait of early childhood higher education faculty members.[1] 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 (see **Box 1** for a description of *Inventory* methodology). The 2015 IOM/NRC report documented the need to strengthen early educator competencies along multiple dimensions, including mathematics, family engagement, and support for dual language learners (IOM & NRC 2015). To address these areas of emphasis, in 2016, the *Inventory* was revised to include three expanded series of questions on support for early math development, engagement with families, and working with dual language learners.

The *Inventory* was implemented in Maryland during the fall of 2019. 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. This technical report consists of detailed data tables and charts representing each of the topics of interest included in the program and faculty modules of the *Inventory* (CSCCE, 2016). An accompanying narrative report provides additional context about the early childhood and higher education systems in Maryland and shares recommendations for policy changes that could lead to more effective teacher practices to support children's learning.

The COVID-19 pandemic that emerged in the United States in the early months of 2020 has highlighted not only the essential, invaluable nature of ECE services and the educators who provide them, but also the crisis that exists within the system of early care and education in this country. As stakeholders, including various levels of government, work to reform a broken and fragmented ECE system, significant attention must be paid to the issue of educator preparation. Meaningful reform of the ECE system begins with appropriate qualifications for educators, coupled with access to and supports for the education and training of the existing and future workforce. As the fields of higher education and early childhood education look to recover from the devastating impacts of COVID-19, it will be crucial to focus attention on what educators

[1] Maryland is one of 14 states (along with Arkansas, California, Florida, Indiana, Mississippi, Nebraska, New Hampshire, New Jersey, New York, Oregon, Rhode Island, Tennessee, and Washington) in which the *Inventory* has been completed at the time of publication of this report.

need to know, learn, and be able to do in order to best promote children's development and learning as both fields embrace this unique opportunity to reimagine and restructure how to deliver effective early educator preparation and quality ECE services for children and families.

Methodology

Mapping

Through an extensive document review, CSCCE identified Maryland's early childhood higher education degree programs by collecting information on each college or university, the departments in which programs are housed, and degrees and certificates offered.

During 2019, CSCCE compiled a comprehensive list of institutions offering early childhood degrees. To identify community colleges and universities for participation in the *Inventory*, our research team conducted an Internet search of early childhood education-related degree programs in the state of Maryland. This search included terms such as "early childhood education," "child studies," and "human development and family studies."[2] We also referenced the National Association for the Education of Young Children (NAEYC) Early Childhood Higher Education Directory, the Maryland Department of Education Division of Early Learning website, and the Maryland Community College website.

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

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

After compiling information about the programs, CSCCE shared the list with the Early Childhood Education Program Coordinator at Montgomery College for assistance in confirming or clarifying the above information.

A letter was emailed to each contact, introducing CSCCE, describing the purpose of the *Inventory*, and identifying the Maryland State Department of Education as the funding source for the *Inventory*. We then attempted to contact, via telephone, the identified deans or program coordinators to verify the information gathered through our various sources. Institutions that actually did not offer an early childhood degree were excluded from the sample (e.g., programs

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

that were no longer active or an identified program with a developmental focus but with no mention of early education or of preparing students to work as classroom teachers).

Maryland's Population of Early Childhood Higher Education Programs

Through this process, we identified a robust population of public and private institutions of higher education in Maryland that serve thousands of prospective and current early childhood practitioners across the state.

During our initial research of early childhood higher education degree programs in Maryland, we identified 29 institutions of higher education offering a total of 58 early childhood degree programs. Among these, 16 were community colleges, which offered 35 early childhood associate degree programs. Thirteen colleges and universities (eight public and five private) offered 15 bachelor's degree programs, seven master's degree programs, and one doctoral degree program in early childhood.

We then emailed the dean or coordinator of each program (for the remainder of this report, we will refer to these faculty and staff members as "program leads") and scheduled phone interviews. During these phone calls and/or with more in-depth Internet research, we confirmed 29 institutions of higher education offering a total of 56 early childhood degree programs (see **Table 1.1**). **Tables 1.2, 1.3,** and **1.4** display the early childhood degrees offered by these institutions.

Program Module

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

Sample Development

During the telephone call with the program leads, CSCCE identified the appropriate person to respond to the Program Module of the *Inventory*. Typically, this was a department chair or program coordinator. We then asked the potential respondent whether they were willing to participate. Of the 29 institutions of higher education offering early childhood degree programs, 86 percent of the institutions agreed to participate in the *Inventory*, including 94 percent of the community colleges (n=15) and 77 percent of the public and private universities (n=10; see **Table 1.1**).

Table 1.1. Population of Institutions of Higher Education (IHE) in Maryland Offering Early Childhood Education Degrees

Institution Type	Number of IHE Identified as Offering ECE Degree	Number of IHE Agreeing to Participate in the Inventory	Number/Percentage of IHE That Completed at Least One Survey	
			Number	Percentage
Community Colleges	16	15	12	75%
Universities	13	10	8	62%

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 lead, 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 should be sent for them to complete. As a result, some institutions were sent one Program Module to be completed for multiple degree programs at the same level.

Table 1.2. Early Childhood Associate Degree Programs in Maryland

Name of Institution	Associate Degree Program(s)
Allegany College of Maryland	A.S., Teacher Education – Area of Concentration in Early Childhood Education
Anne Arundel Community College	A.A.S., Early Childhood Development A.A.T., Early Childhood Education/Early Childhood Special Education
Baltimore City Community College	A.A.S., Early Childhood Education
Carroll Community College	A.A.S., Early Childhood Education A.A.T., Early Childhood Education/Early Childhood Special Education A.A., Teacher Education (concentration in early childhood)
Cecil College	A.A.T., Early Childhood Education
Chesapeake College	A.A.S., Early Childhood Development A.A.T., Early Childhood Education/Early Childhood Special Education
College of Southern Maryland	A.A.S., Early Childhood Development A.A.T., Early Childhood Education/Generic Special Education, Birth-Grade 3
Frederick Community College	A.A.S. Early Childhood Development A.A.T., Early Childhood Education/Early Childhood Special Education
Garrett College	A.A.T., Early Childhood Education/Early Childhood Special Education A.A., Early Childhood Education
Hagerstown Community College	A.A.T., Early Childhood Education A.A.S., Early Childhood/Primary Grades Education
Harford Community College	A.A.S., Early Childhood Education A.A.T., Early Childhood Education/Early Childhood Special Education
Howard Community College	A.A.S., Early Childhood Development A.A.T., Early Childhood Education/Early Childhood Special Education A.A., Early Childhood Education
Montgomery College	A.A.S., Early Childhood Education Technology A.A.T., Early Childhood Education/Early Childhood Special Education
Prince George's Community College	A.A.S., Early Childhood Education A.A.T., Early Childhood Education/Early Childhood Special Education
The Community College of Baltimore County	A.A.S.. Early Childhood Development A.A.T., Early Childhood Education/Early Childhood Special Education A.A., Teacher Education (Early Childhood Education Option)
Wor-Wic Community College	A.A.S., Early Childhood Education A.A.T., Early Childhood Education

Table 1.3. Early Childhood Bachelor's Degree Programs in Maryland

Name of Institution	Bachelor's Degree Program(s)
Bowie State University	B.S., Early Childhood Education
Coppin State University	B.S., Early Childhood Education B.S., Early Childhood Education – Human Development
Frostburg State University	B.S., Early Childhood/Elementary Education
Hood College	B.A., Early Childhood Education
Notre Dame of Maryland University	B.A., Early Childhood Education/Liberal Arts
Salisbury University	B.S., Early Childhood Education B.S., Early Childhood/Elementary Education Double Major
Stevenson University	B.S., Early Childhood Education
Towson University	B.S., Early Childhood Education
University of Maryland Baltimore County	Undergraduate PreK-3 certification program (Early Childhood Education)*
University of Maryland College Park	B.S., Early Childhood/Early Childhood Special Education B.S., Human Development
University of Maryland Eastern Shore	B.S., Human Ecology, concentration in Child Development
Washington Adventist University	B.A., Early Childhood Education/Special Education

*This program requires students to complete a major in addition to the early childhood education program certification content.

Table 1.4. Early Childhood Graduate Degree Programs in Maryland

Name of Institution	Graduate Degree Program(s)
Loyola University Maryland	M.Ed., Montessori Education (concurrent) M.Ed., Montessori Education (post-diploma)
University of Maryland College Park	M.A., Human Development M.Ed., Human Development Ph.D., Human Development
Notre Dame of Maryland University	M.A.T., Early Childhood Education (PreK-3)
Towson University	M.Ed., Early Childhood Education M.A.T., Early Childhood Education
University of Maryland Baltimore County	M.A.T., Early Childhood Education

Data Collection

The Program Module was emailed to all respondents using Qualtrics, an online survey software program. The Program Module was open for respondents for approximately 60 days during the spring 2019 semester.

Response Rate

A total of 49 program surveys were emailed to the degree programs: 30 to associate degree programs; 11 to bachelor's degree programs; seven to master's degree programs; and one to a doctoral degree program. The final sample consisted of 20 associate degree programs, eight bachelor's degree programs, and two graduate degree programs.[3] The response rate for associate degree programs was 67 percent, for bachelor's degree programs, 73 percent, and for graduate degree programs, 25 percent (see **Table 1.5**).

Table 1.5. Response Rate for the Program Module of the Maryland Inventory

Program Type	Number of Program Modules Administered*	Program Module Response Rate	
		Number	Percentage
Associate	30	20	67%
Bachelor's	11	8	73%
Graduate	8	2	25%

*This category includes only institutions that agreed to participate in the *Inventory*. See **Table 1.1**.

Program Module Content

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

- Goals of the early childhood degree program related to training students for specific job roles and early childhood settings;
- Format in which the degree was offered (e.g., online/distance learning; traditional/on-campus program);
- Program content and age-group focus, including:
    - Course content related to early childhood administration and leadership (asked if offered, not required);
    - Course content to prepare students for a variety of professional development service roles (for example, as mentors, coaches, quality improvement staff, or trainers); and
    - Course content related to self-reflection and awareness of culture, bias, and discriminatory practices;
- Structure of instruction on early childhood topics (e.g., whether content areas are taught as a separate course and/or as part of a broader course covering multiple topics);

[3] Due to the small sample size of graduate degree programs and in order to protect the identity of these institutions, graduate degree program data will not be reported.

- 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);
- Student population including:
    - Target: Pre-service teachers and/or experienced teachers; and
    - Number of students enrolled and number attaining degrees;
- Available student services;
- Number of faculty members teaching in the degree program; and
- Challenges facing the degree program.

Data Analysis

Using Stata 16.1 data analysis and statistical software, we computed frequencies for all questions, by program degree level (associate and bachelor's). Data are reported by program level or type.

Faculty Module

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

Sample Development

We attempted to survey all faculty members employed at each college or university identified as offering an early childhood degree program. For each of the institutions, our telephone conversation with the program lead included a request for a list of names and email addresses for all full- and part-time/adjunct faculty members teaching in the early childhood degree program. Eighteen of the 25 institutions of higher education participating in the *Inventory* sent CSCCE a faculty list, and these names served as the sample universe for the Faculty Module. If the program lead also taught in the early childhood program, they were included in the Faculty Module sample.

A total of 108 surveys were emailed to individual faculty members, resulting in an eligible sample of 70 community college and 38 university faculty members. The final sample consisted of 55 faculty members. Of the faculty members who completed a survey, 30 teach in associate degree programs and 25 teach in bachelor's degree programs. The response rate for community college faculty was 43 percent and for university faculty, 66 percent (see **Table 1.5**). While we cannot assume that findings from this module are representative of all early childhood teacher educators in the state, findings from the Faculty Module concerning course content topics covered and age-group focus were consistent with those from the Program Module.

Data Collection

Each faculty member received a letter from CSCCE describing the *Inventory* and encouraging participation. The Faculty Module was emailed to all faculty members identified for the sample using Qualtrics. The Faculty Module was open to respondents for approximately 60 days during the spring 2019 semester.

Faculty Module Content: All Degree Types

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

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

Response Rate

Table 1.6. Response Rate for the Faculty Module of the Maryland Inventory

Faculty Type	Number of Faculty Modules Administered*	Number of Faculty Responses*	Faculty Module Response Rate
Community College Faculty	70	30	43%
University Faculty	38	25	66%
TOTAL	108	55	51%

*This number is adjusted for email bounces and reflects the eligible sample from the faculty list supplied by program leads.

Data Analysis

Using Stata 16.1 data analysis and statistical software, we computed frequencies for all questions, for faculty members teaching at each degree level (associate and bachelor's).

Chapter 2:
Early Childhood Degree Programs

What we asked about program goals, number of faculty members teaching, the student population, and student services:

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

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

The *Inventory* asked program leads the number of full-time and part-time/adjunct faculty members teaching in the degree program during the fall term of 2019.

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

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

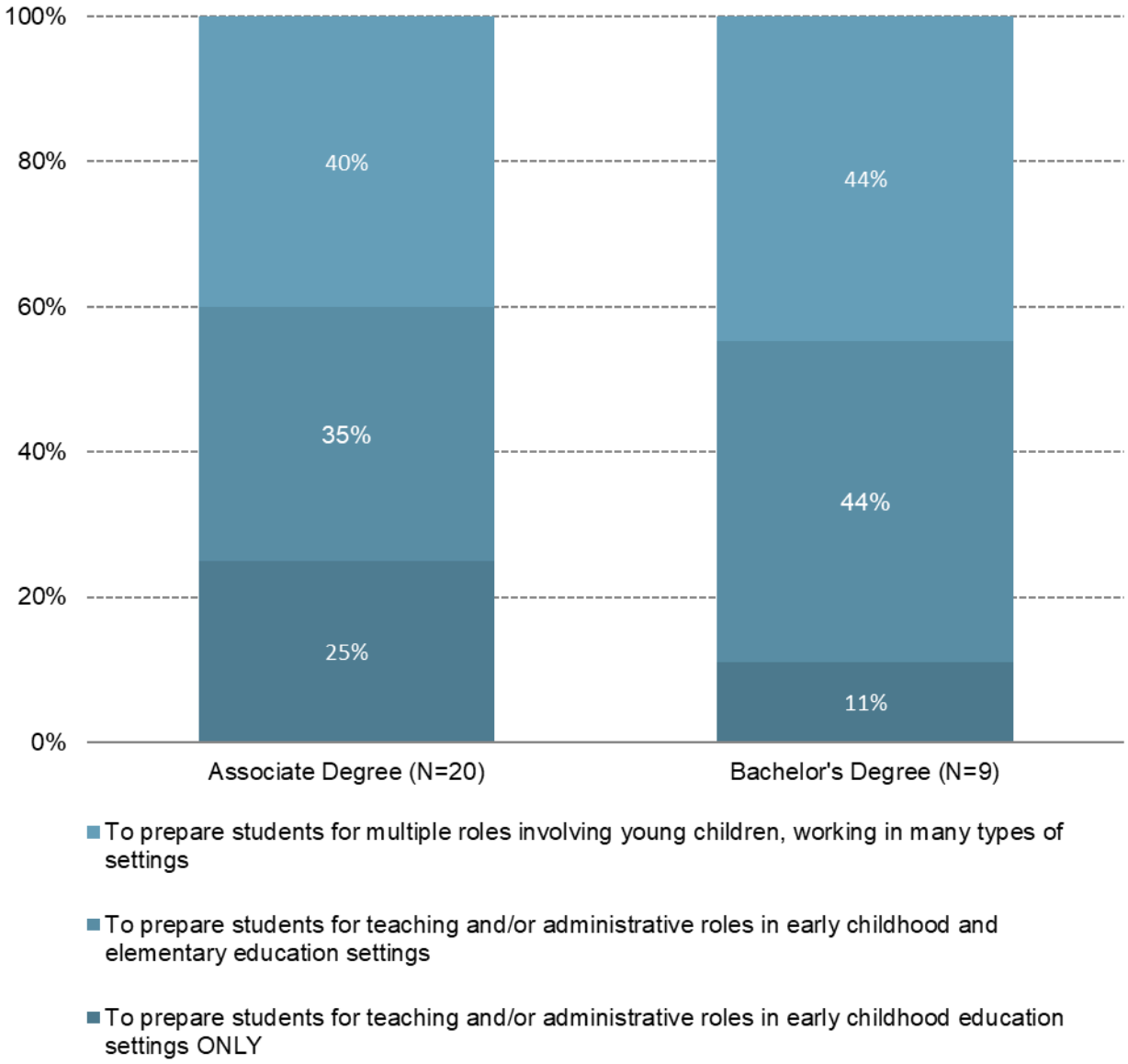
They were then asked to estimate the number of students registered in the degree program and the number of degrees conferred during the 2018-2019 academic year.

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

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

Primary Goals of Maryland Early Childhood Degree Programs

Figure 2.1. Primary Goal of Maryland Early Childhood Degree Programs, by Degree Level



Number of Faculty Members Teaching in Maryland Early Childhood Degree Programs

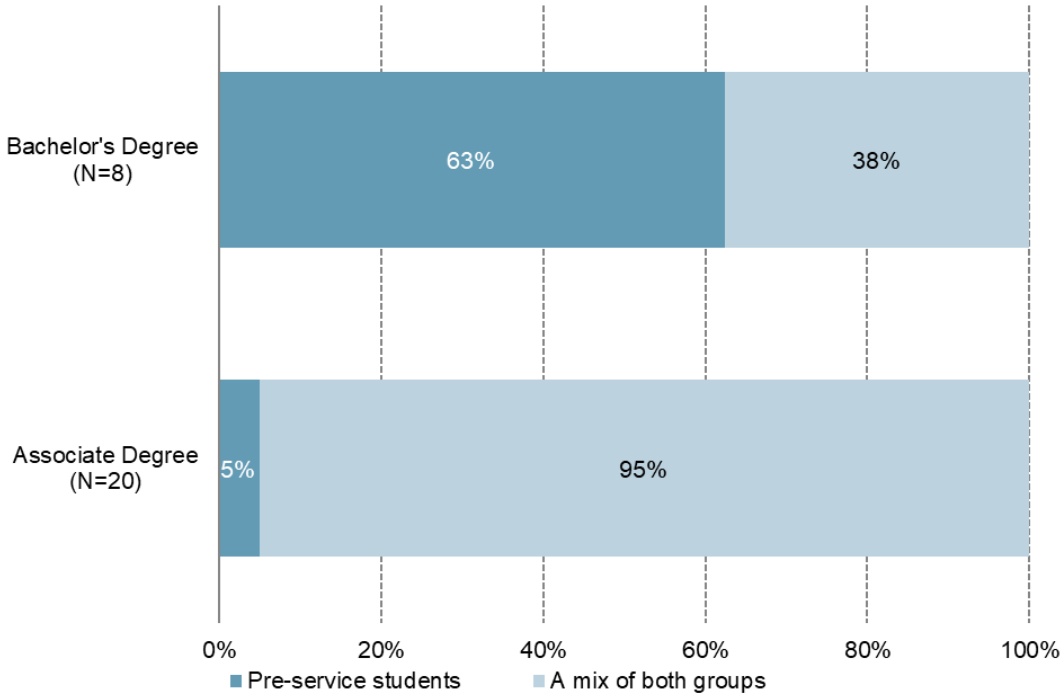
Table 2.1. Number of Faculty Members Teaching in Degree Programs During Fall 2019, by Degree Level

Number of Faculty	Associate Degree (N=40)	Bachelor's Degree (N=12)
Full-Time Faculty		
Mean	2.4	5.86
Range	1-8	0-12
Part-Time/Adjunct Faculty		
Mean	3.45	1.8
Range	0-10	0-2

Students Served in Maryland Early Childhood Degree Programs

Target Student Population

Figure 2.2. Target Student Population of Maryland Early Childhood Degree Programs, by Degree Level



Number of Students and Degrees Conferred

Figure 2.3. Number of Students Enrolled in Maryland Early Childhood Degree Programs in the 2018-2019 Academic Year (N=18)

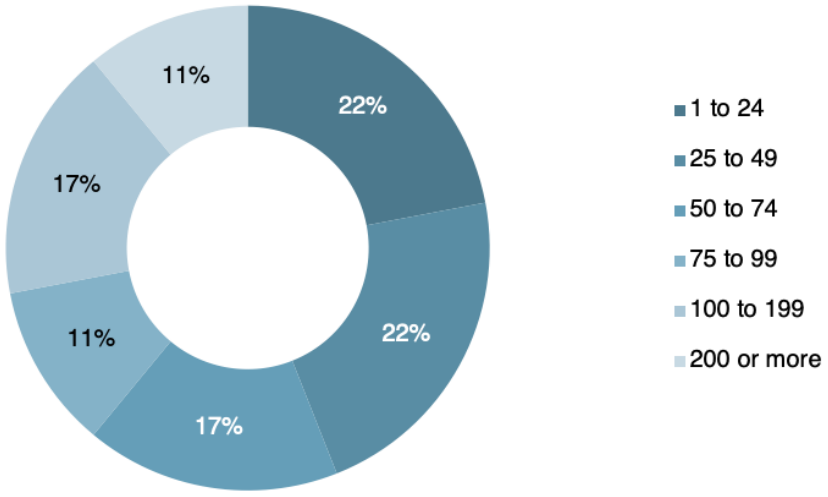
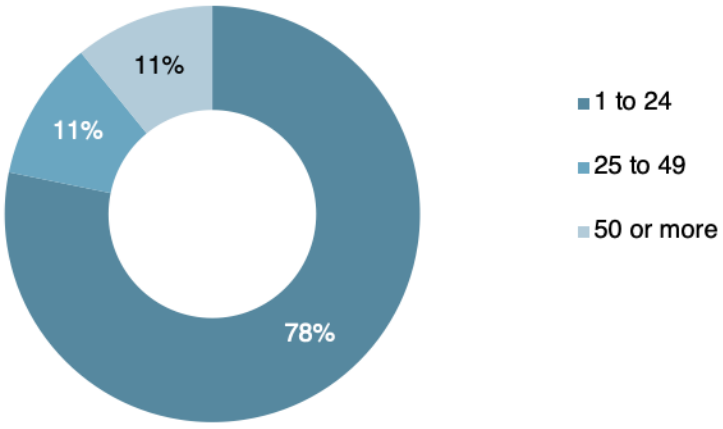
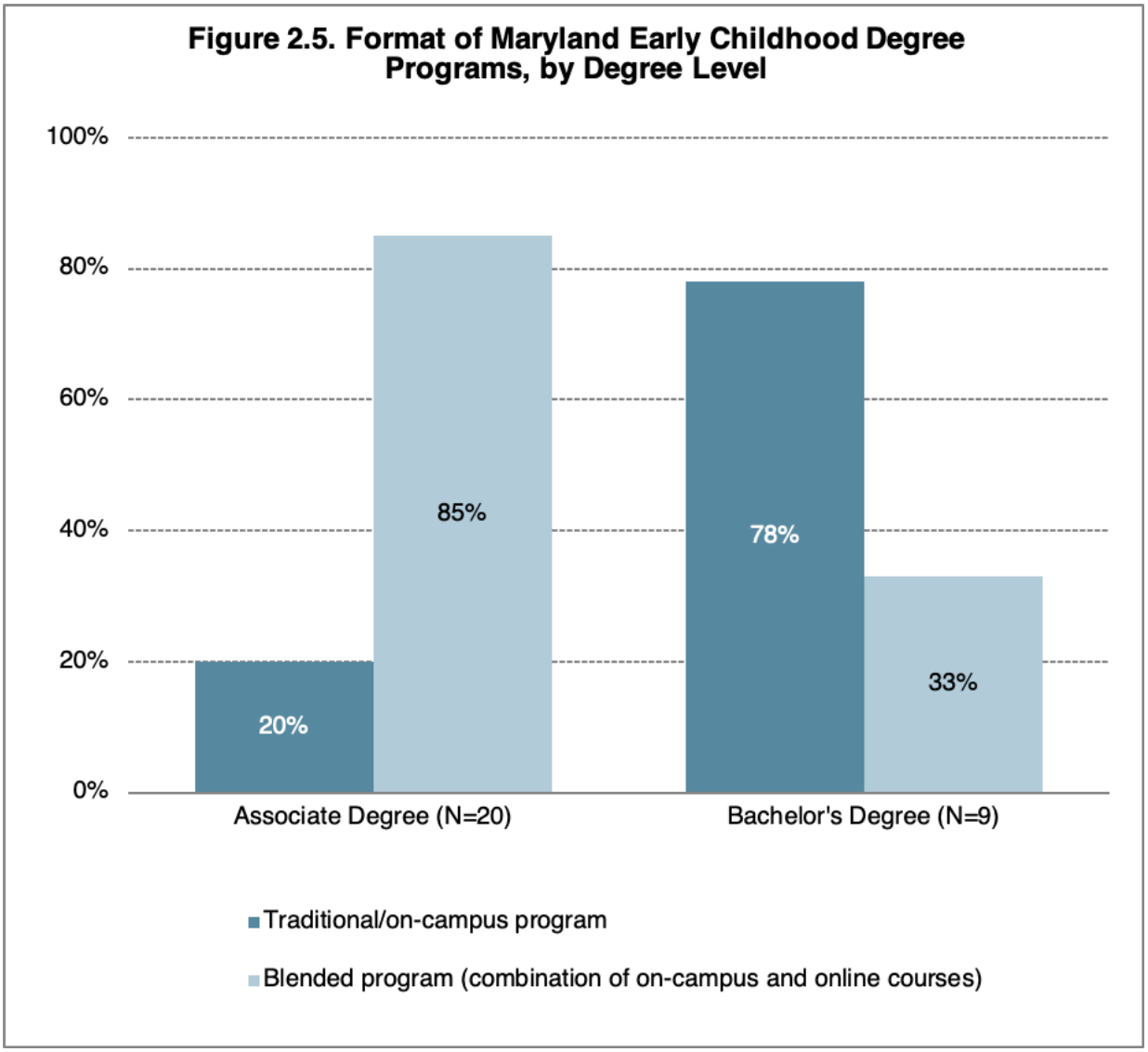


Figure 2.4. Number of Degrees Conferred in Maryland Early Childhood Degree Programs in the 2018-2019 Academic Year (N=19)

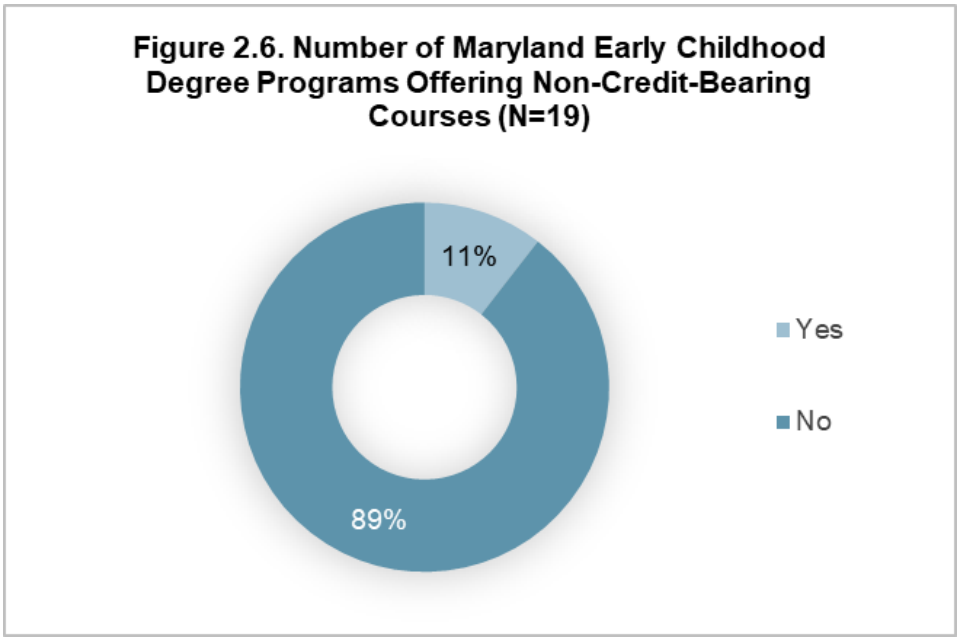


Format of Degree Program

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



Non-Credit-Bearing Courses



Student Services

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

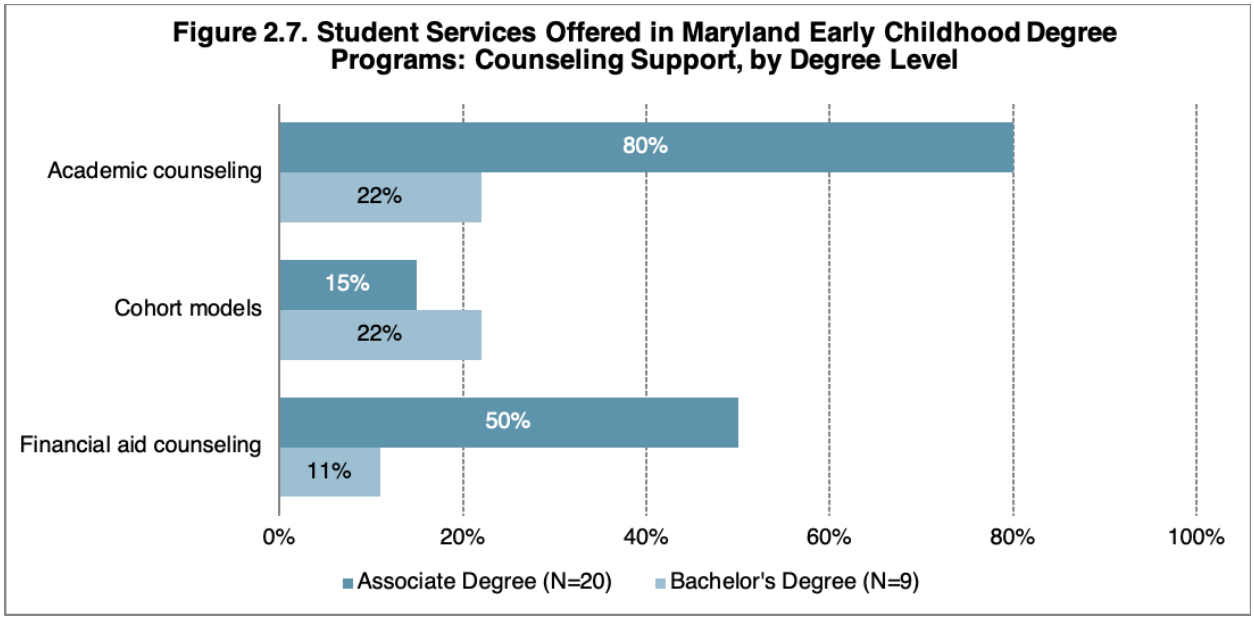


Figure 2.8. Student Services Offered in Maryland Early Childhood Degree Programs: Access Support, by Degree Level

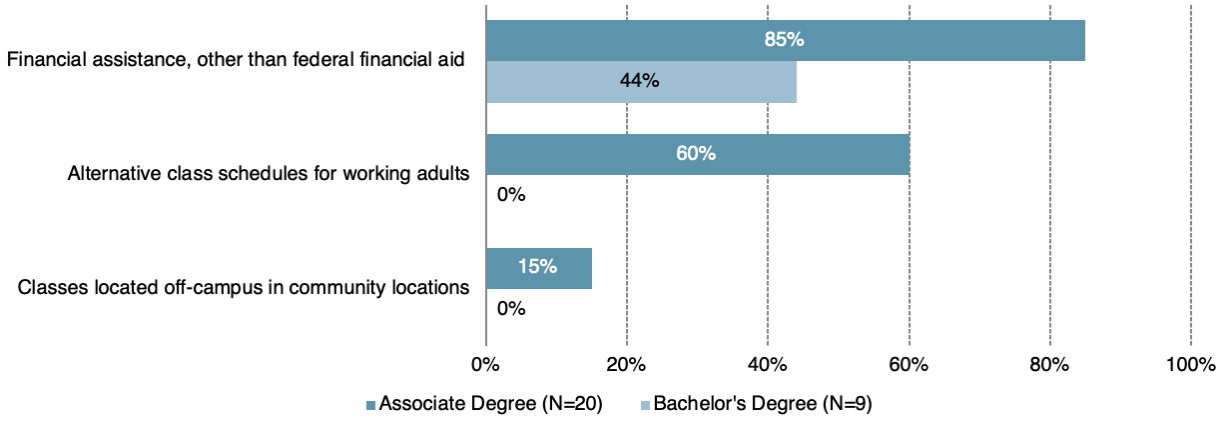
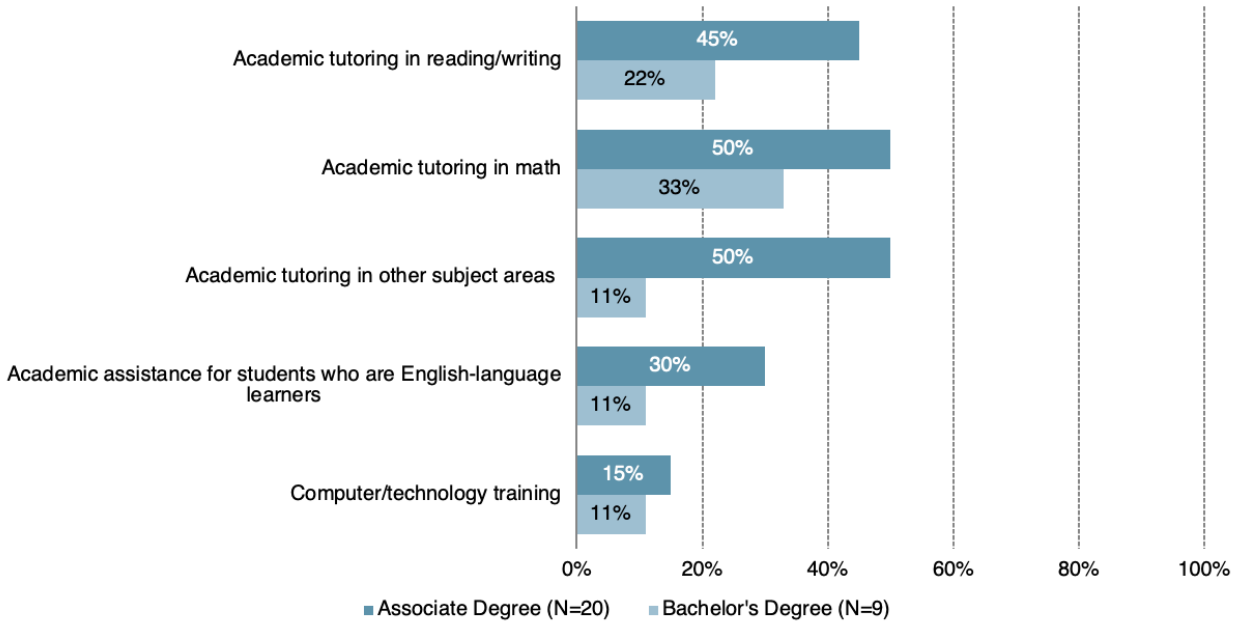


Figure 2.9. Student Services Offered in Maryland Early Childhood Degree Programs: Skills Support, by Degree Level



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

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

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

- Child development and learning;
- Teaching diverse child populations;
- Teaching and curriculum;
- Teaching skills in early childhood settings;
- Family engagement;
- Early mathematics;
  - Development of young children's mathematical understanding; and
  - Teaching young children math skills; and
- Teaching dual language learners.

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

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

Program leads were asked if the degree program required coursework related to self-reflection and issues of culture and bias, if programs offered coursework to prepare students to provide professional development services (e.g., mentoring, coaching, training), and also if programs offered coursework related to early childhood administration and leadership.

Finally, program leads were asked about course structure and required student assessments.

Child Development and Learning

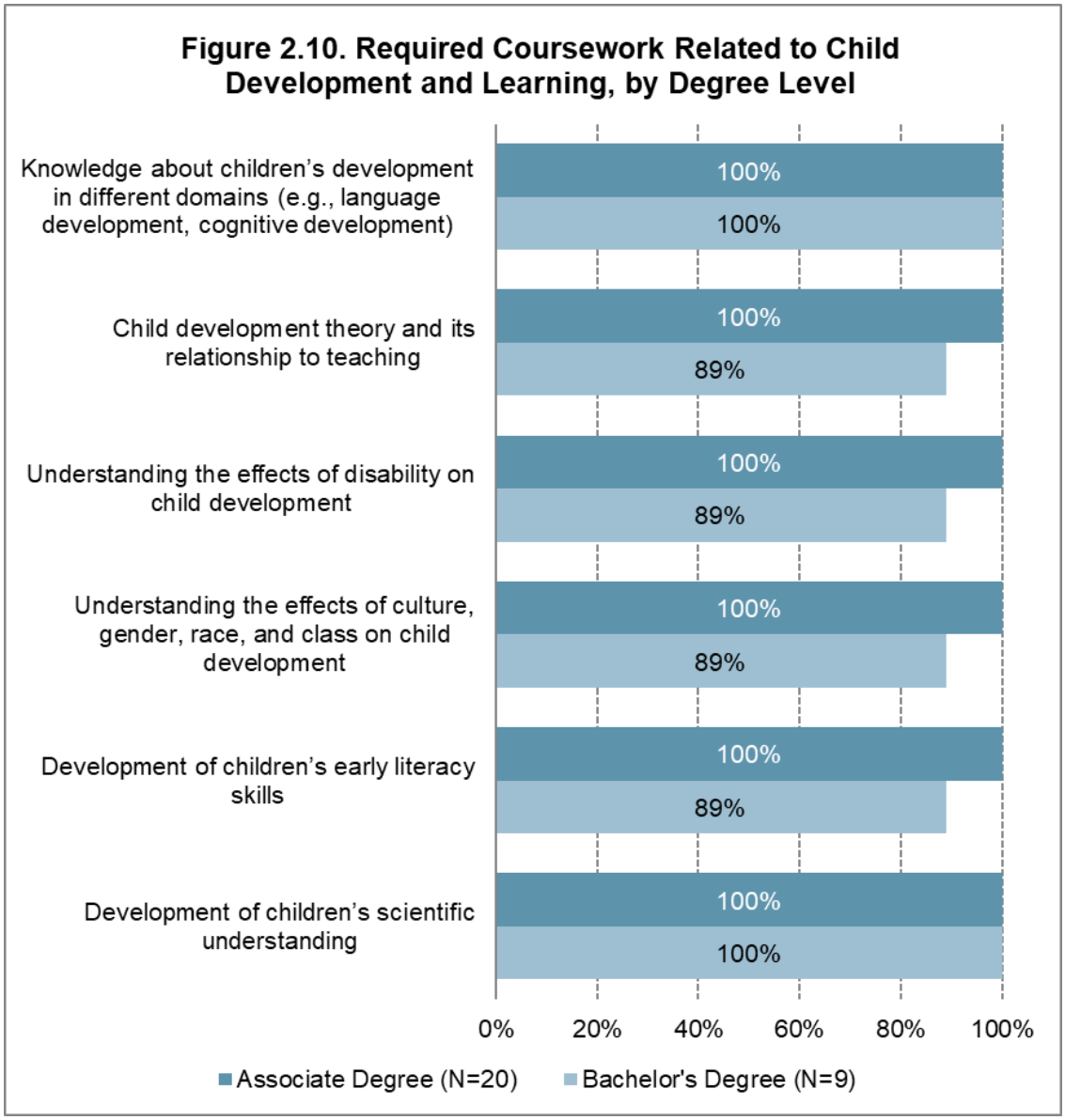


Table 2.2. Coursework Related to Child Development and Learning: Required Age-Group Focus, by Degree Level

Required age-group focus of topic and percentage of programs not requiring this content

Age-Group Focus	Associate Degree (N=20)	Bachelor's Degree (N=9)
Knowledge about children's development in different domains (e.g., language development, cognitive development)		
Birth to 2 years	95%	67%
3 and/or 4 years (pre-K)	95%	89%
K-grade 3 or higher	85%	89%
Required, but no age-group focus	5%	11%
Content area not required	0%	0%
Development of children's early literacy skills		
Birth to 2 years	90%	56%
3 and/or 4 years (pre-K)	95%	78%
K-grade 3 or higher	75%	89%
Required, but no age-group focus	5%	0%
Content area not required	0%	11%
Development of children's scientific understanding		
Birth to 2 years	75%	56%
3 and/or 4 years (pre-K)	75%	78%
K-grade 3 or higher	60%	89%
Required, but no age-group focus	20%	11%
Content area not required	0%	0%
Understanding the effects of culture, gender, race, and class on child development		
Birth to 2 years	90%	56%
3 and/or 4 years (pre-K)	90%	67%
K-grade 3 or higher	80%	78%
Required, but no age-group focus	10%	11%
Content area not required	0%	11%
Child development theory and its relationship to teaching		
Birth to 2 years	90%	67%
3 and/or 4 years (pre-K)	90%	89%
K-grade 3 or higher	75%	89%
Required, but no age-group focus	10%	0%
Content area not required	0%	11%

Table 2.2. Coursework Related to Child Development and Learning: Required Age-Group Focus, by Degree Level (Continued)

Required age-group focus of topic and percentage of programs not requiring this content

Age-Group Focus	Associate Degree (N=20)	Bachelor's Degree (N=9)
Understanding the effects of disability on child development		
Birth to 2 years	85%	56%
3 and/or 4 years (pre-K)	90%	67%
K-grade 3 or higher	80%	89%
Required, but no age-group focus	5%	0%
Content area not required	0%	11%

Teaching Diverse Child Populations

Figure 2.11. Required Coursework Related to Teaching Diverse Child Populations, by Degree Level

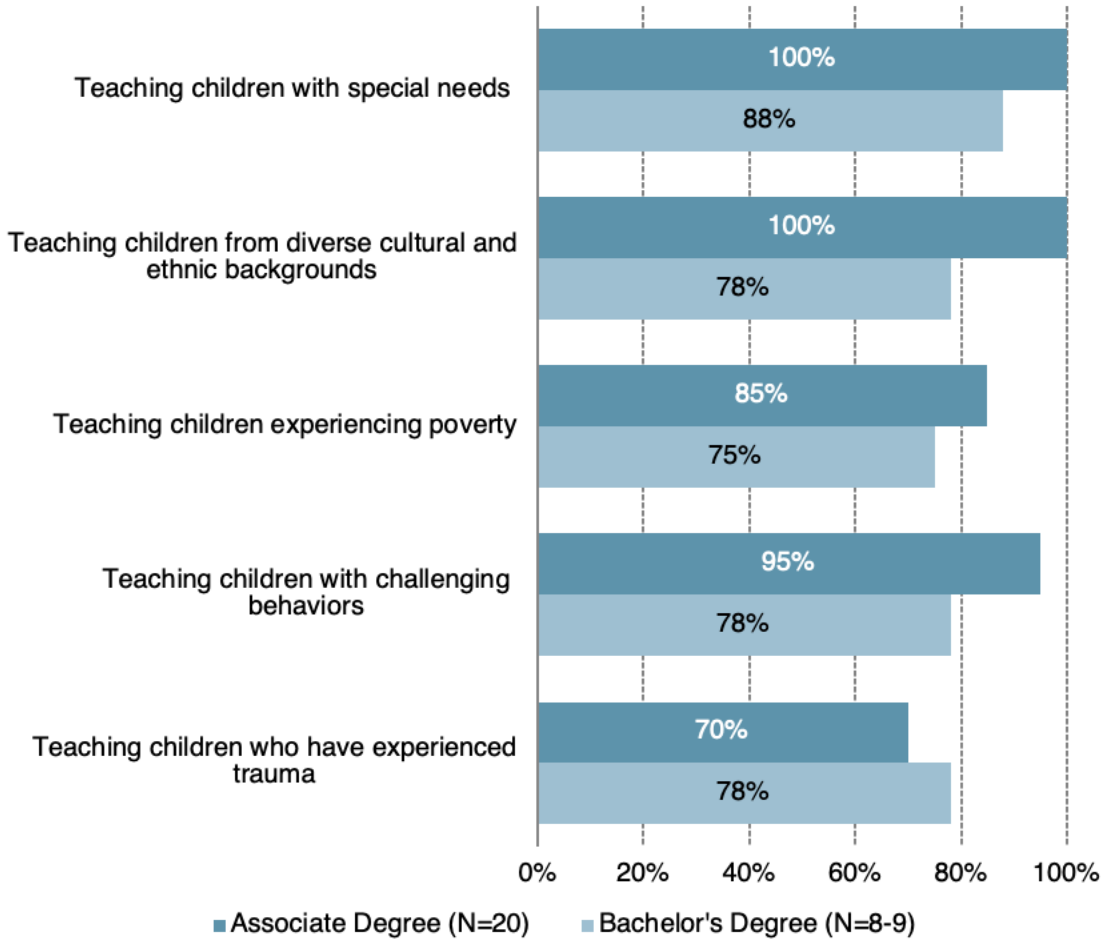


Table 2.3. Coursework Related to Teaching Diverse Child Populations: Required Age-Group Focus, by Degree Level

Required age-group focus of topic and percentage of programs not requiring this content

Age-Group Focus	Associate Degree (N=20)	Bachelor's Degree (N=9)
Teaching children who are experiencing poverty		
Birth to 2 years	65%	50%
3 and/or 4 years (pre-K)	65%	63%
K-grade 3 or higher	60%	63%
Required, but no age-group focus	20%	13%
Content area not required	15%	25%
Teaching children from diverse cultural and ethnic backgrounds		
Birth to 2 years	80%	44%
3 and/or 4 years (pre-K)	80%	67%
K-grade 3 or higher	75%	67%
Required, but no age-group focus	20%	11%
Content area not required	0%	22%
Teaching children with challenging behaviors		
Birth to 2 years	80%	44%
3 and/or 4 years (pre-K)	80%	67%
K-grade 3 or higher	75%	67%
Required, but no age-group focus	15%	11%
Content area not required	5%	22%
Teaching children with special needs		
Birth to 2 years	85%	56%
3 and/or 4 years (pre-K)	85%	78%
K-grade 3 or higher	80%	78%
Required, but no age-group focus	10%	11%
Content area not required	0%	11%
Teaching children who have experienced trauma		
Birth to 2 years	50%	44%
3 and/or 4 years (pre-K)	50%	67%
K-grade 3 or higher	45%	67%
Required, but no age-group focus	20%	11%
Content area not required	30%	22%

Teaching and Curriculum

Figure 2.12. Required Coursework Related to Teaching and Curriculum, by Degree Level

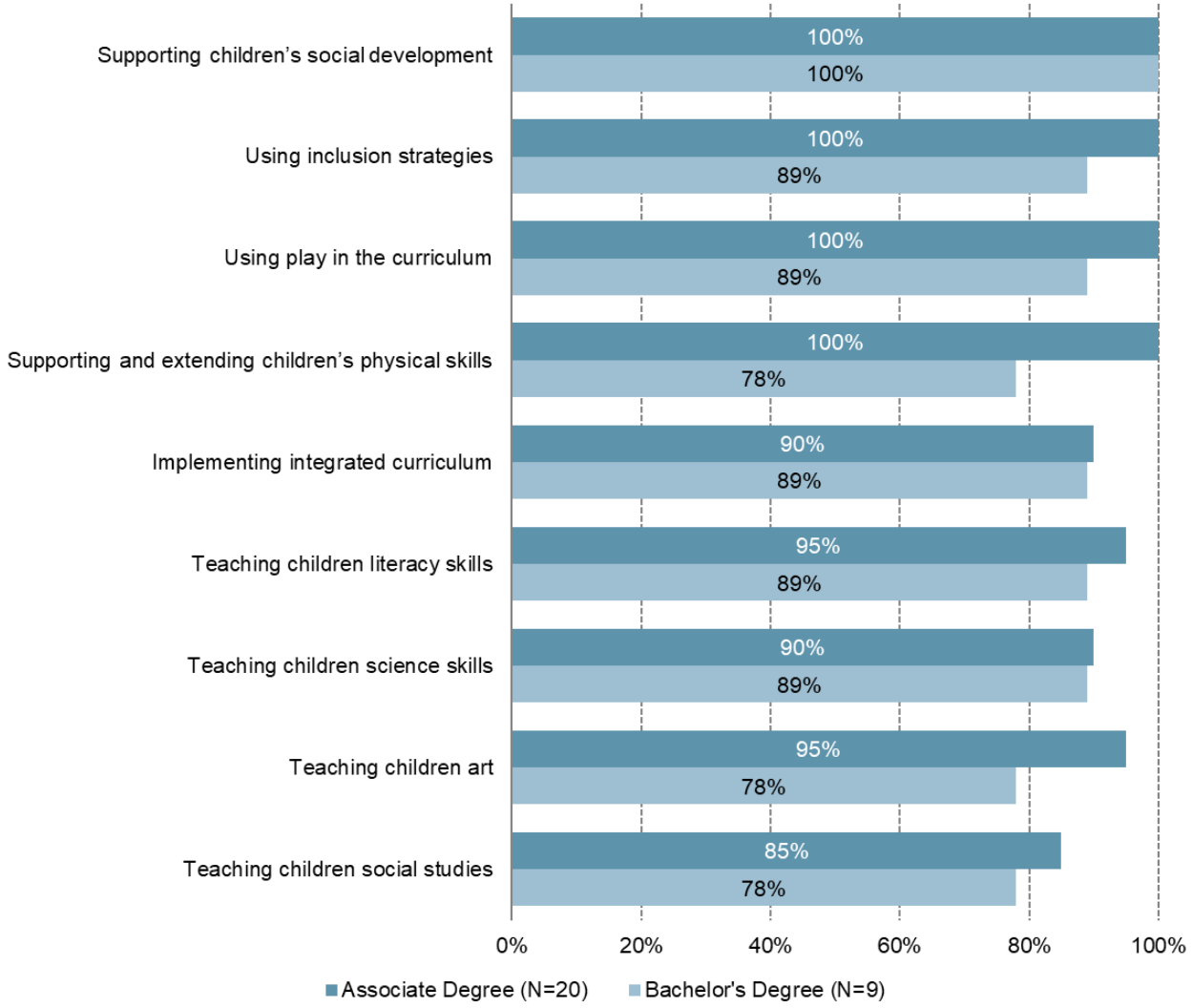


Table 2.4. Coursework Related to Teaching and Curriculum: Required Age-Group Focus, by Degree Level

Required age-group focus of topic and percentage of programs not requiring this content

Age-Group Focus	Associate Degree (N=20)	Bachelor's Degree (N=9)
Teaching children science skills		
Birth to 2 years	55%	33%
3 and/or 4 years (pre-K)	75%	78%
K-grade 3 or higher	60%	89%
Required, but no age-group focus	15%	0%
Content area not required	10%	11%
Teaching children literacy skills		
Birth to 2 years	80%	44%
3 and/or 4 years (pre-K)	85%	78%
K-grade 3 or higher	75%	89%
Required, but no age-group focus	10%	0%
Content area not required	5%	11%
Teaching children art		
Birth to 2 years	65%	33%
3 and/or 4 years (pre-K)	75%	67%
K-grade 3 or higher	70%	78%
Required, but no age-group focus	20%	0%
Content area not required	5%	22%
Teaching children social studies		
Birth to 2 years	55%	22%
3 and/or 4 years (pre-K)	65%	67%
K-grade 3 or higher	55%	78%
Required, but no age-group focus	20%	0%
Content area not required	15%	22%
Using play in the curriculum		
Birth to 2 years	80%	56%
3 and/or 4 years (pre-K)	80%	78%
K-grade 3 or higher	75%	78%
Required, but no age-group focus	20%	0%
Content area not required	0%	11%

Table 2.4. Coursework Related to Teaching and Curriculum: Required Age-Group Focus, by Degree Level (Continued)

Required age-group focus of topic and percentage of programs not requiring this content

Age-Group Focus	Associate Degree (N=20)	Bachelor's Degree (N=9)
Supporting and extending children's physical skills		
Birth to 2 years	80%	22%
3 and/or 4 years (pre-K)	80%	44%
K-grade 3 or higher	75%	56%
Required, but no age-group focus	20%	22%
Content area not required	0%	22%
Supporting children's social development		
Birth to 2 years	80%	33%
3 and/or 4 years (pre-K)	80%	56%
K-grade 3 or higher	75%	67%
Required, but no age-group focus	20%	33%
Content area not required	0%	0%
Implementing integrated curriculum		
Birth to 2 years	70%	22%
3 and/or 4 years (pre-K)	75%	67%
K-grade 3 or higher	60%	67%
Required, but no age-group focus	15%	11%
Content area not required	10%	11%
Implementing inclusion strategies for children of all abilities		
Birth to 2 years	80%	44%
3 and/or 4 years (pre-K)	80%	56%
K-grade 3 or higher	75%	67%
Required, but no age-group focus	20%	22%
Content area not required	0%	11%

Teaching Skills in Early Childhood Settings

Figure 2.13. Required Coursework Related to Teaching Skills in Early Childhood Settings, by Degree Level

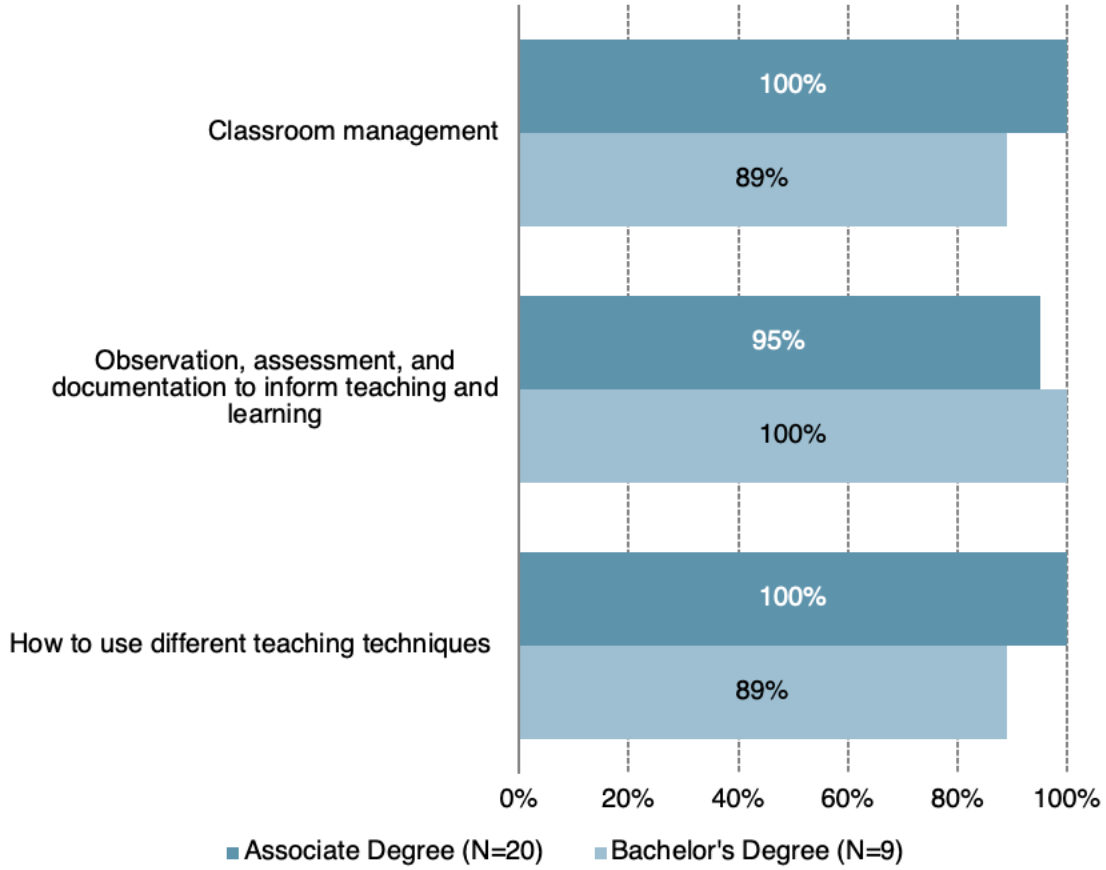


Table 2.5. Coursework Related to Teaching Skills in Early Childhood Settings: Required Age-Group Focus, by Degree Level

Required age-group focus of topic and percentage of programs not requiring this content

Age-Group Focus	Associate Degree (N=20)	Bachelor's Degree (N=9)
Observation, assessment, and documentation to inform teaching and learning		
Birth to 2 years	85%	56%
3 and/or 4 years (pre-K)	80%	78%
K-grade 3 or higher	80%	89%
Required, but no age-group focus	10%	11%
Content area not required	5%	0%
Classroom management		
Birth to 2 years	80%	44%
3 and/or 4 years (pre-K)	85%	67%
K-grade 3 or higher	75%	78%
Required, but no age-group focus	15%	11%
Content area not required	0%	11%
How to use different teaching strategies (e.g., planning, instructing, facilitating)		
Birth to 2 years	80%	56%
3 and/or 4 years (pre-K)	80%	78%
K-grade 3 or higher	80%	89%
Required, but no age-group focus	15%	0%
Content area not required	0%	11%

Administration and Leadership

Figure 2.14. Coursework Offered Related to Administration and Leadership: Supervision and Operations Topics, by Degree Level

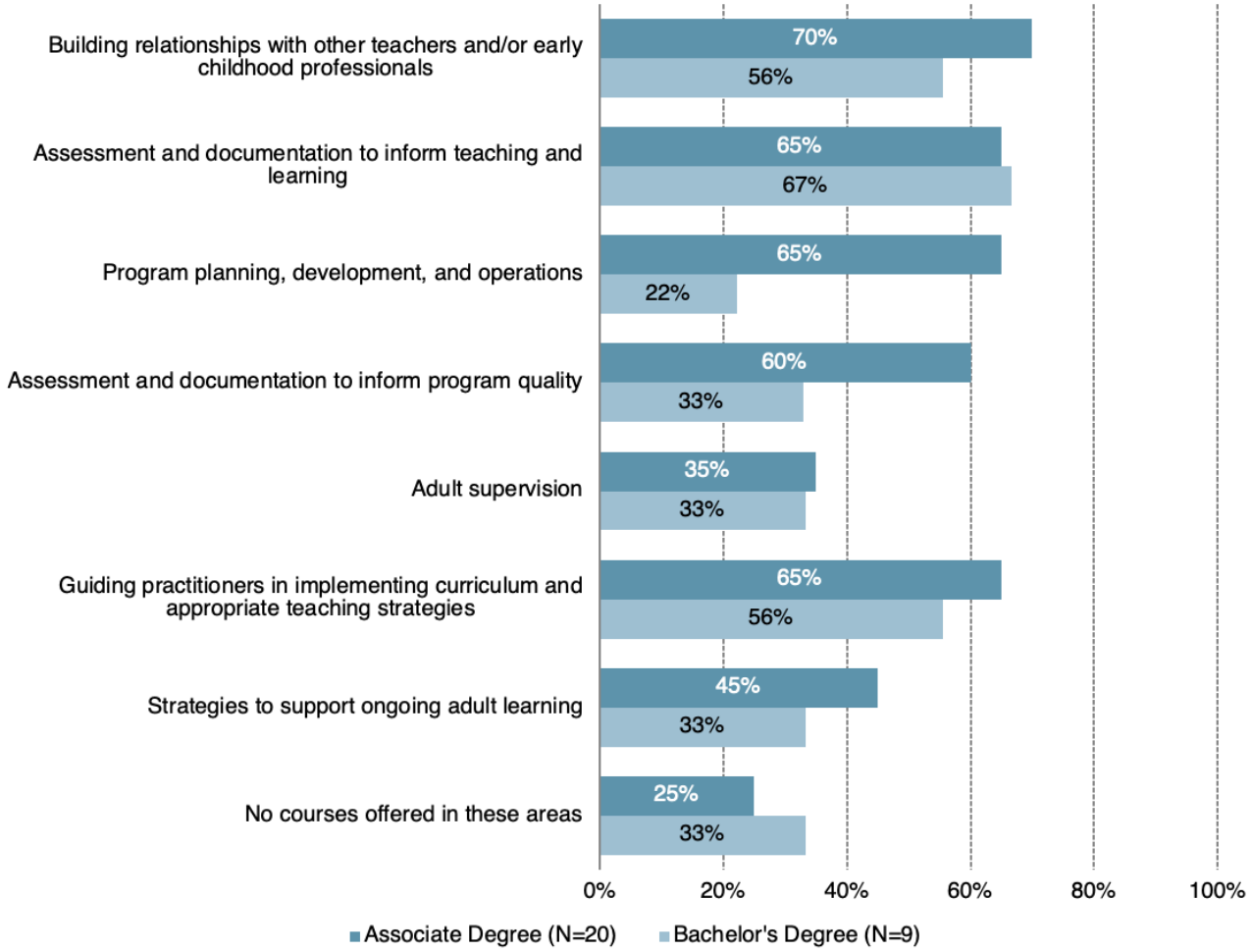
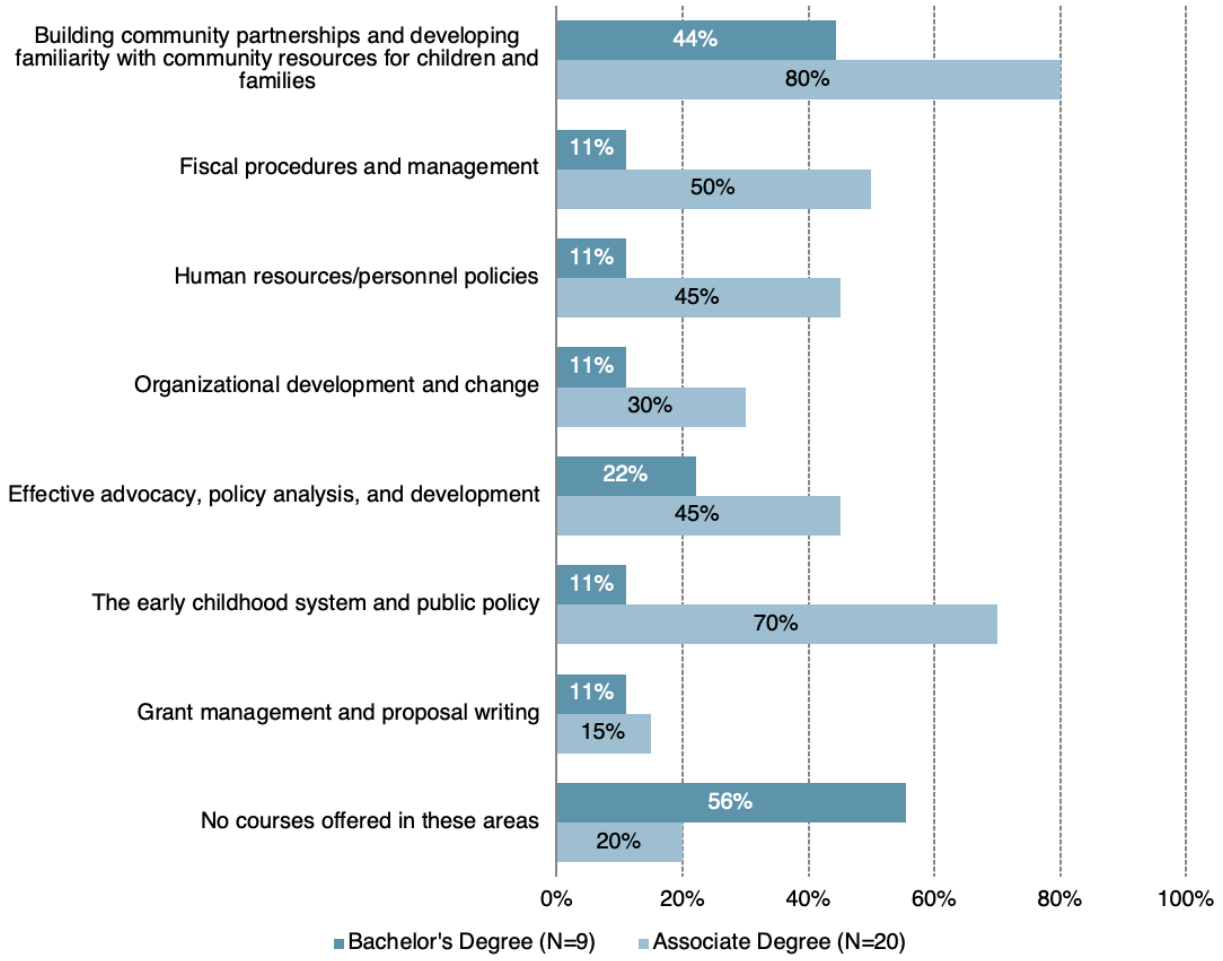


Figure 2.15. Coursework Offered Related to Administration and Leadership: Organization and Systems Topics, by Degree Level



Family Engagement

Figure 2.16. Required Coursework Related to Family Engagement, by Degree Level

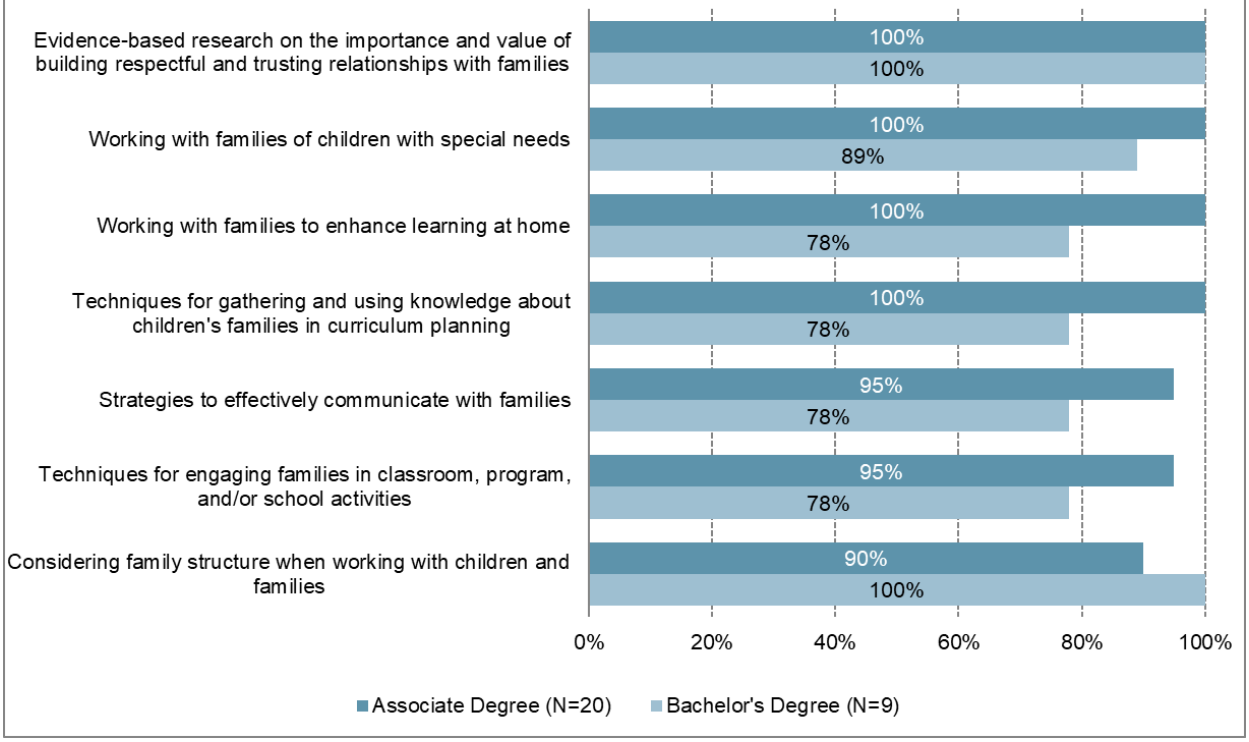


Table 2.6. Coursework Related to Family Engagement: Required Age-Group Focus, by Degree Level

Required age-group focus of topic and percentage of programs not requiring this content

Age-Group Focus	Associate Degree (N=20)	Bachelor's Degree (N=9)
Evidence-based research on the importance and value of building respectful and trusting relationships with families		
Birth to 2 years	75%	44%
3 and/or 4 years (pre-K)	75%	67%
K-grade 3 or higher	70%	67%
Required, but no age-group focus	25%	33%
Content area not required	0%	0%
Considering family structures when working with children and families (e.g., single-parent and divorced families, LGBT families, multi-generational families) and having strategies to partner effectively with a variety of family types		
Birth to 2 years	65%	56%
3 and/or 4 years (pre-K)	65%	67%
K-grade 3 or higher	60%	67%
Required, but no age-group focus	25%	33%
Content area not required	10%	0%
Working with families of children with special needs		
Birth to 2 years	80%	44%
3 and/or 4 years (pre-K)	80%	56%
K-grade 3 or higher	75%	56%
Required, but no age-group focus	20%	33%
Content area not required	0%	11%
Working with families to help them enhance their children's learning at home		
Birth to 2 years	80%	56%
3 and/or 4 years (pre-K)	80%	67%
K-grade 3 or higher	70%	67%
Required, but no age-group focus	20%	11%
Content area not required	0%	22%

Table 2.6. Coursework Related to Family Engagement: Required Age-Group Focus, by Degree Level (Continued)

Required age-group focus of topic and percentage of programs not requiring this content

Age-Group Focus	Associate Degree (N=20)	Bachelor's Degree (N=9)
Techniques for engaging families in classroom, program, and/or school activities		
Birth to 2 years	75%	56%
3 and/or 4 years (pre-K)	75%	67%
K-grade 3 or higher	70%	67%
Required, but no age-group focus	20%	11%
Content area not required	5%	22%
Strategies to effectively communicate with families, including communicating in their home language, making home visits, using technology (email, text message), and providing families opportunities for communication		
Birth to 2 years	75%	56%
3 and/or 4 years (pre-K)	75%	67%
K-grade 3 or higher	70%	67%
Required, but no age-group focus	20%	11%
Content area not required	5%	22%
Techniques for gathering and using knowledge about children's families in curriculum planning		
Birth to 2 years	80%	56%
3 and/or 4 years (pre-K)	80%	67%
K-grade 3 or higher	75%	67%
Required, but no age-group focus	20%	11%
Content area not required	0%	22%

Early Mathematics

Figure 2.17. Required Coursework Related to Development of Children's Mathematical Understanding, by Degree Level

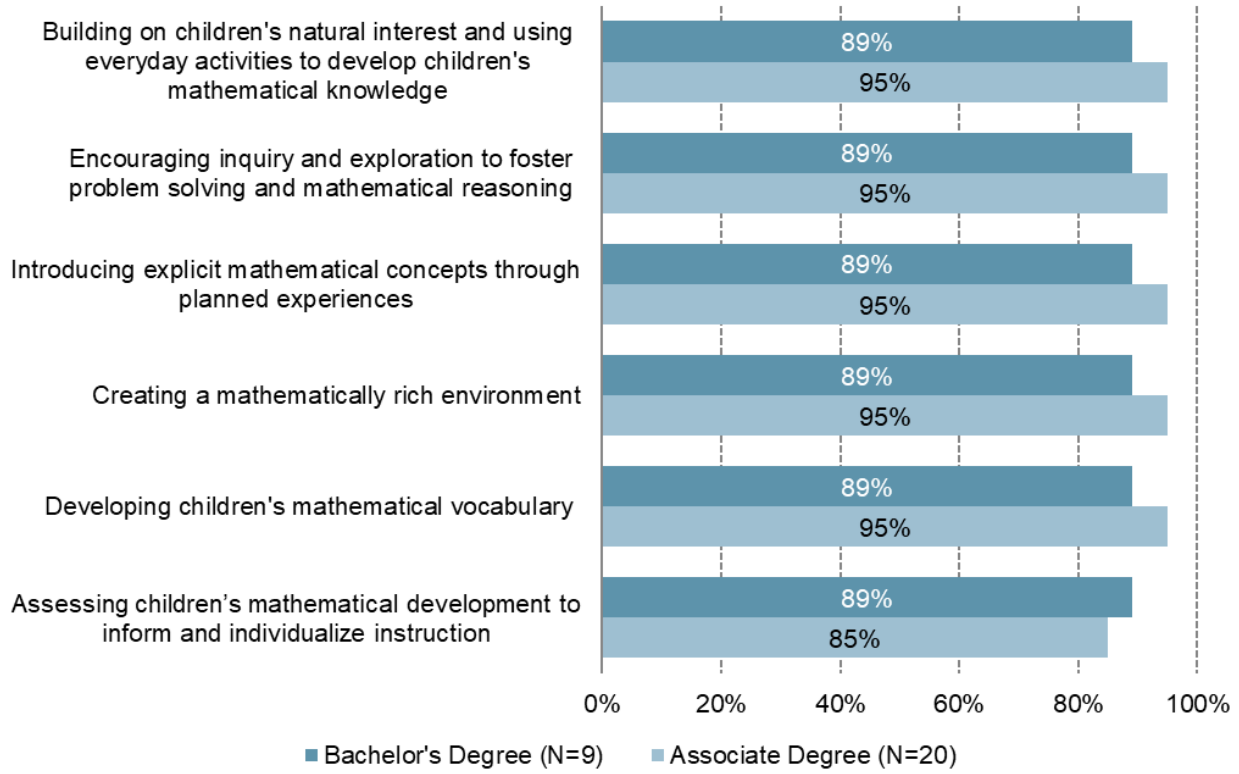


Table 2.7. Coursework Related to Development of Children's Mathematical Understanding: Required Age-Group Focus, by Degree Level
Required age-group focus of topic and percentage of programs not requiring this content

Age-Group Focus	Associate Degree (N=20)	Bachelor's Degree (N=9)
Building on children's natural interest in mathematics and using everyday activities as natural vehicles for developing children's mathematical knowledge		
Birth to 2 years	55%	44%
3 and/or 4 years (pre-K)	70%	78%
K-grade 3 or higher	70%	89%
Required, but no age-group focus	15%	0%
Content area not required	5%	11%
Encouraging children's inquiry and exploration to foster problem solving and mathematical reasoning		
Birth to 2 years	55%	33%
3 and/or 4 years (pre-K)	75%	78%
K-grade 3 or higher	70%	89%
Required, but no age-group focus	15%	0%
Content area not required	5%	11%
Introducing explicit mathematical concepts through planned experiences		
Birth to 2 years	55%	22%
3 and/or 4 years (pre-K)	75%	78%
K-grade 3 or higher	65%	89%
Required, but no age-group focus	15%	0%
Content area not required	5%	11%
Creating a mathematically rich environment		
Birth to 2 years	55%	33%
3 and/or 4 years (pre-K)	80%	78%
K-grade 3 or higher	70%	89%
Required, but no age-group focus	10%	0%
Content area not required	5%	11%
Developing children's mathematical vocabulary		
Birth to 2 years	55%	22%
3 and/or 4 years (pre-K)	65%	78%
K-grade 3 or higher	65%	89%
Required, but no age-group focus	20%	0%
Content area not required	5%	11%

Table 2.7. Coursework Related to Development of Children's Mathematical Understanding: Required Age-Group Focus, by Degree Level (Continued)
Required age-group focus of topic and percentage of programs not requiring this content

Age-Group Focus	Associate Degree (N=20)	Bachelor's Degree (N=9)
Assessing children's mathematical development to inform and individualize instruction		
Birth to 2 years	45%	33%
3 and/or 4 years (pre-K)	55%	78%
K-grade 3 or higher	55%	89%
Required, but no age-group focus	20%	0%
Content area not required	15%	11%

Figure 2.18. Required Coursework Related to Teaching Children Specific Math Skills, by Degree Level

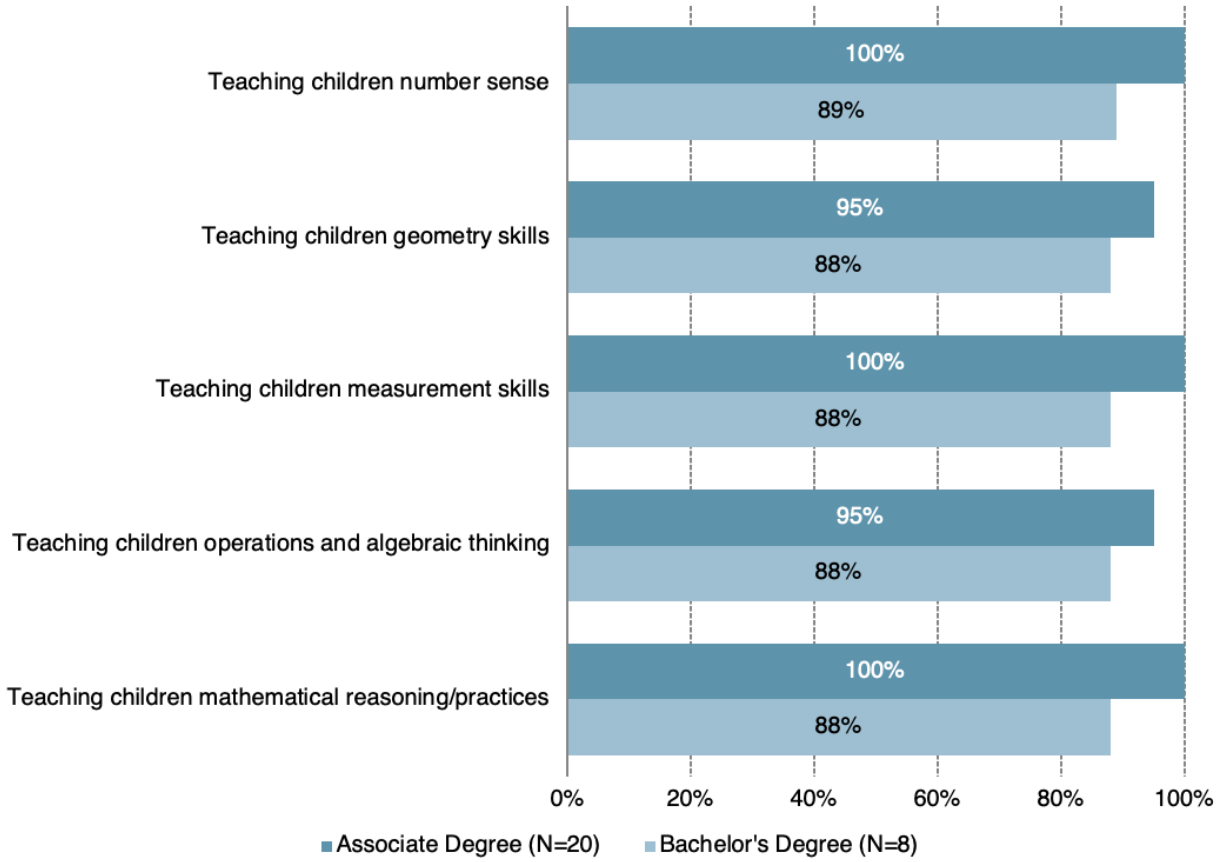


Table 2.8. Coursework Related to Teaching Children Specific Math Skills: Required Age-Group Focus, by Degree Level

Required age-group focus of topic and percentage of programs not requiring this content

Age-Group Focus	Associate Degree (N=20)	Bachelor's Degree (N=9)
Teaching children number sense (counting and cardinality)		
Birth to 2 years	70%	11%
3 and/or 4 years (pre-K)	90%	78%
K-grade 3 or higher	75%	89%
Required, but no age-group focus	5%	0%
Content area not required	0%	11%
Teaching children operations and algebraic thinking		
Birth to 2 years	60%	13%
3 and/or 4 years (pre-K)	80%	75%
K-grade 3 or higher	70%	88%
Required, but no age-group focus	10%	0%
Content area not required	5%	13%
Teaching children measurement skills		
Birth to 2 years	60%	13%
3 and/or 4 years (pre-K)	85%	75%
K-grade 3 or higher	75%	88%
Required, but no age-group focus	10%	0%
Content area not required	0%	13%
Teaching children geometry skills		
Birth to 2 years	65%	13%
3 and/or 4 years (pre-K)	85%	75%
K-grade 3 or higher	70%	88%
Required, but no age-group focus	5%	0%
Content area not required	5%	13%
Teaching children mathematical reasoning/practices		
Birth to 2 years	65%	13%
3 and/or 4 years (pre-K)	85%	75%
K-grade 3 or higher	75%	88%
Required, but no age-group focus	10%	0%
Content area not required	0%	13%

Dual Language Learners

Figure 2.19. Required Coursework Related to Dual Language Learners (DLLs), by Degree Level

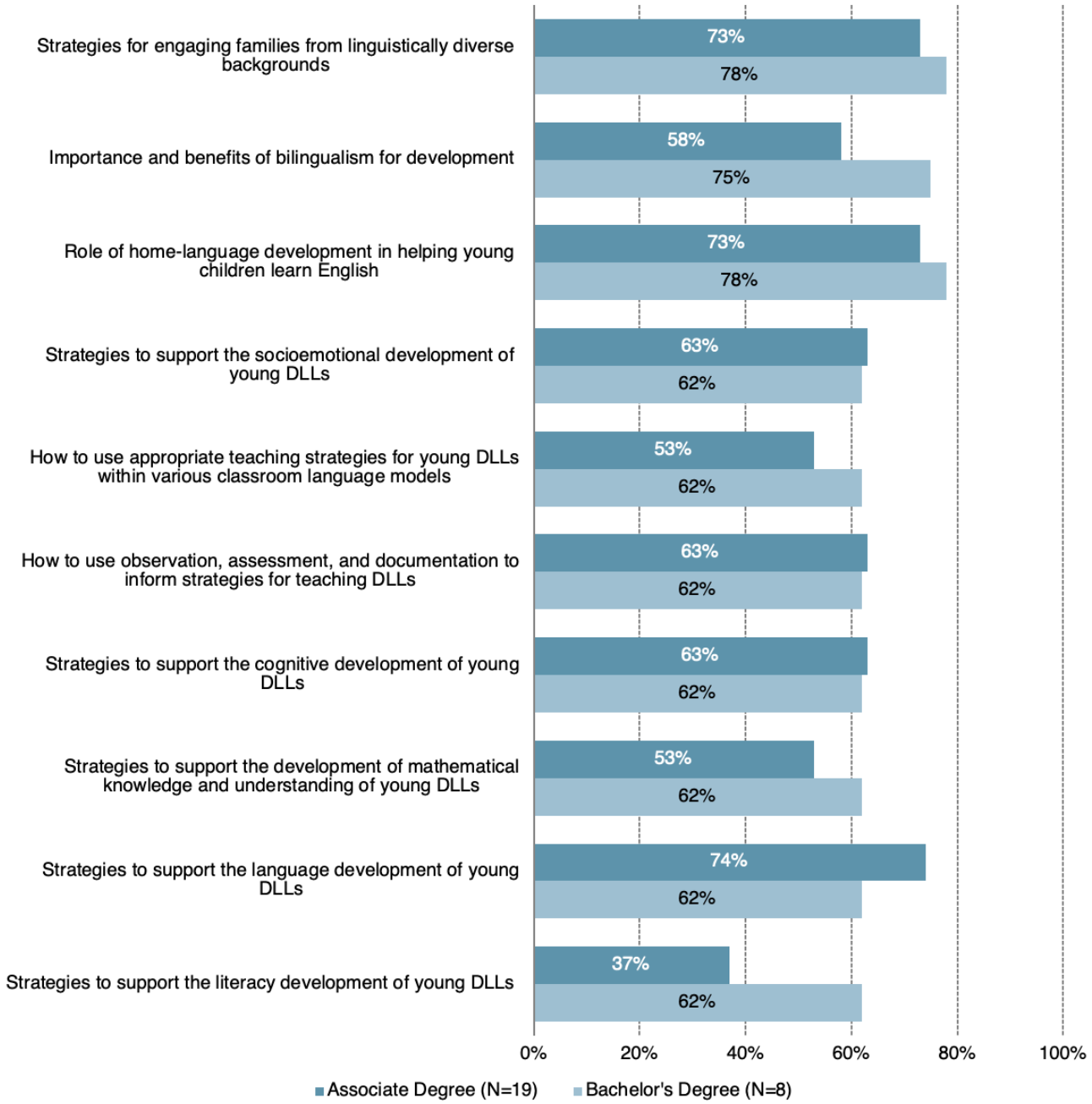


Table 2.9. Coursework Related to Dual Language Learners (DLLs): Required Age-Group Focus, by Degree Level

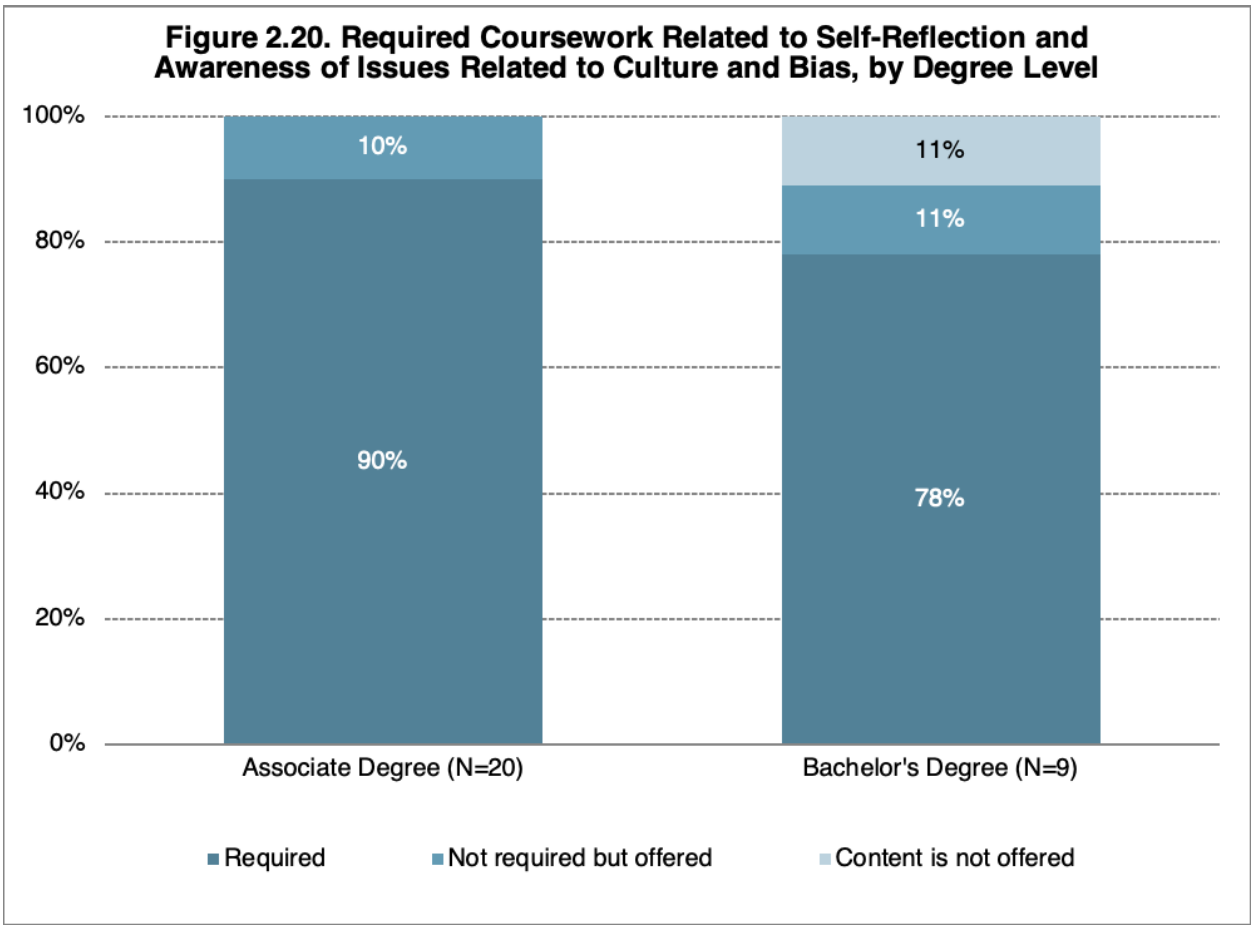
Required age-group focus of topic and percentage of programs not requiring this content

Age-Group Focus	Associate Degree (N=19)	Bachelor's Degree (N=8)
Importance and benefits of bilingualism for young children's development		
Birth to 2 years	42%	50%
3 and/or 4 years (pre-K)	42%	50%
K-grade 3 or higher	42%	50%
Required, but no age-group focus	16%	25%
Content area not required	42%	25%
Role of home-language development in helping young children learn English		
Birth to 2 years	58%	33%
3 and/or 4 years (pre-K)	58%	56%
K-grade 3 or higher	53%	56%
Required, but no age-group focus	16%	22%
Content area not required	26%	22%
Strategies to support the cognitive development of young DLLs		
Birth to 2 years	42%	38%
3 and/or 4 years (pre-K)	42%	50%
K-grade 3 or higher	47%	50%
Required, but no age-group focus	16%	13%
Content area not required	37%	38%
Strategies to support the language development of young DLLs		
Birth to 2 years	42%	50%
3 and/or 4 years (pre-K)	42%	50%
K-grade 3 or higher	42%	50%
Required, but no age-group focus	16%	13%
Content area not required	42%	38%
Strategies to support the literacy development of young DLLs		
Birth to 2 years	47%	38%
3 and/or 4 years (pre-K)	47%	50%
K-grade 3 or higher	47%	50%
Required, but no age-group focus	16%	13%
Content area not required	37%	38%

Table 2.9. Coursework Related to Dual Language Learners (DLLs): Required Age-Group Focus, by Degree Level (Continued)
Required age-group focus of topic and percentage of programs not requiring this content

Age-Group Focus	Associate Degree (N=19)	Bachelor's Degree (N=8)
Strategies to support the development of mathematical knowledge and understanding of young DLLs		
Birth to 2 years	37%	25%
3 and/or 4 years (pre-K)	37%	50%
K-grade 3 or higher	32%	50%
Required, but no age-group focus	16%	13%
Content area not required	47%	38%
Strategies to support the socioemotional development of young DLLs		
Birth to 2 years	47%	50%
3 and/or 4 years (pre-K)	47%	50%
K-grade 3 or higher	47%	50%
Required, but no age-group focus	16%	13%
Content area not required	37%	38%
How to use appropriate teaching strategies for young DLLs within various classroom language models (e.g., English only, dual language, English with home language support)		
Birth to 2 years	37%	50%
3 and/or 4 years (pre-K)	37%	50%
K-grade 3 or higher	32%	38%
Required, but no age-group focus	16%	13%
Content area not required	47%	38%
How to use observation, assessment, and documentation to inform strategies for teaching young DLLs		
Birth to 2 years	47%	50%
3 and/or 4 years (pre-K)	47%	50%
K-grade 3 or higher	42%	50%
Required, but no age-group focus	16%	13%
Content area not required	37%	38%
Strategies for engaging families from linguistically diverse backgrounds		
Birth to 2 years	58%	33%
3 and/or 4 years (pre-K)	58%	44%
K-grade 3 or higher	58%	44%
Required, but no age-group focus	16%	33%
Content area not required	26%	22%

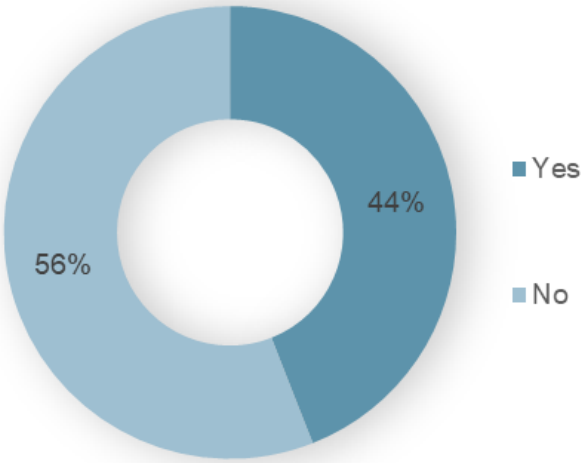
Self-Reflection and Awareness of Culture and Bias



Providing Professional Development Services

Program leads were asked if the degree program offered coursework to prepare students to provide professional development services (e.g., mentoring, coaching, training).

Figure 2.21. Coursework Offered Related to Preparing Students to Provide Professional Development Services (N=25)



Structure of Course Content

Table 2.10. Structure of Course Content in Maryland Early Childhood Degree Programs, by Degree Level

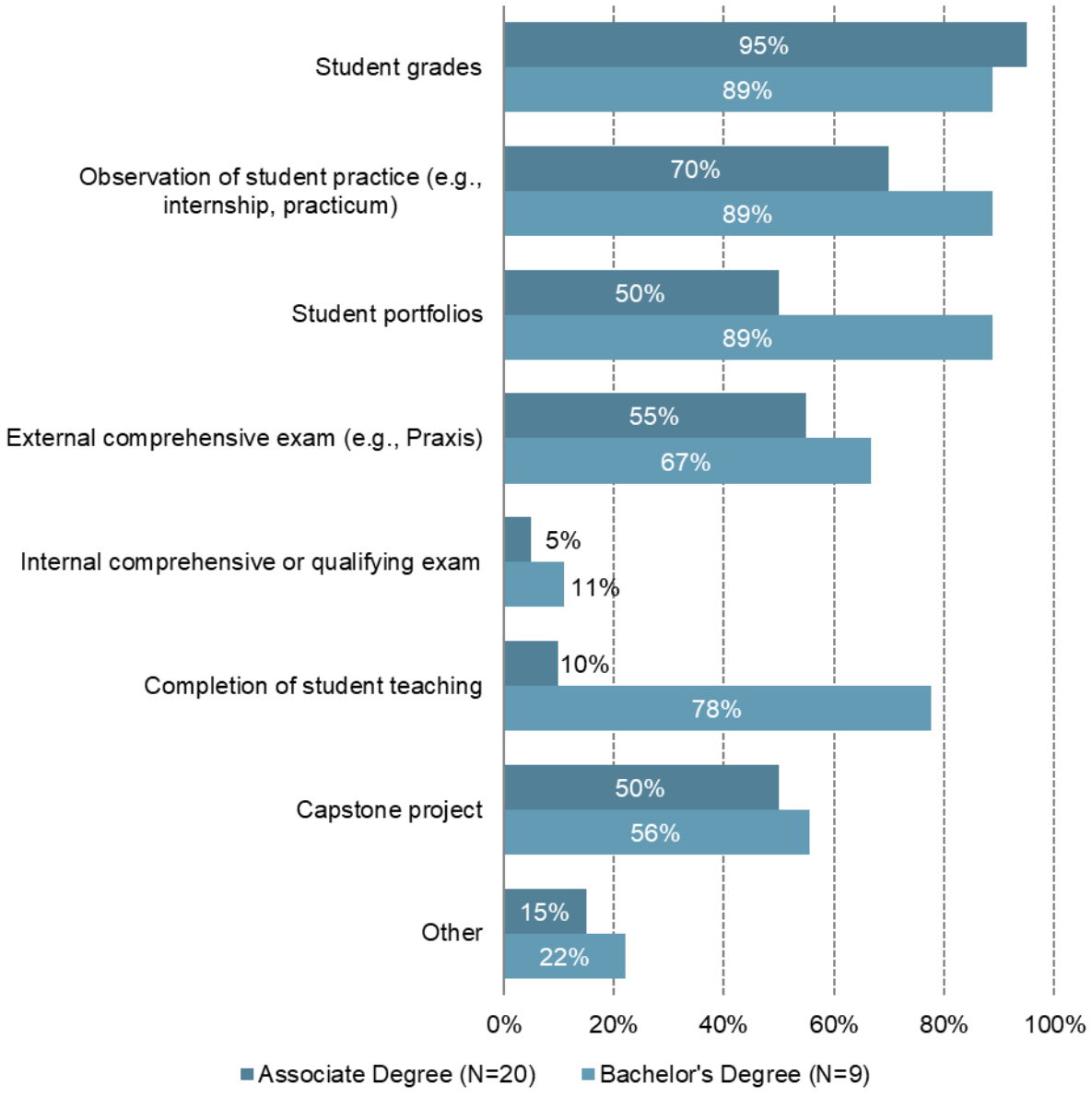
Course Content Structure	Associate Degree (N=20)	Bachelor's Degree (N=9)
Literacy development in young children and how to promote their skills related to oral and written language		
Taught as a separate course	50%	33%
Taught within a broader course	10%	11%
Taught both as a separate course and embedded within a broader course	40%	56%
Not taught	0%	0%
Socioemotional development, its relationship to learning, and how to support children's socioemotional skills		
Taught as a separate course	25%	11%
Taught within a broader course	45%	56%
Taught both as a separate course and embedded within a broader course	30%	33%
Not taught	0%	0%
Normal and atypical motor development in young children, the relationship of motor development to learning, and how to facilitate children's motor skills		
Taught as a separate course	20%	33%
Taught within a broader course	50%	56%
Taught both as a separate course and embedded within a broader course	30%	11%
Not taught	0%	0%
Implementing assessments effectively to inform and individualize instruction with children		
Taught as a separate course	0%	33%
Taught within a broader course	65%	22%
Taught both as a separate course and embedded within a broader course	35%	33%
Not taught	0%	11%

Table 2.10. Structure of Course Content in Maryland Early Childhood Degree Programs, by Degree Level (Continued)

Course Content Structure	Associate Degree (N=20)	Bachelor's Degree (N=9)
Domains and sequence of mathematical knowledge in young children and how to promote their mathematical understanding and ability to solve problems		
Taught as a separate course	20%	44%
Taught within a broader course	55%	11%
Taught both as a separate course and embedded within a broader course	20%	33%
Not taught	5%	11%
Strategies for working with children who are dual language learners		
Taught as a separate course	0%	13%
Taught within a broader course	55%	50%
Taught both as a separate course and embedded within a broader course	20%	25%
Not taught	25%	13%
Strategies to engage families in ongoing and reciprocal partnerships and the relationship between family-school engagement and outcomes for children		
Taught as a separate course	5%	22%
Taught within a broader course	65%	33%
Taught both as a separate course and embedded within a broader course	30%	44%
Not taught	0%	0%

Student Assessments

Figure 2.22. Student Assessments Required to Earn Degree, by Degree Level



Field-Based Learning Experiences

What we asked about field-based experiences:

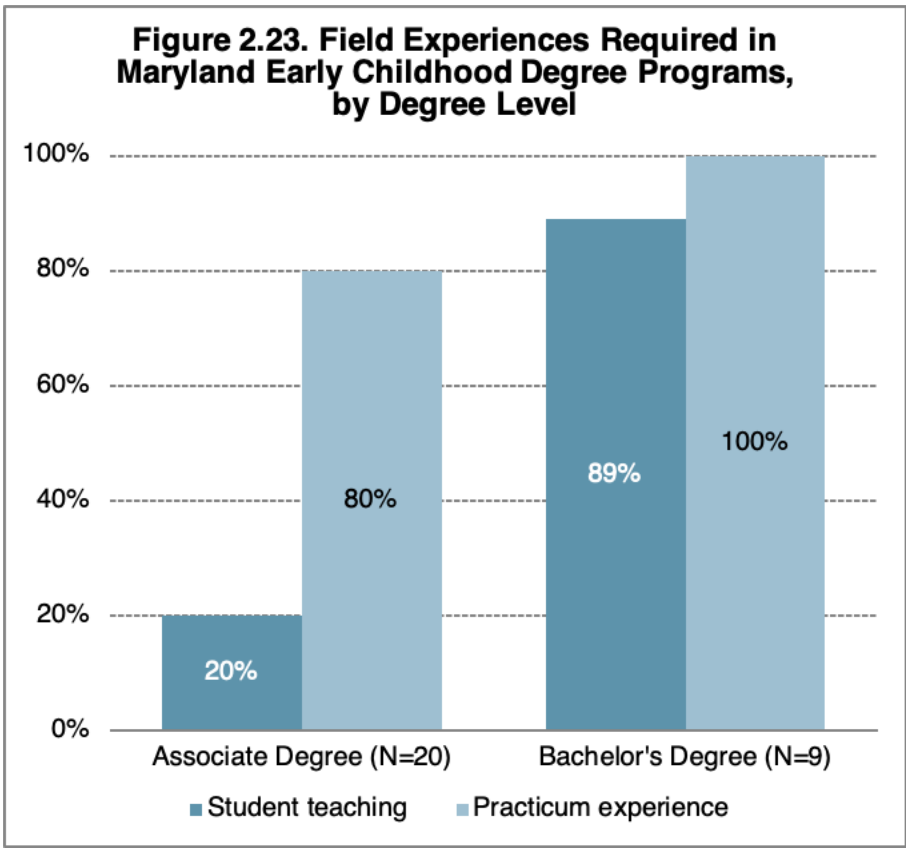
The *Inventory* asked respondents about two types of field experiences offered to the students.

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

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

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

Required Field Experiences



Timing and Duration of Field Experiences

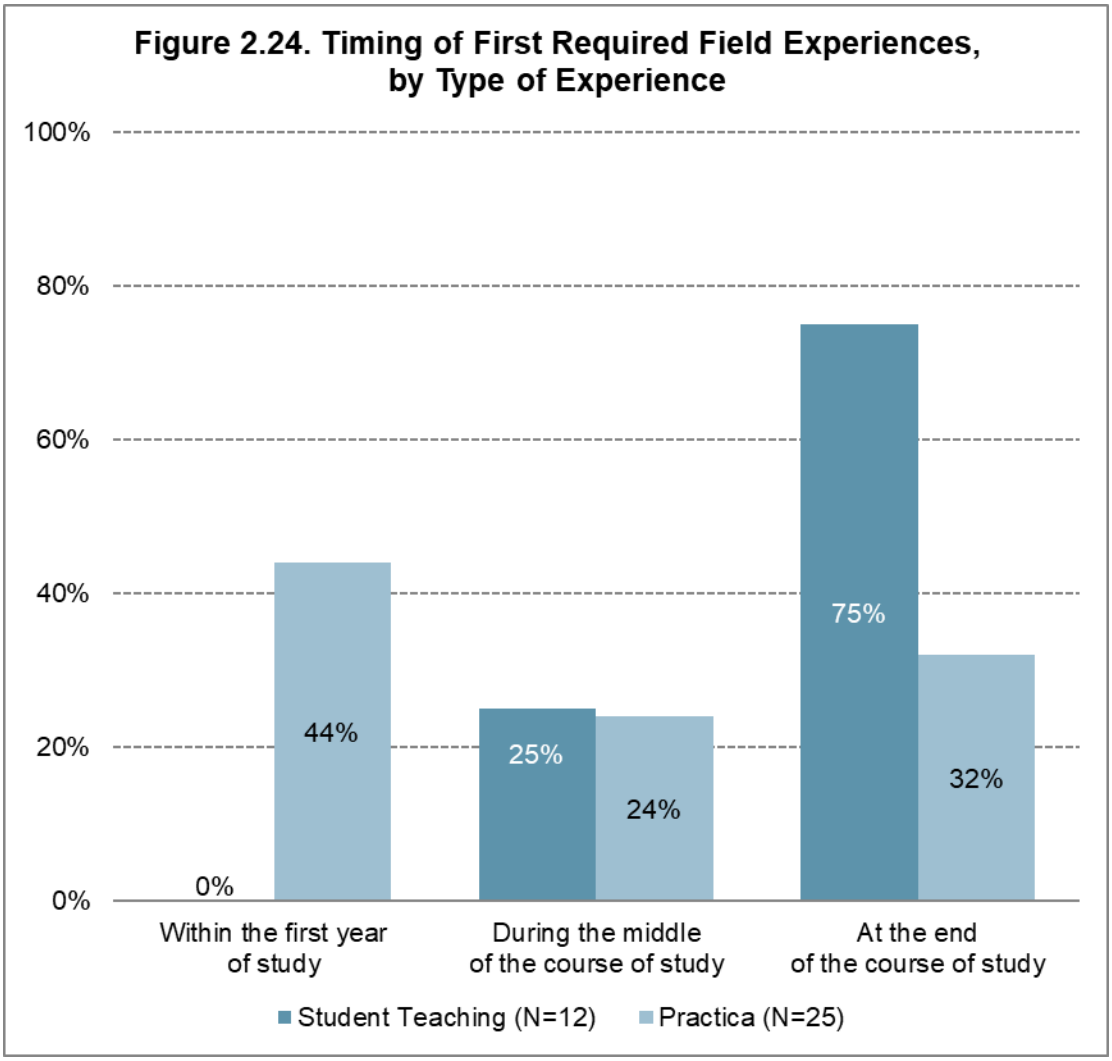


Table 2.11. Time Requirements of Required Practica, by Degree Level

Requirement	Associate Degree (N=15-16)	Bachelor's Degree (N=9)
Courses Required		
Average practicum courses required	1.8	4.4
Range of practicum courses required	1-3	1-12
Hours per Course		
Average hours per practicum course	72	106
Range of hours per practicum course	15-225	10-300

Requirements of Field Experiences

Table 2.12. Required Age-Group Focus and Elements of Field Experiences in Maryland Early Childhood Degree Programs, by Type of Experience and Degree Level

Age-Group Focus or Element	Required	Optional	Not Offered
Student Teaching	**All Degree Programs (N=12)**		
Working with children birth to 2 years	17%	42%	42%
Working with children 3 or 4 years (pre-K)	50%	42%	8%
Working with children K-3 or higher	58%	25%	17%
Working with children who are DLLs	17%	67%	17%
Working with children with disabilities	17%	75%	8%
Working with families	67%	8%	17%
Scaffolding math development and understanding	92%	8%	0%
Scaffolding literacy development	92%	8%	0%
Supporting socioemotional development	92%	8%	0%
Facilitating motor development	67%	25%	8%
Developing partnerships with families	58%	25%	17%
Using assessment to inform instruction	92%	8%	0%
Collaborating with community organizations	42%	50%	8%
Practica	**Associate Degree Programs (N=14-16)**		
Working with children birth to 2 years	25%	75%	0%
Working with children 3 or 4 years (pre-K)	63%	37%	0%
Working with children K-3 or higher	50%	44%	6%
Working with children who are DLLs	13%	62%	25%
Working with children with disabilities	31%	69%	0%
Working with families	25%	50%	25%
Scaffolding math development and understanding	43%	43%	14%
Scaffolding literacy development	67%	27%	7%
Supporting socioemotional development	73%	27%	0%
Facilitating motor development	67%	27%	7%
Developing partnerships with families	53%	33%	13%
Using assessment to inform instruction	57%	36%	7%
Collaborating with community organizations	36%	50%	14%

Table 2.12. Required Age-Group Focus and Elements of Field Experiences in Maryland Early Childhood Degree Programs, by Type of Experience and Degree Level (Continued)

Age-Group Focus or Element	Required	Optional	Not Offered
Practica	**Bachelor's Degree Programs (N=8-9)**		
Working with children birth to 2 years	56%	22%	22%
Working with children 3 or 4 years (pre-K)	78%	11%	11%
Working with children K-3 or higher	78%	22%	0%
Working with children who are DLLs	38%	50%	12%
Working with children with disabilities	56%	33%	11%
Working with families	44%	44%	11%
Scaffolding math development and understanding	78%	11%	11%
Scaffolding literacy development	89%	11%	0%
Supporting socioemotional development	67%	11%	22%
Facilitating motor development	44%	22%	33%
Developing partnerships with families	67%	22%	11%
Using assessment to inform instruction	78%	11%	11%
Collaborating with community organizations	33%	56%	11%

Criteria for Selecting Field Experience Sites

Table 2.13. Criteria Used to Select Field Experience Sites, by Type of Experience and Degree Level

Criteria	Degree Programs	
Student Teaching	**Bachelor's Degree Programs (N=8)**	
Site is at a college laboratory school	13%	
Site is a public school	88%	
Licensed child care center	13%	
Maryland State Department of Education-approved nursery program	13%	
Observed quality rating of the site	25%	
Site is a nationally accredited early childhood program	25%	
Degree program/college has a partnership with a school district	75%	
Location of site	88%	
Student currently works at the site	25%	
Children with disabilities served at the site	38%	
Age of children served at the site	50%	
Demographic background of children served at the site	50%	
Teacher qualifications	63%	
Other	13%	
Practica	**Associate Degree Programs (N=11)**	**Bachelor's Degree Programs (N=8)**
Site is at a college laboratory school	64%	13%
Site is a public school	91%	63%
Licensed child care center	73%	50%
Maryland State Department of Education-approved nursery program	64%	25%
Observed quality rating of the site	36%	25%
Site is a nationally accredited early childhood program	36%	38%
Degree program/college has a partnership with a school district	36%	50%
Location of site	73%	88%
Student currently works at the site	64%	25%
Children with disabilities served at the site	64%	50%
Age of children served at the site	55%	75%
Demographic background of children served at the site	18%	38%
Teacher qualifications	36%	50%
Other	0%	0%

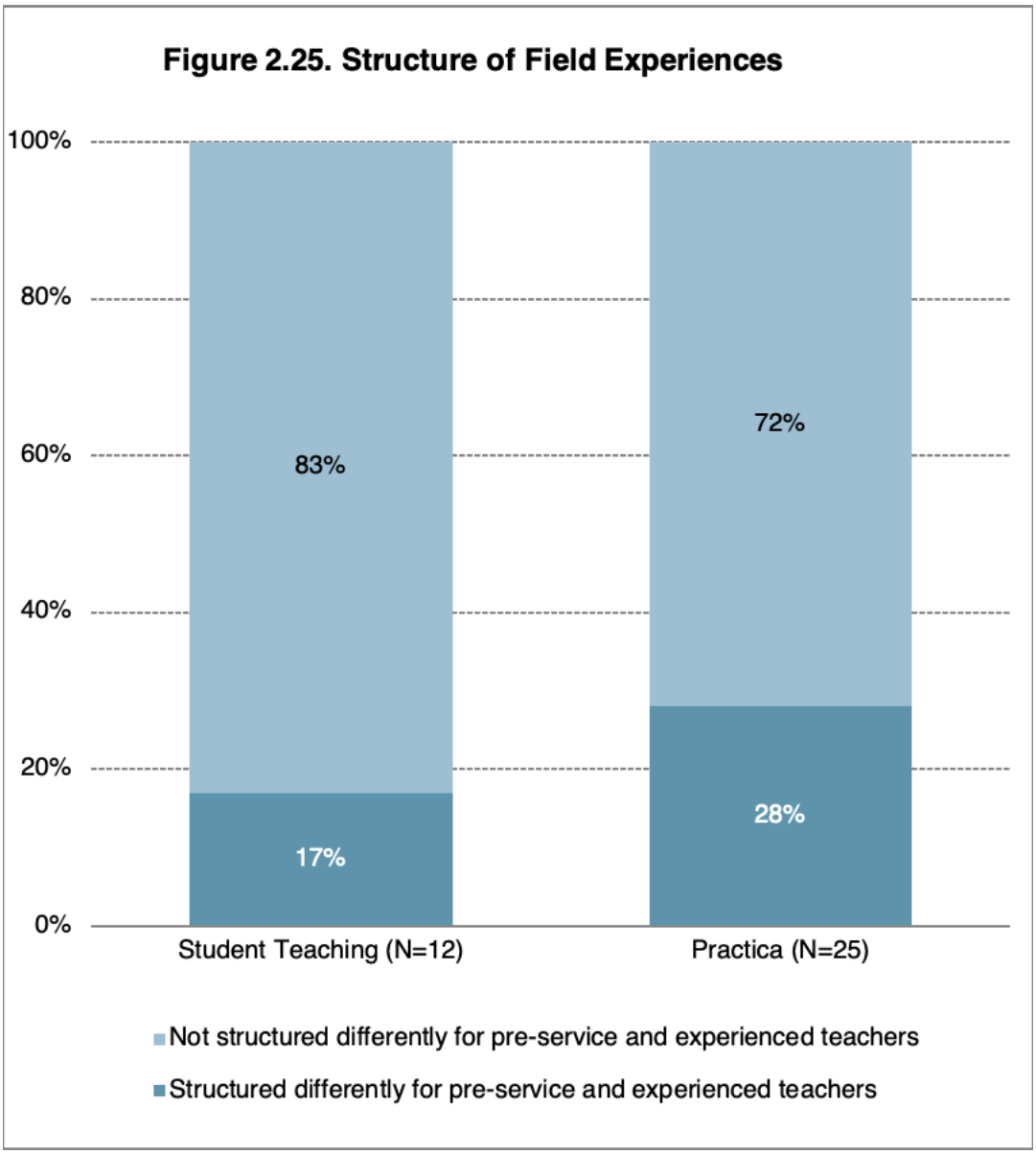
Supervision of Field Experiences

Table 2.14. Supervision of Field Experiences: Percentage of Programs Using Specific Personnel to Supervise Students, by Type of Experience and Degree Level

Supervisors	Degree Programs
Student Teaching	**Bachelor's Degree Programs (N=8)**
Typical Supervisors	
Cooperating teacher	88%
Field supervisor	75%
Field mentor	25%
Faculty	75%
Practica	**All Programs (N=21-25)**
Typical Supervisors (N=25)	
Cooperating teacher	84%
Field supervisor	12%
Field mentor	8%
Faculty	84%
Status of Supervising Faculty (N=21)	
Tenure track/tenured	52%
Non-tenured*	48%
Clinical faculty	14%
Adjunct/part-time	33%

*The majority of community colleges in Maryland do not utilize the tenure system.

Field Experience Structure for Pre-Service and Experienced Teachers



Articulation and Alignment With the Maryland Professional Development System

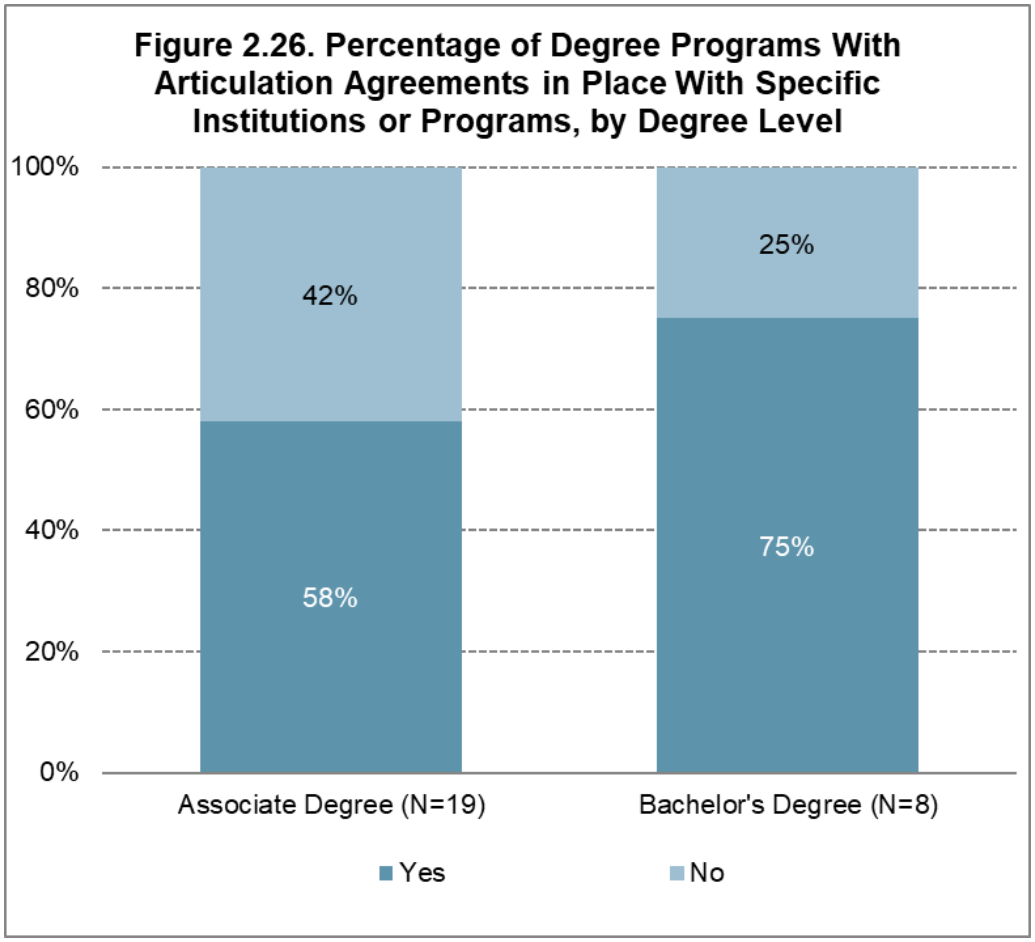
What we asked about articulation and alignment:

The *Inventory* asked program leads whether their degree programs had formal articulation agreements with other degree programs. Respondents were also asked the status of students entering the program (so that we could understand how many students are transferring versus starting as first-year students) and what challenges students face in transferring.

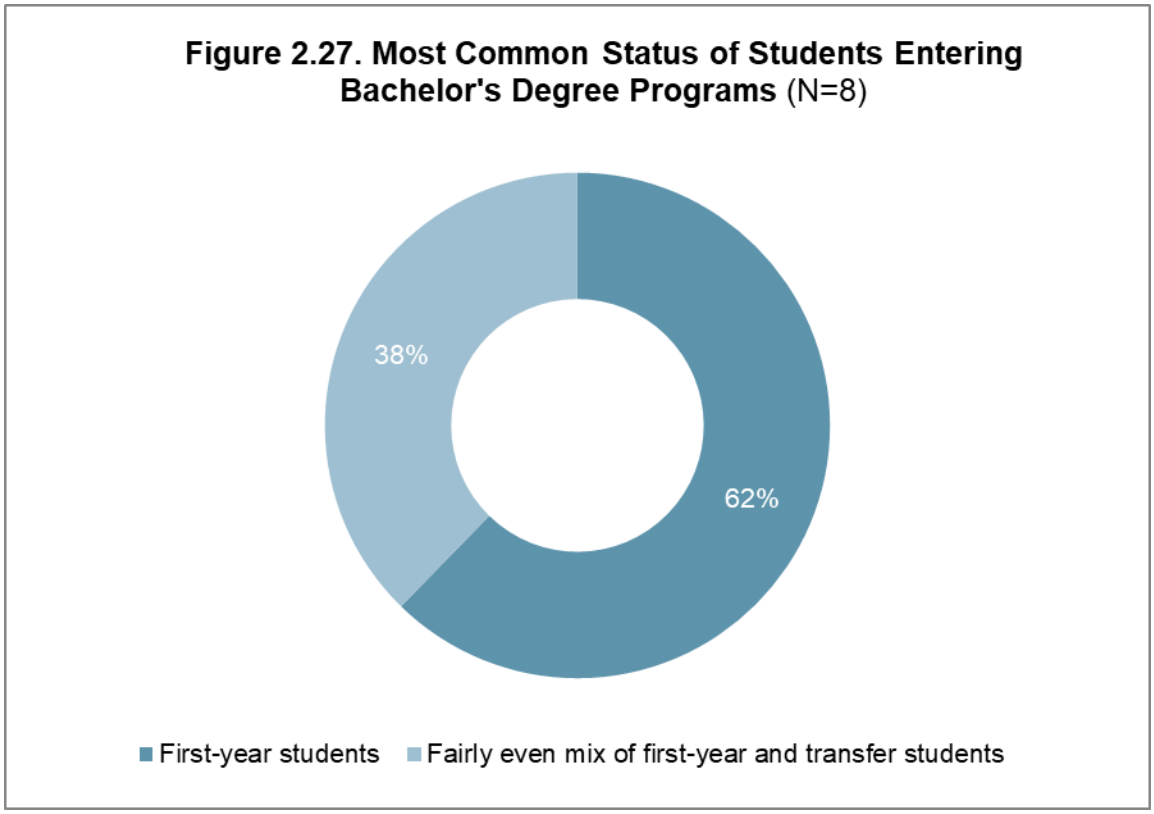
Respondents were then asked a series of questions about the alignment of coursework with the state's professional development system:

- Whether the degree program offers coursework aligned with state and national standards;
- Whether the degree program offers coursework that can be applied to the national Child Development Associate (CDA) credential;
- Whether the program offers credentials aligned with state credentials; and
- Whether the degree program offers portable and/or stackable certificates or credentials.

Articulation



Student Status



Challenges Students Face in Transferring

Table 2.15. Challenges Students Face in Transferring Associate Degree Credits Into Bachelor's Degree Programs, by Degree Level

Challenge	Associate Degree (N=20)	Bachelor's Degree (N=8)
Lower-division early childhood course content does not transfer	20%	13%
Upper-division early childhood course content does not transfer	5%	13%
General education course content does not transfer	20%	13%
Courses taken out of state do not transfer	10%	25%
Other	40%	25%
Don't know	40%	38%

Alignment With State and National Standards

Integration of Standards and Competencies

Figure 2.28. State or National Math Standards Incorporated Into Early Math Course Content of Maryland Early Childhood Degree Programs (N=27)

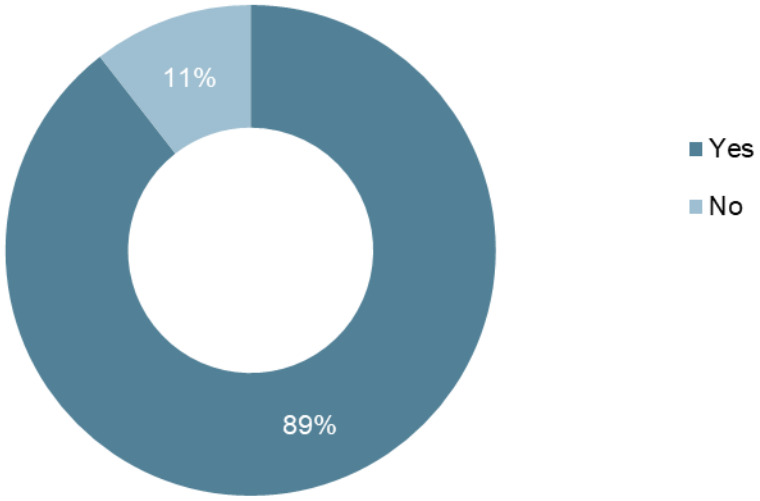


Figure 2.29. State or National Family Engagement Standards Incorporated Into Family Engagement Course Content of Maryland Early Childhood Degree Programs (N=22)

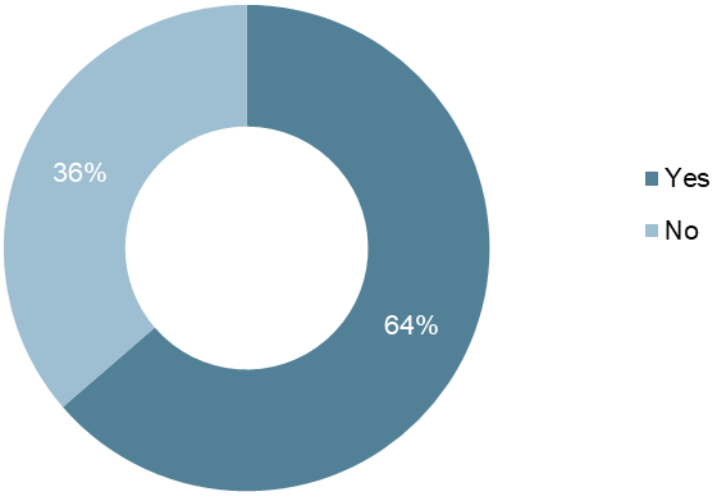
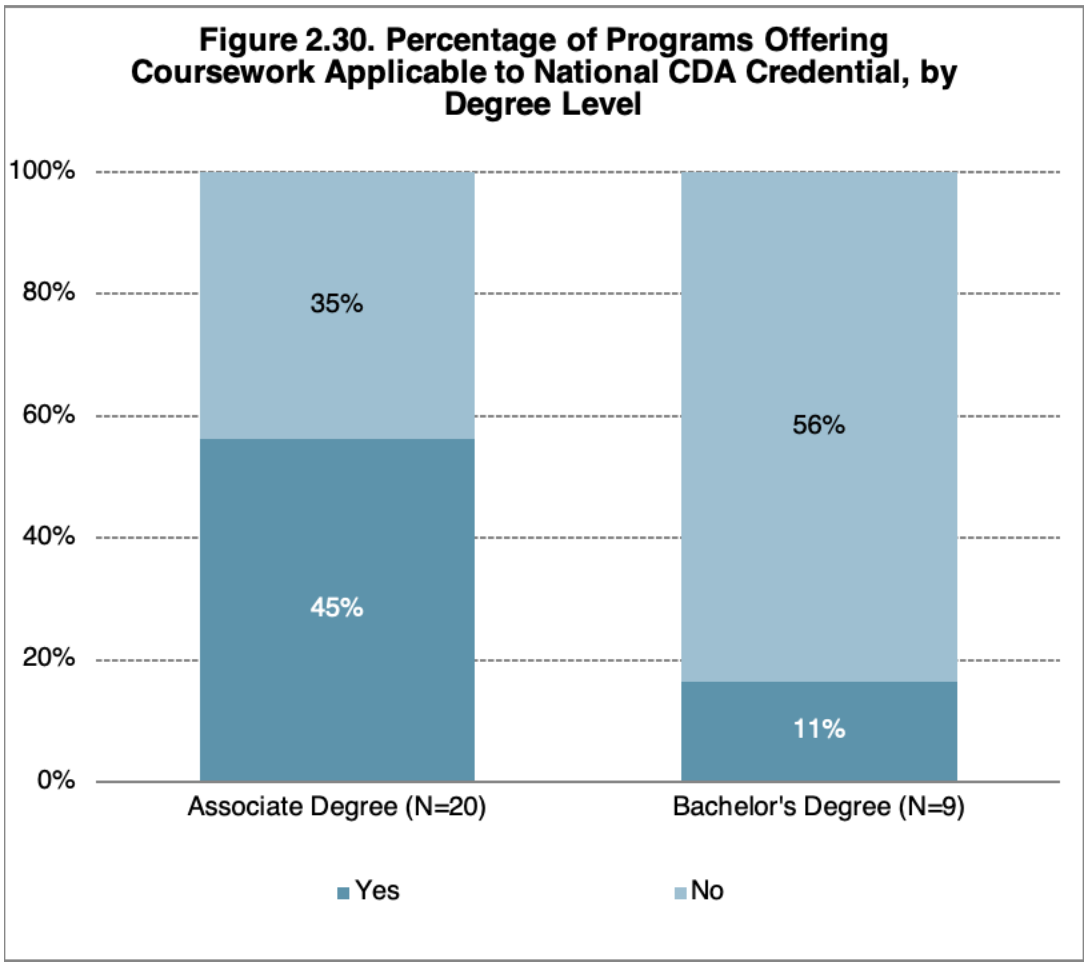


Table 2.16. Integration of Standards and Competencies Into Coursework

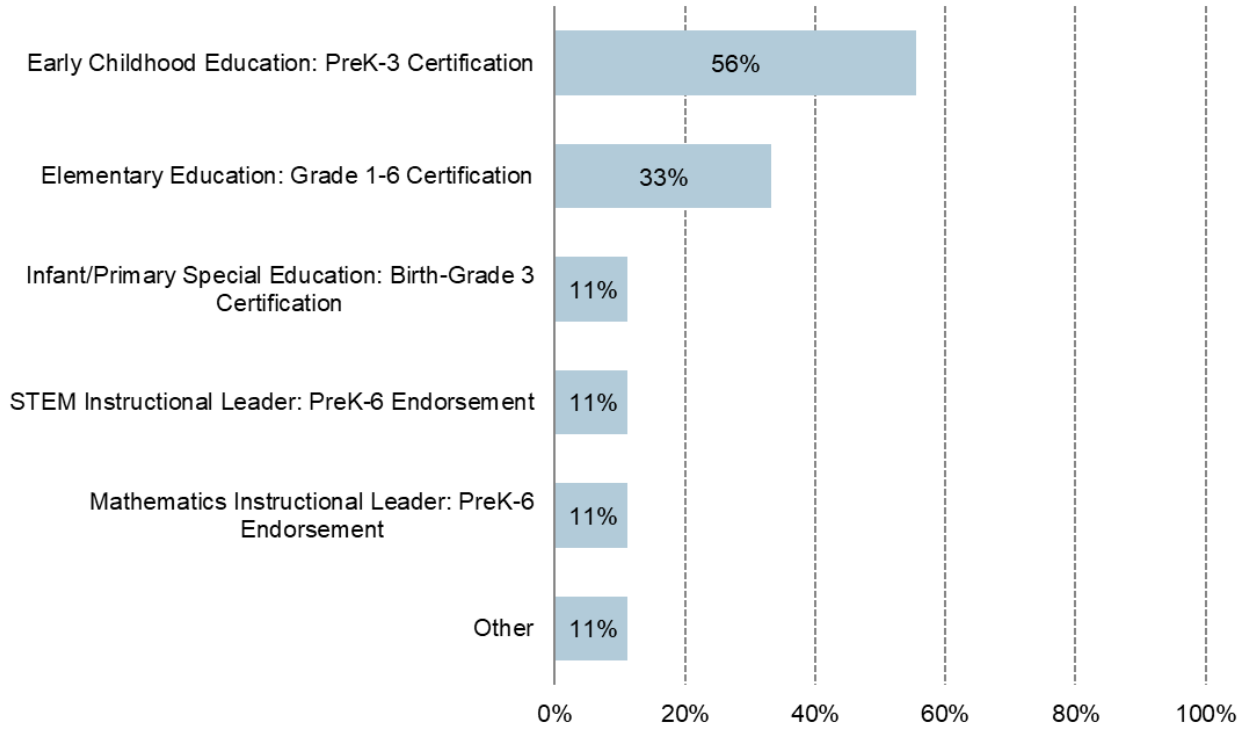
Standards	All Degree Programs
State or National Math Standards (N=24)	
Maryland's Healthy Beginnings: Birth to 3 Years, Cognitive Development Domain	40%
Maryland College and Career-Ready Standards for Mathematics	76%
Maryland Early Learning Developmental Standards – 8 Years, Mathematics Domain	48%
Head Start Early Learning Outcomes Framework: Birth-5 (ELOF), Mathematics Development Domain	12%
NAEYC Program Accreditation Standards	64%
National Council of Teachers of Mathematics (NCTM) Principles and Standards for School Mathematics	60%
State or National Family Engagement Standards (N=14)	
Maryland's Early Childhood Family Engagement Framework and Toolkit	57%
Association for Early Learning Leaders: Family Engagement Accreditation Standards	7%
Head Start Parent, Family, and Community Engagement Framework	7%
NAEYC Professional Preparation Standards/CAEP: Standard 2 Building Family and Community Relationships	86%
NAEYC Program Accreditation Standards: Standard 7 Families	57%
NAEYC Principles of Effective Family Engagement	57%
Other State Standards and Competencies (N=27)	
Maryland's Healthy Beginnings: Birth to 3 Years	44%
Maryland College and Career-Ready Standards	70%
Maryland Early Learning Standards – Birth to 8 Years	44%
Maryland EXCELS (Quality Rating and Improvement System)	37%
CDA Competencies	15%
NAEYC Teacher Standards	78%
Council for the Accreditation of Educator Preparation Standards	15%
Next Generation Science Standards	44%

Alignment With the Child Development Associate (CDA) Credential

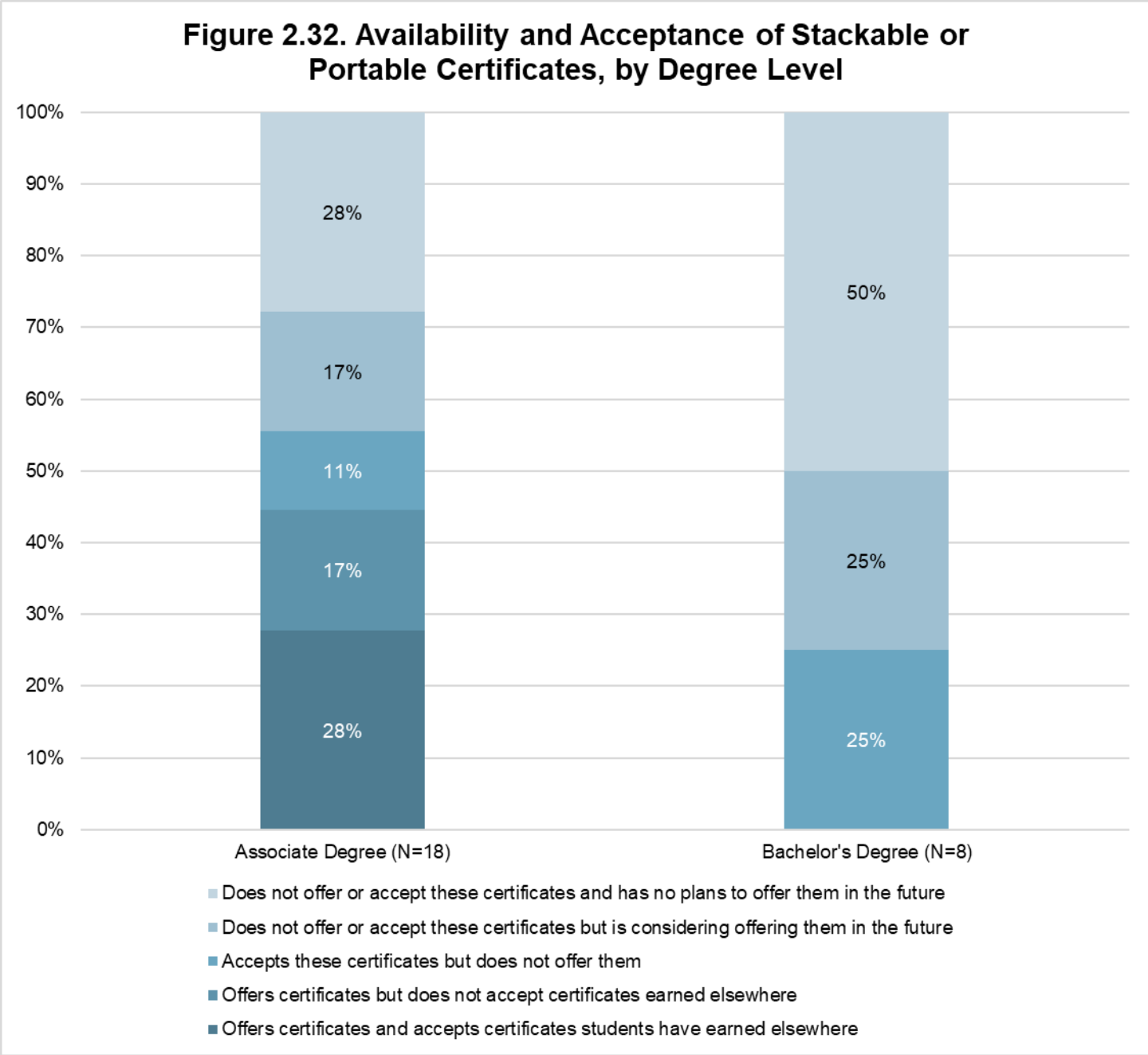


Alignment With State Credentials

Figure 2.31. Percentage of Bachelor's Degree Programs Offering Coursework Applicable to State Certificates or Endorsements (N=9)



Stackable and Portable Certificates



Chapter 3:
Early Childhood Degree Program Faculty Members

Demographics of Faculty Members Participating in the Maryland Inventory

What we asked faculty members:

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

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

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

Gender

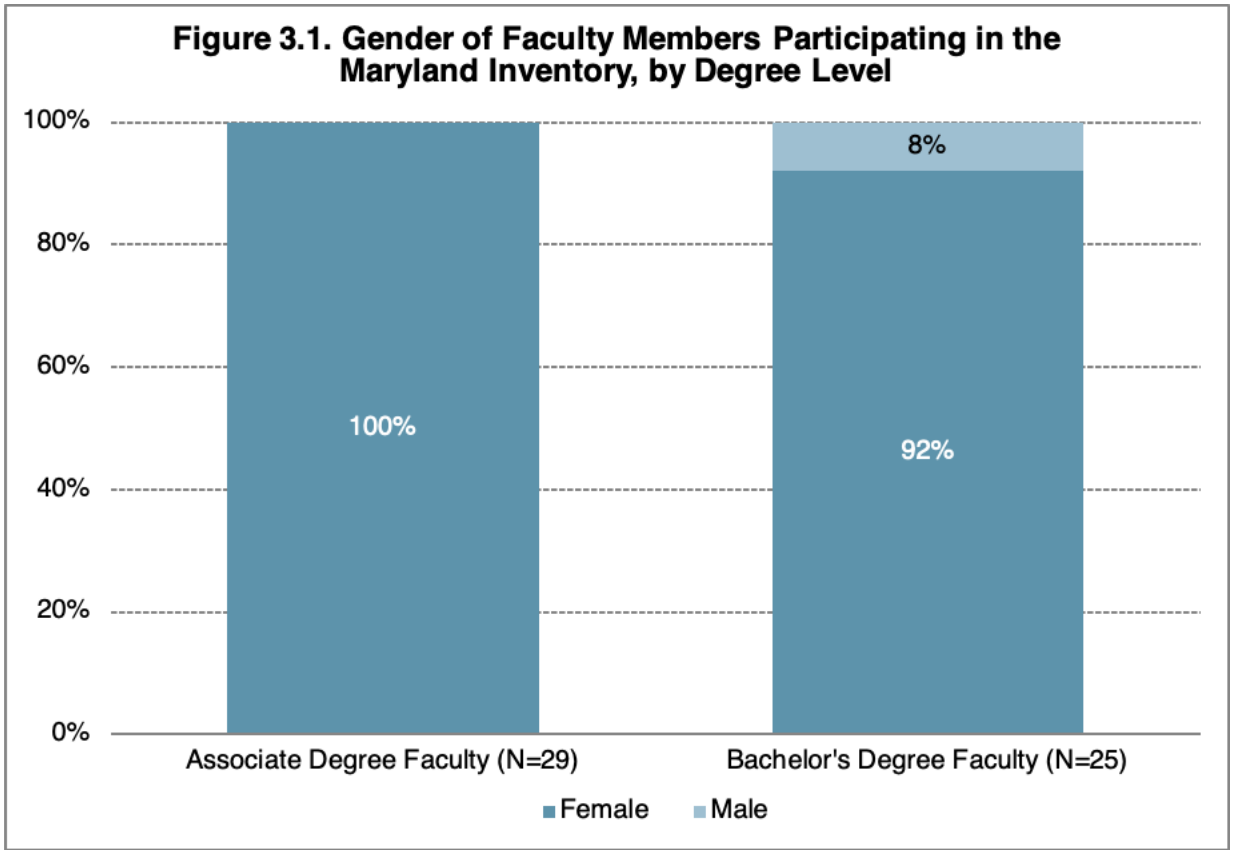


Figure 3.1. Gender of Faculty Members Participating in the Maryland Inventory, by Degree Level
100%
80%
60%
40%
20%
0%
100%
8%
92%
Associate Degree Faculty (N=29)
Bachelor's Degree Faculty (N=25)
Female
Male

Age

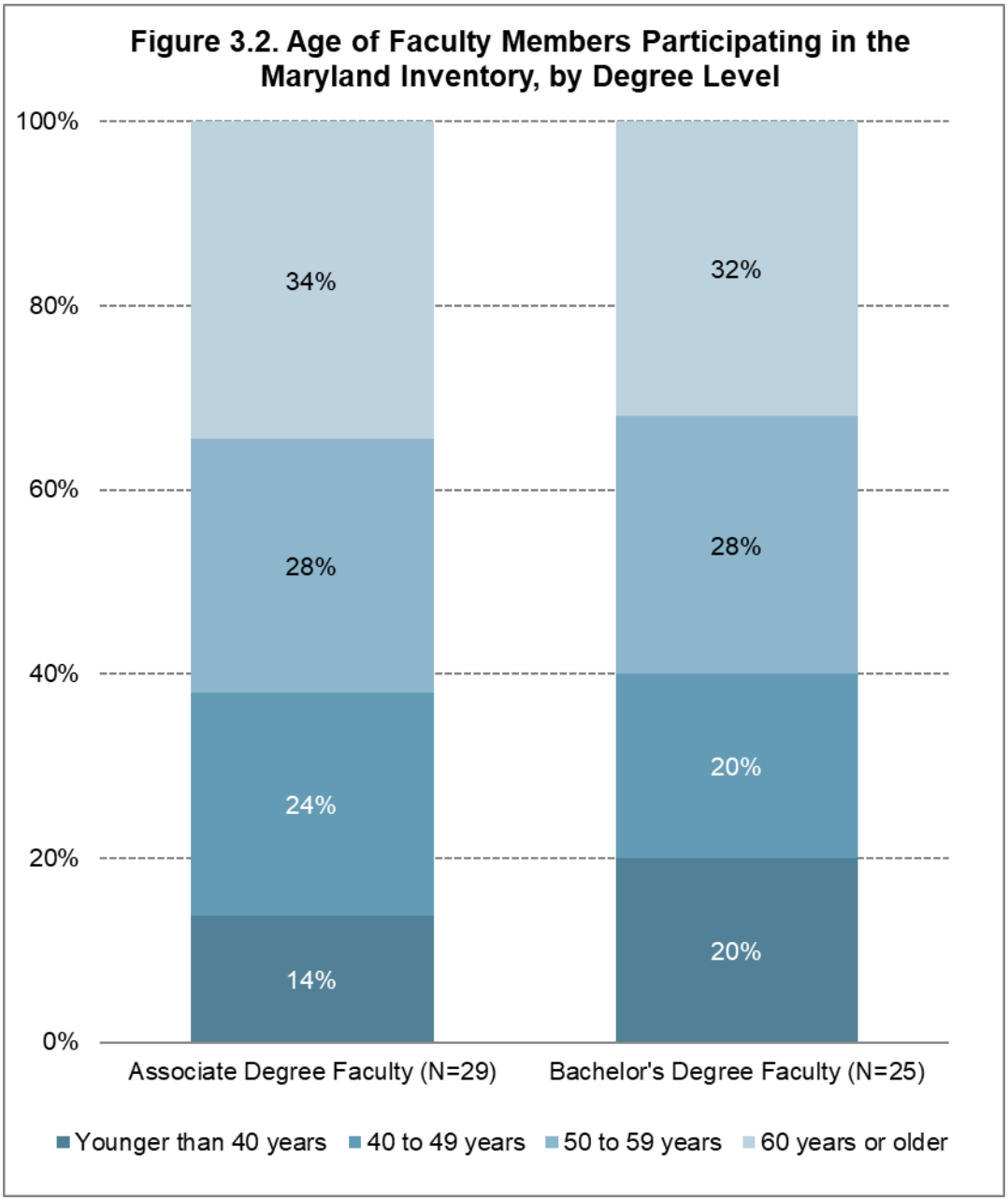
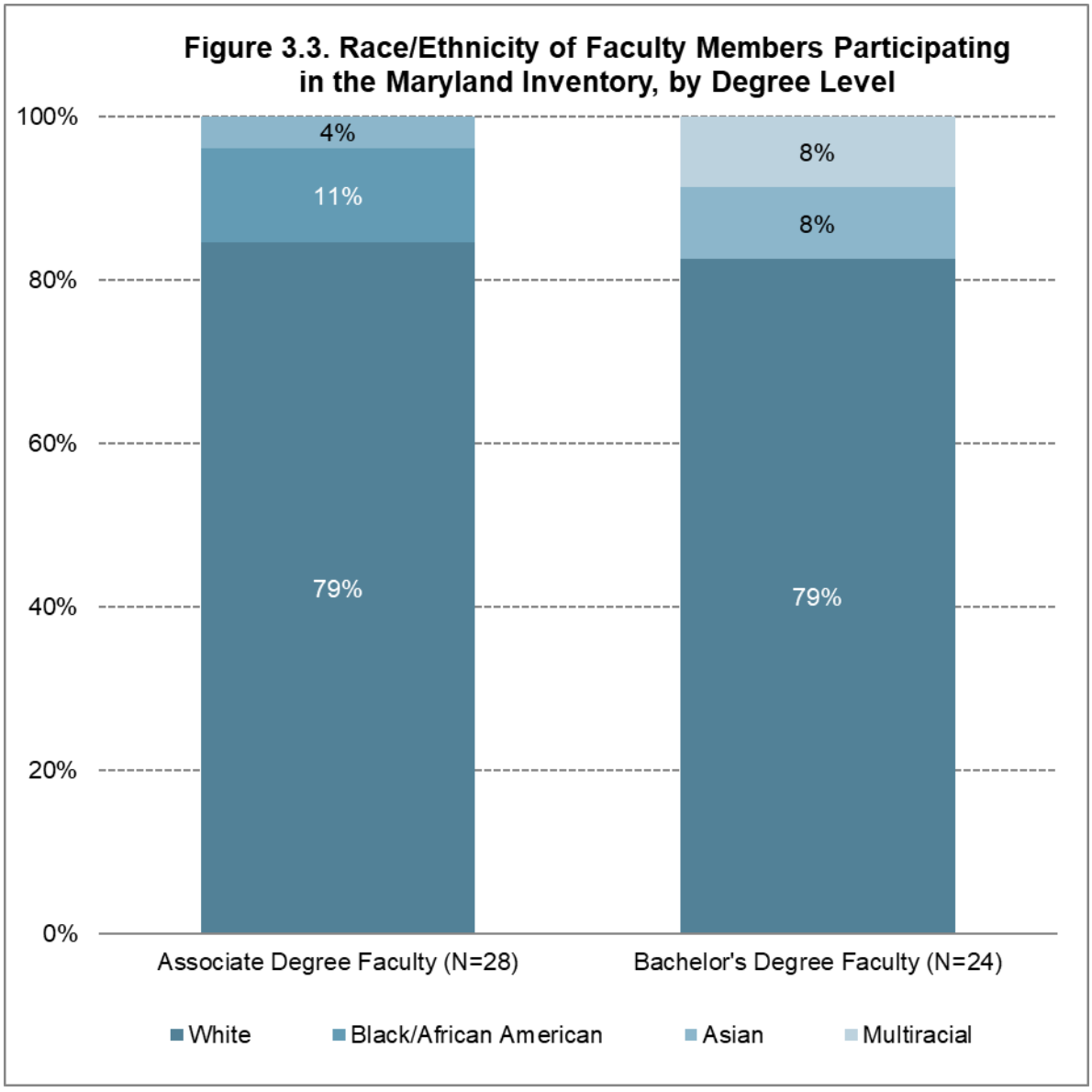


Figure 3.2. Age of Faculty Members Participating in the Maryland Inventory, by Degree Level
100%
80%
60%
40%
20%
0%
34%
28%
24%
14%
32%
28%
20%
20%
Associate Degree Faculty (N=29)
Bachelor's Degree Faculty (N=25)
Younger than 40 years
40 to 49 years
50 to 59 years
60 years or older

Race/Ethnicity



Languages

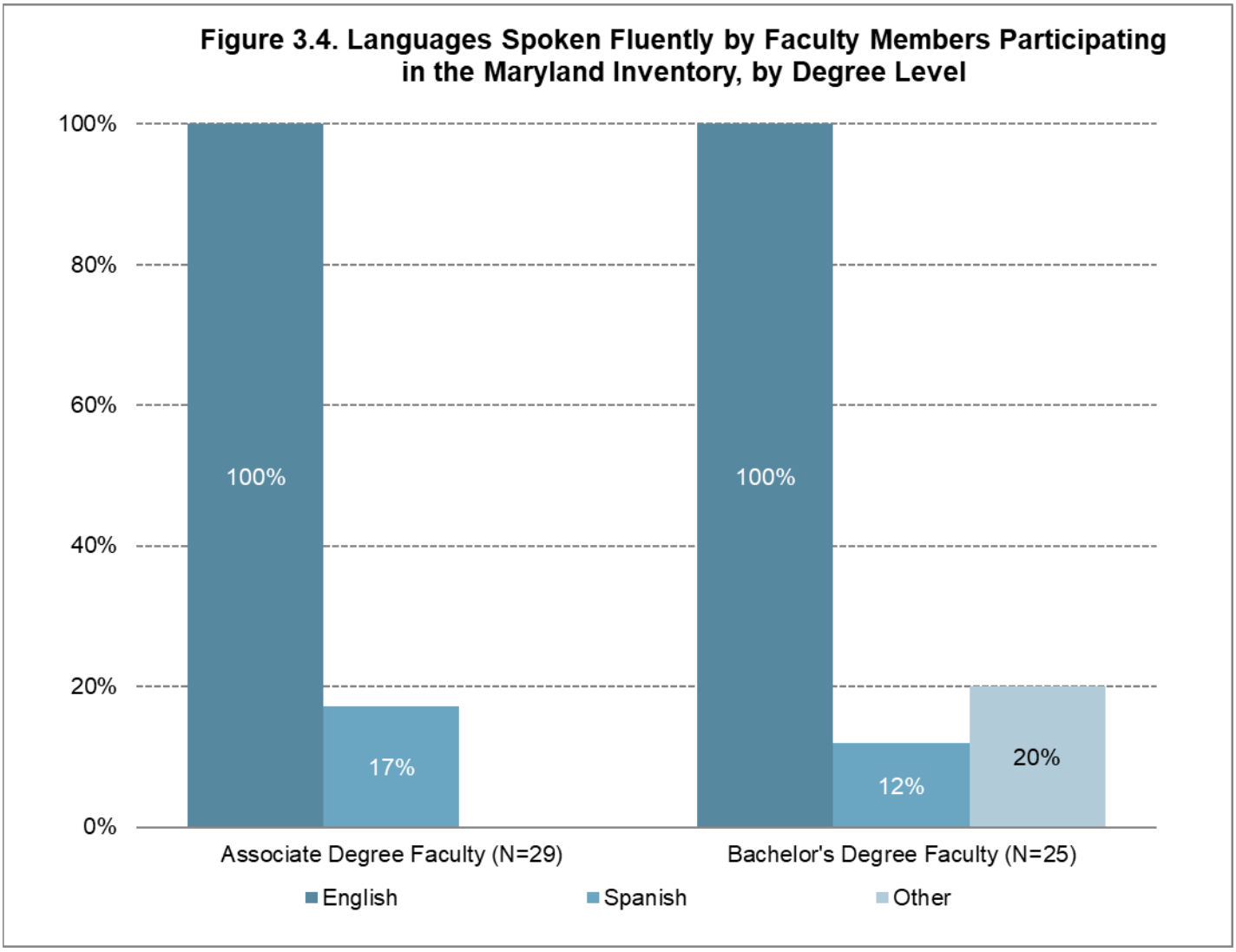


Figure 3.4. Languages Spoken Fluently by Faculty Members Participating in the Maryland Inventory, by Degree Level
100%
80%
60%
40%
20%
0%
100%
17%
100%
12%
20%
Associate Degree Faculty (N=29)
Bachelor's Degree Faculty (N=25)
English
Spanish
Other

Figure 3.5. Languages Used to Communicate With Students by Faculty Members Participating in the Maryland Inventory, by Degree Level

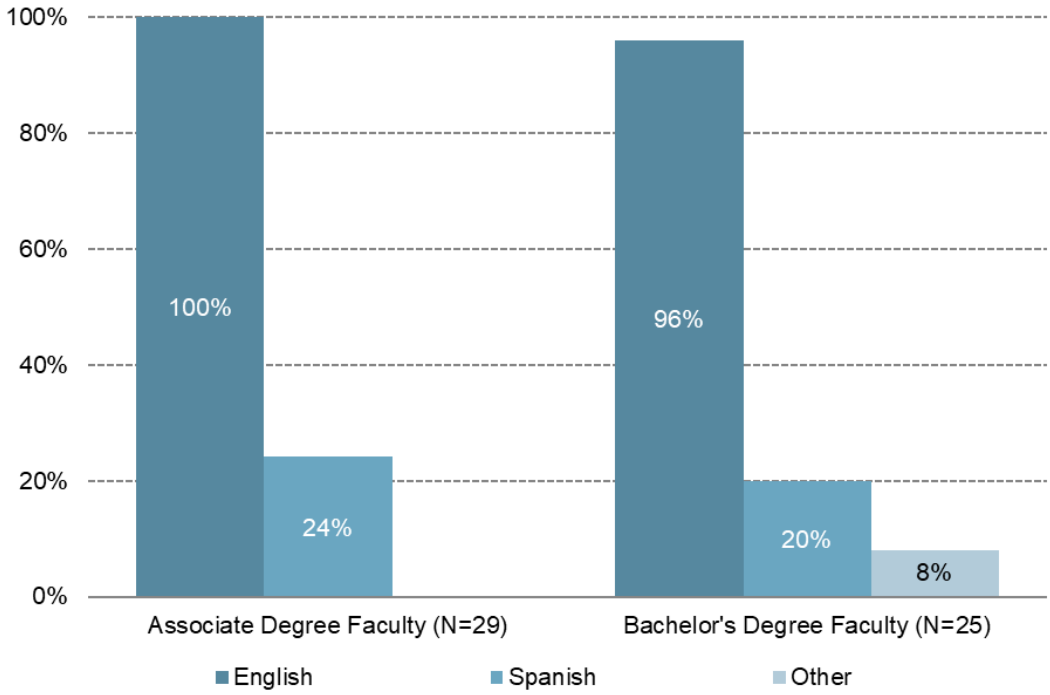
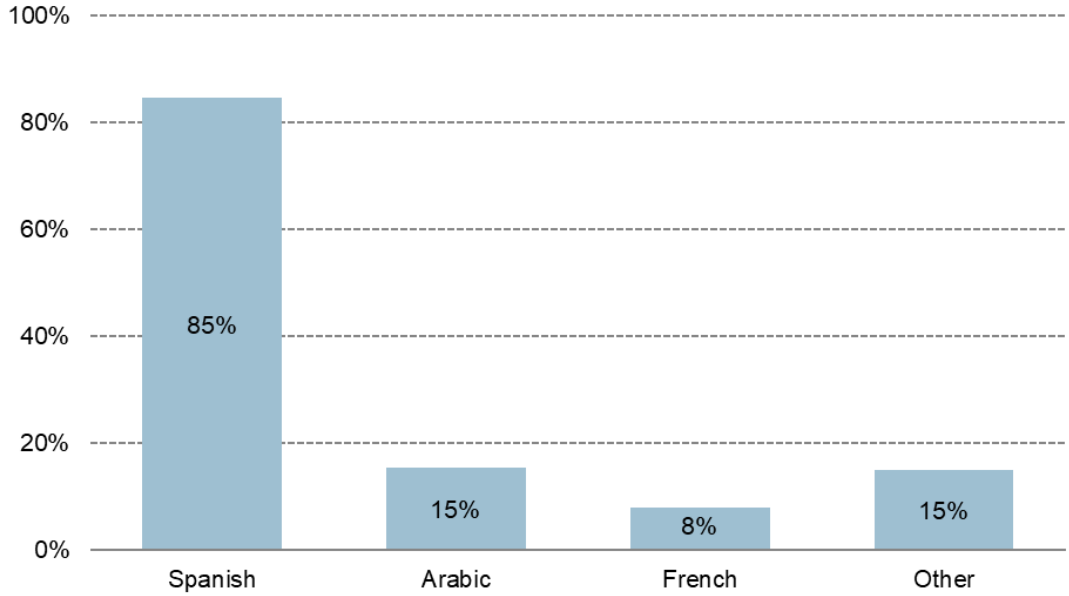


Figure 3.6. Languages That Faculty Members Participating in the Maryland Inventory Would Like to Know to Better Communicate With Students (N=26)



Education Levels of Faculty Members Participating in the Maryland Inventory

Figure 3.7. Highest Level of Education Attained by Faculty Members Participating in the Maryland Inventory, by Degree Level

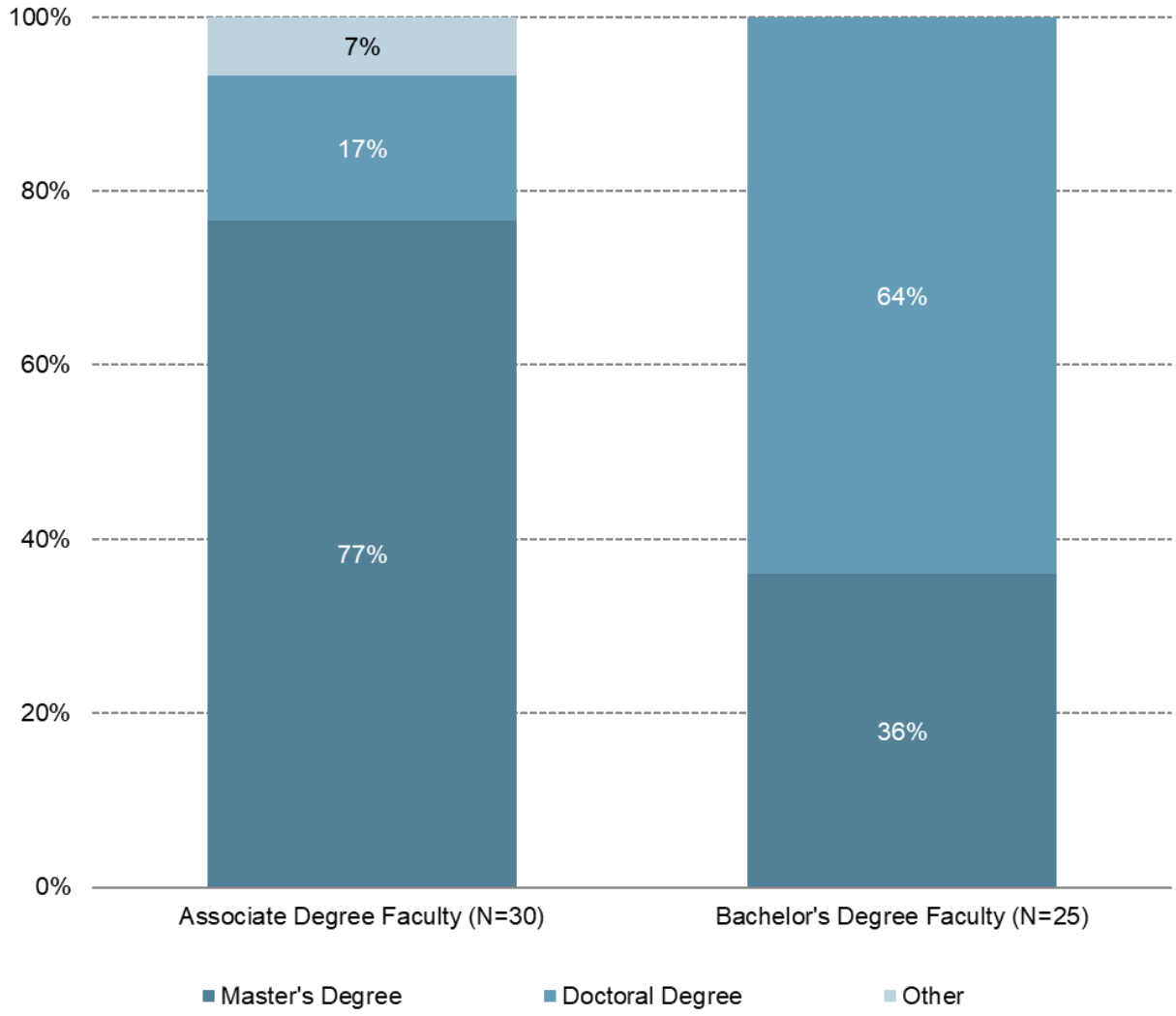
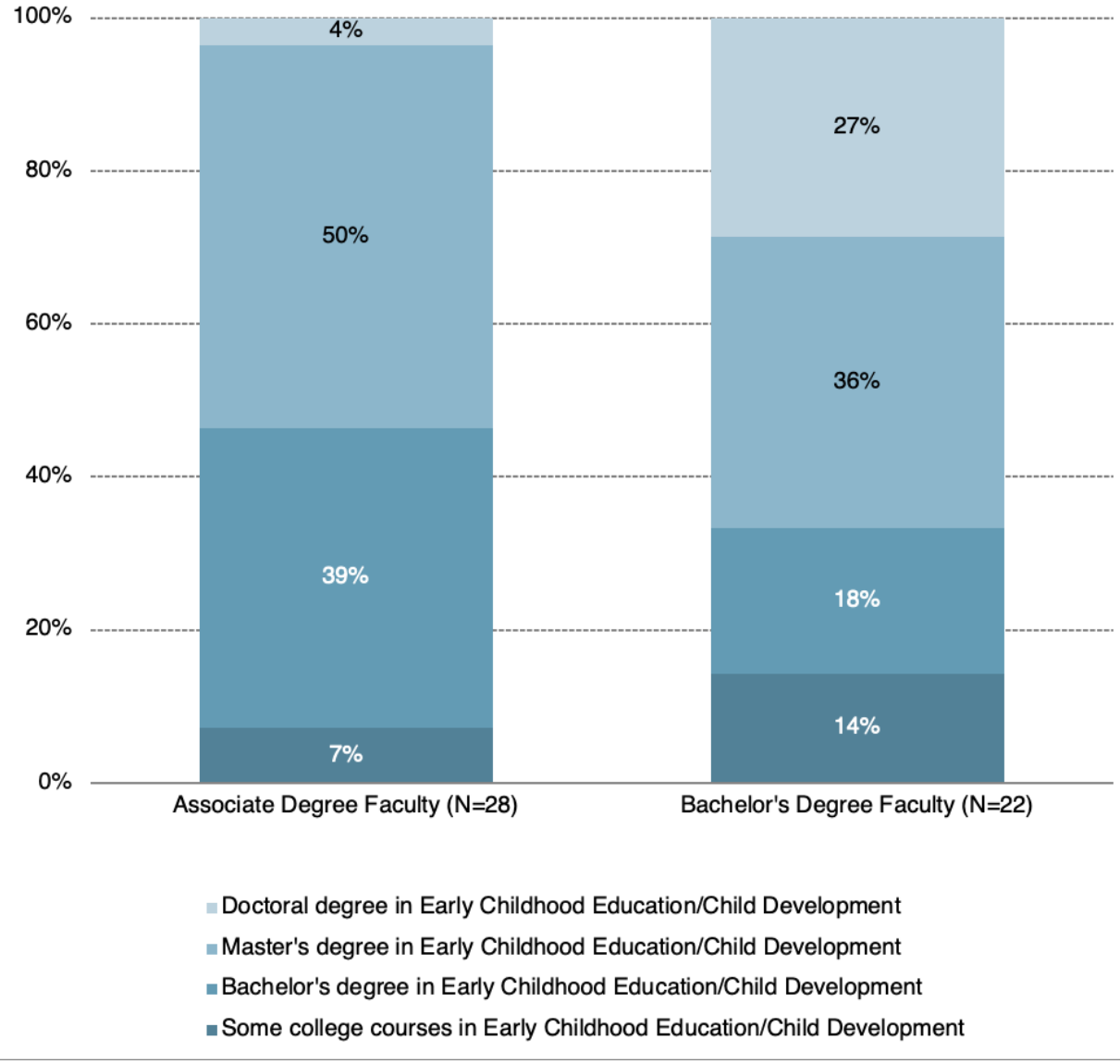


Figure 3.8. Early Childhood Education or Child Development Degree Attainment by Faculty Members Participating in the Maryland Inventory, by Degree Level



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

Teaching Experience

Figure 3.9. Number of Years Teaching at the College or University Level for Faculty Members Participating in the Maryland Inventory, by Degree Level

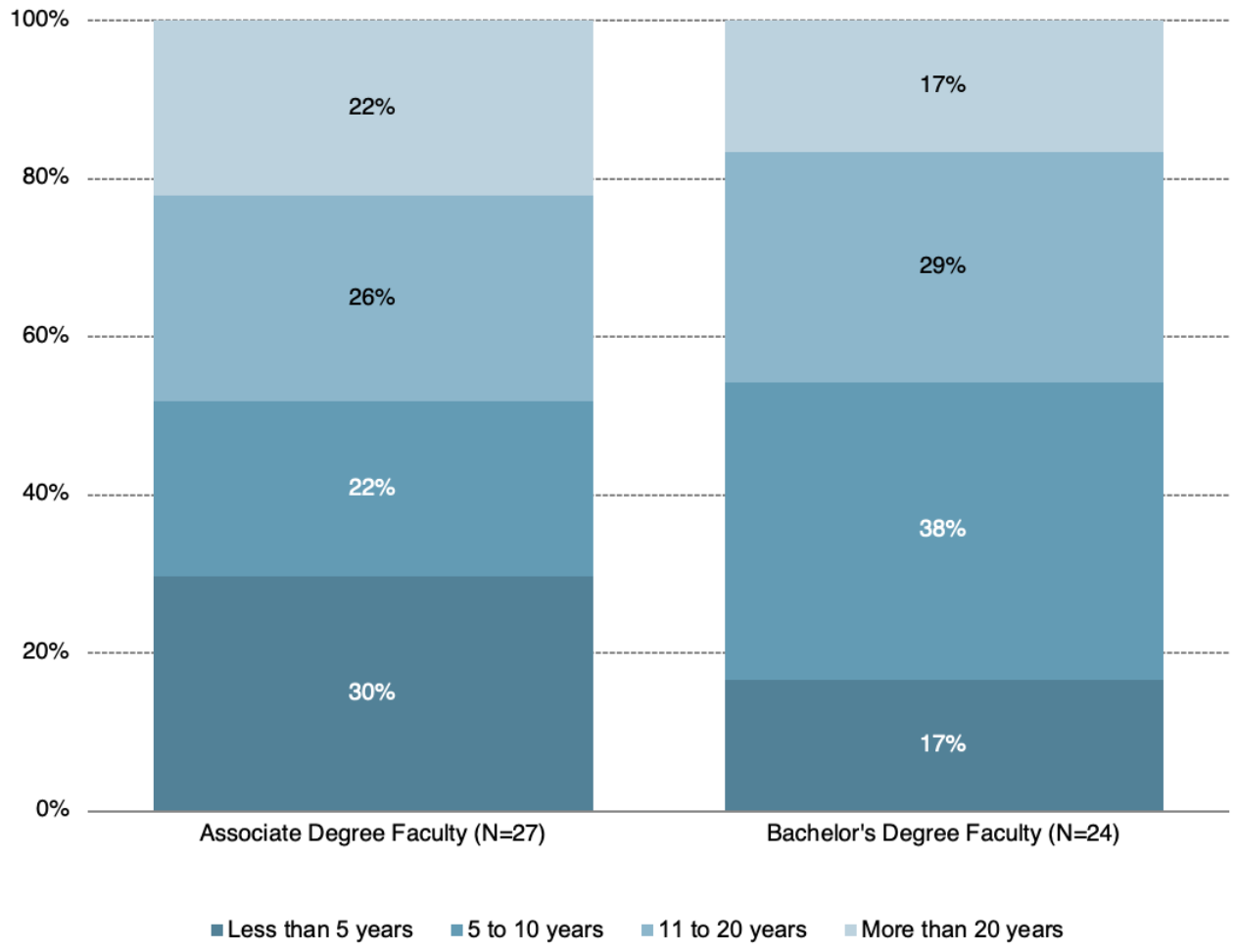
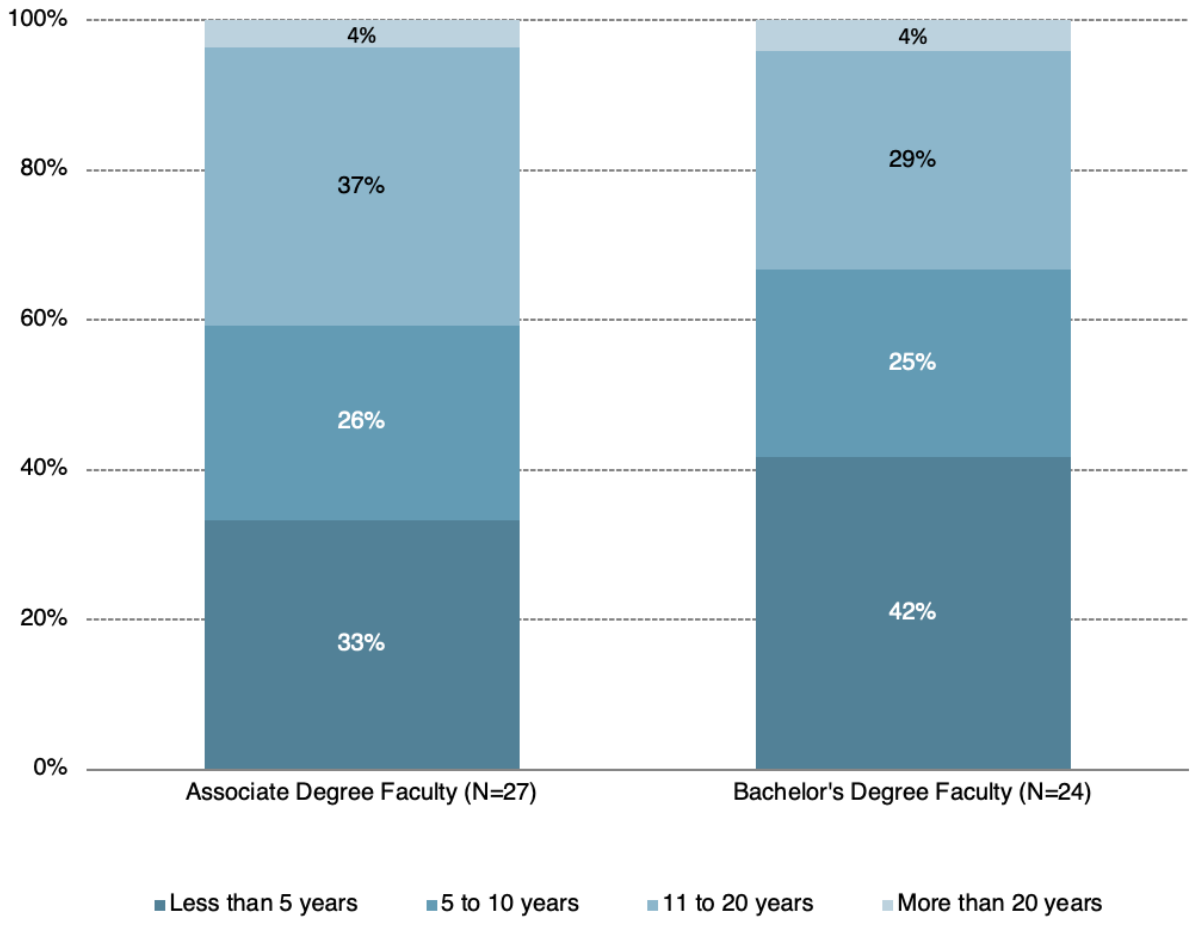


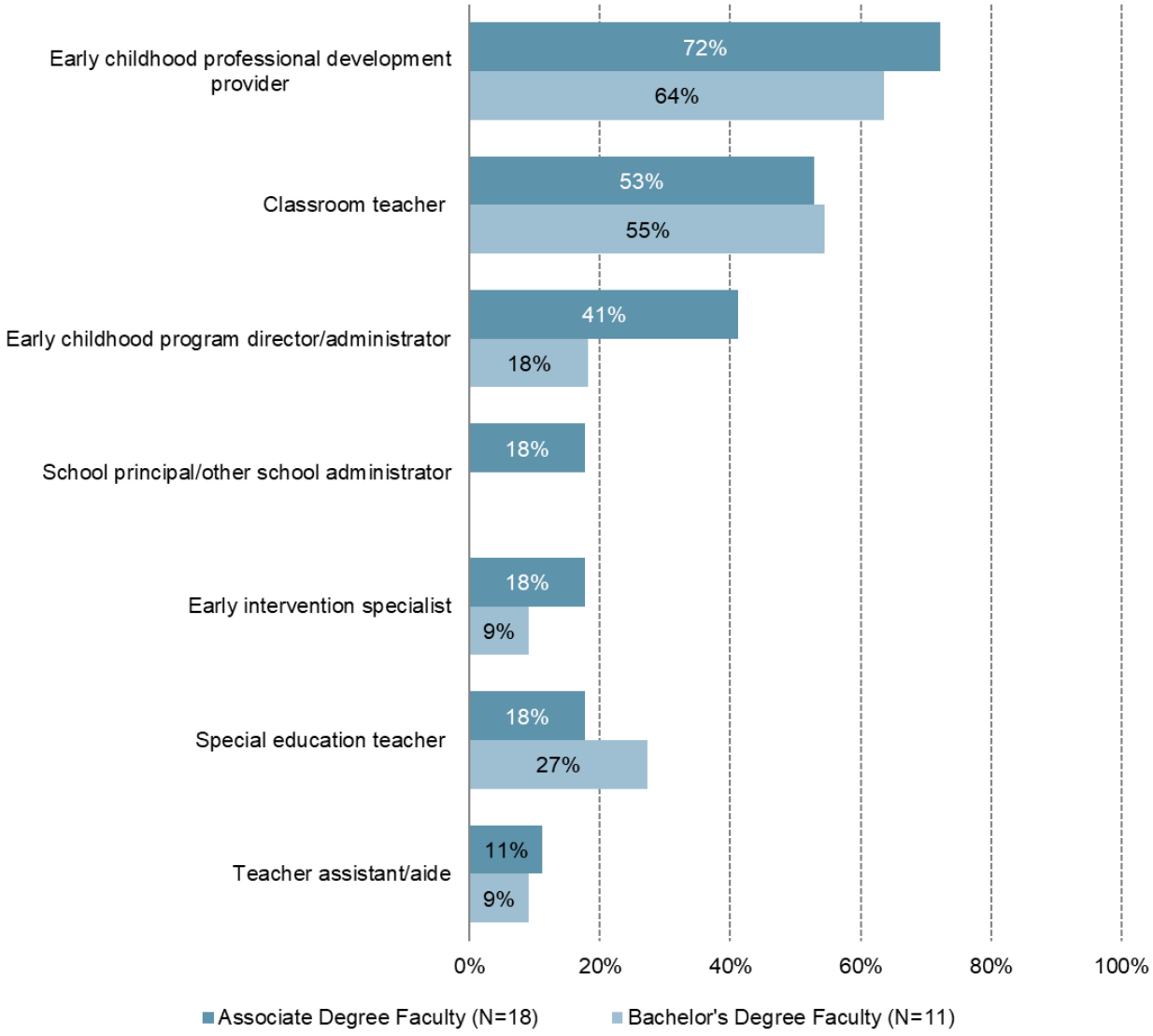
Figure 3.10. Number of Years Teaching at Current College or University for Faculty Members Participating in the Maryland Inventory, by Degree Level



Other Employment

Sixty percent of faculty members teaching in associate degree programs and 44 percent of faculty members teaching in bachelor's programs reported that they had worked in roles other than college-level teaching or administration in the past 10 years.

Figure 3.11. Job Roles Other Than College-Level Teaching in the Past 10 Years Reported by Faculty Members, by Degree Level



Current Employment

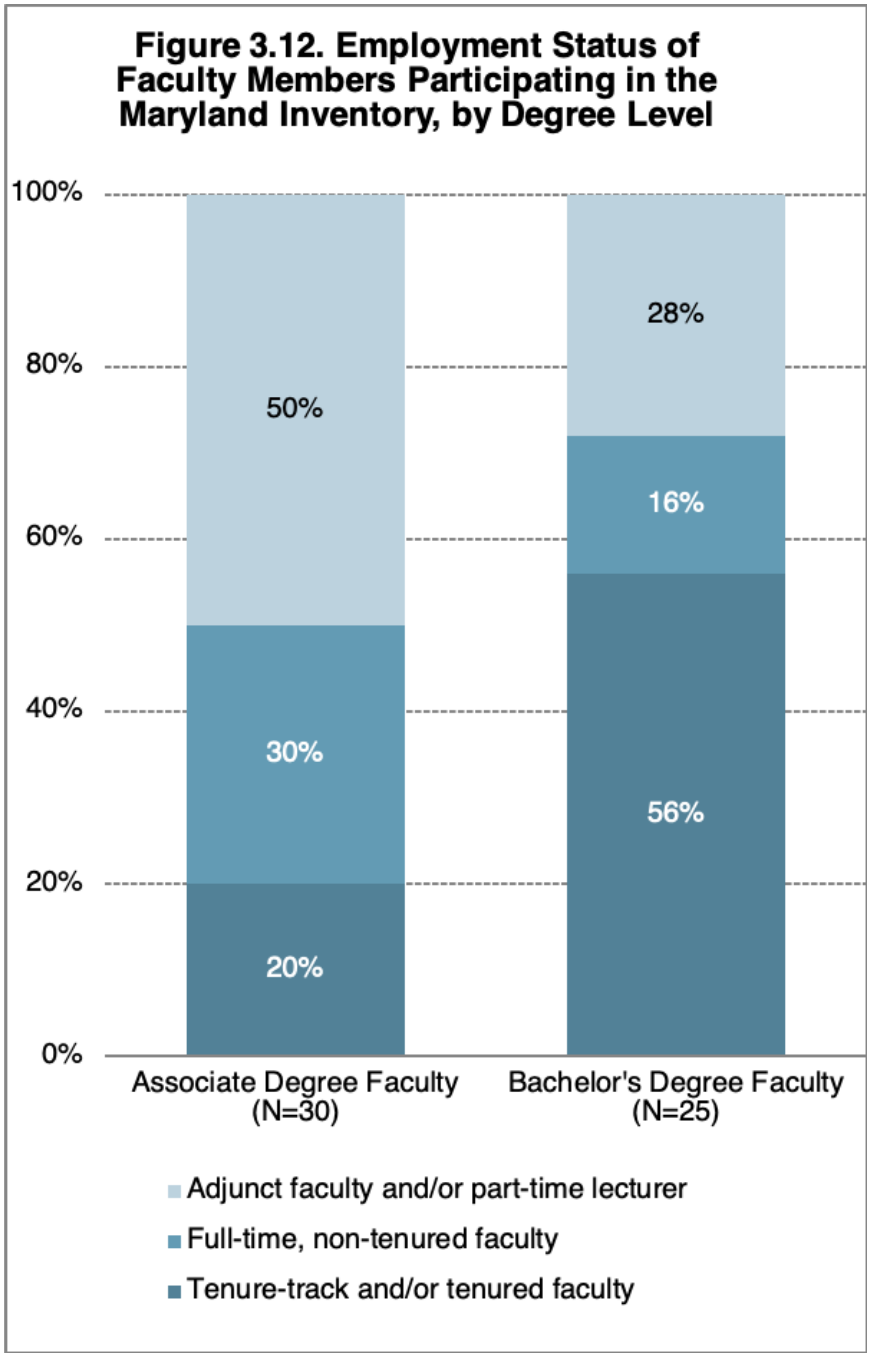


Figure 3.13. Primary Responsibility of Faculty Members Participating in the Maryland Inventory, by Degree Level

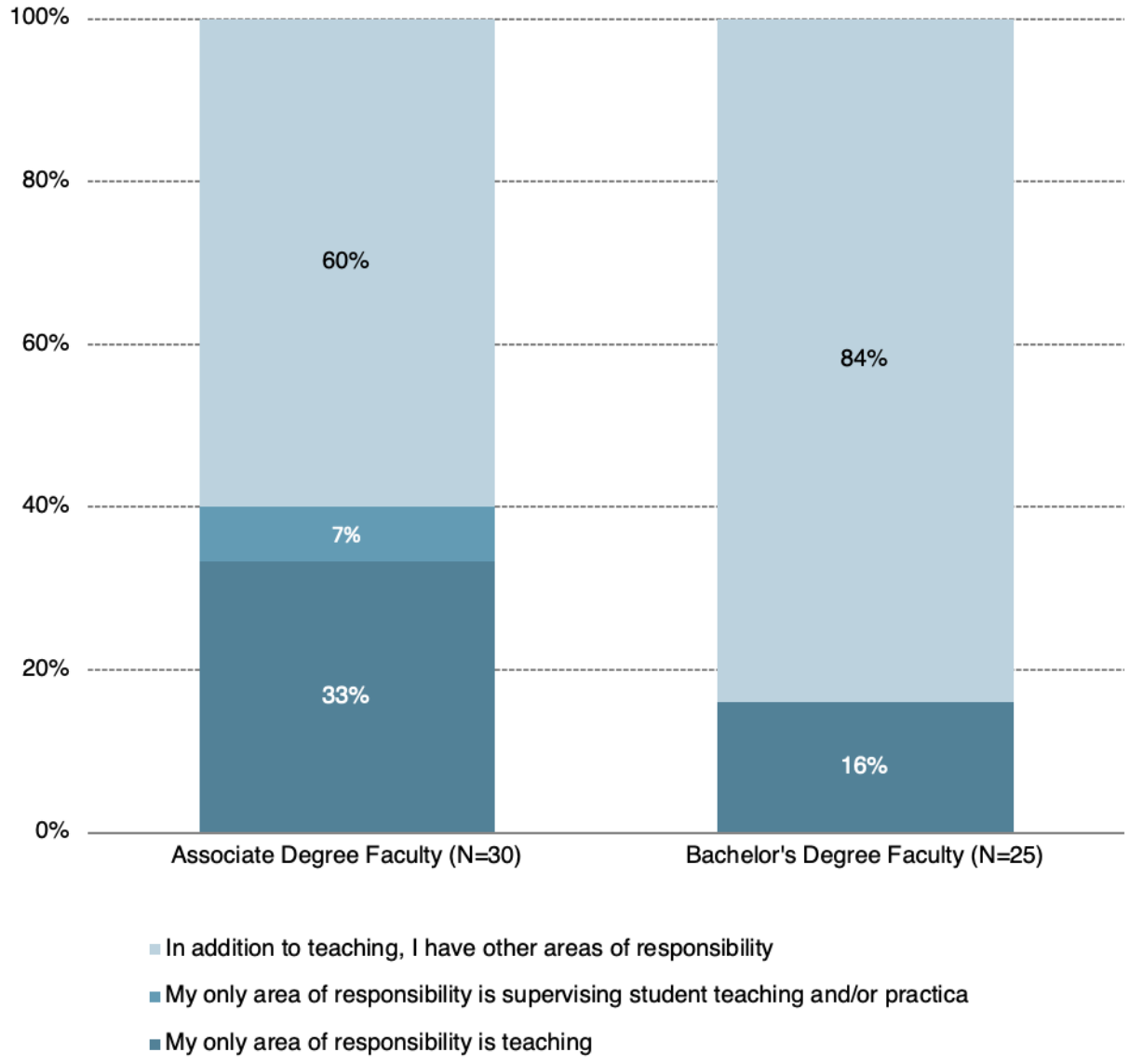
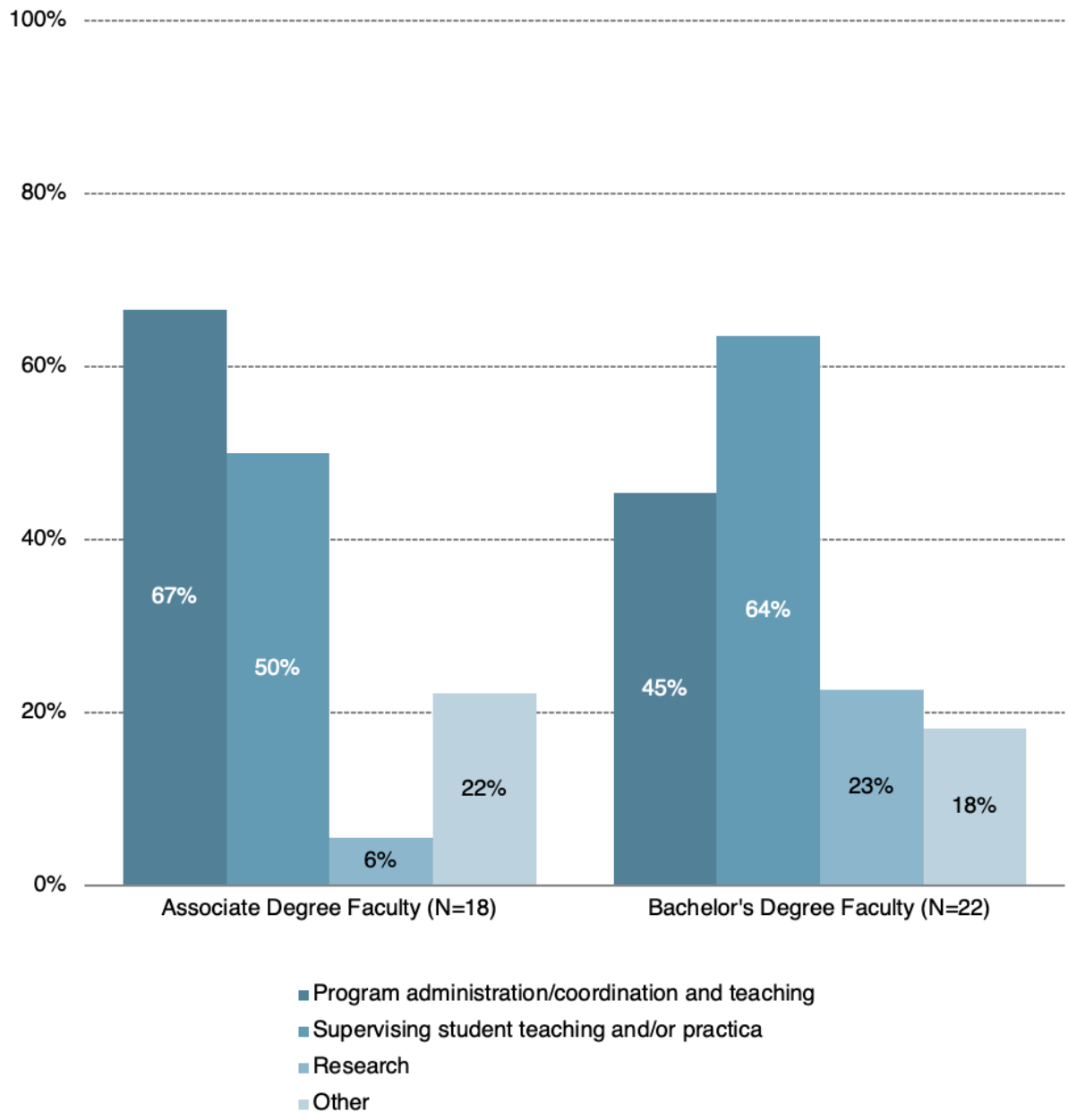


Figure 3.14. Additional Responsibilities of Teaching Faculty Members Participating in the Maryland Inventory, by Degree Level



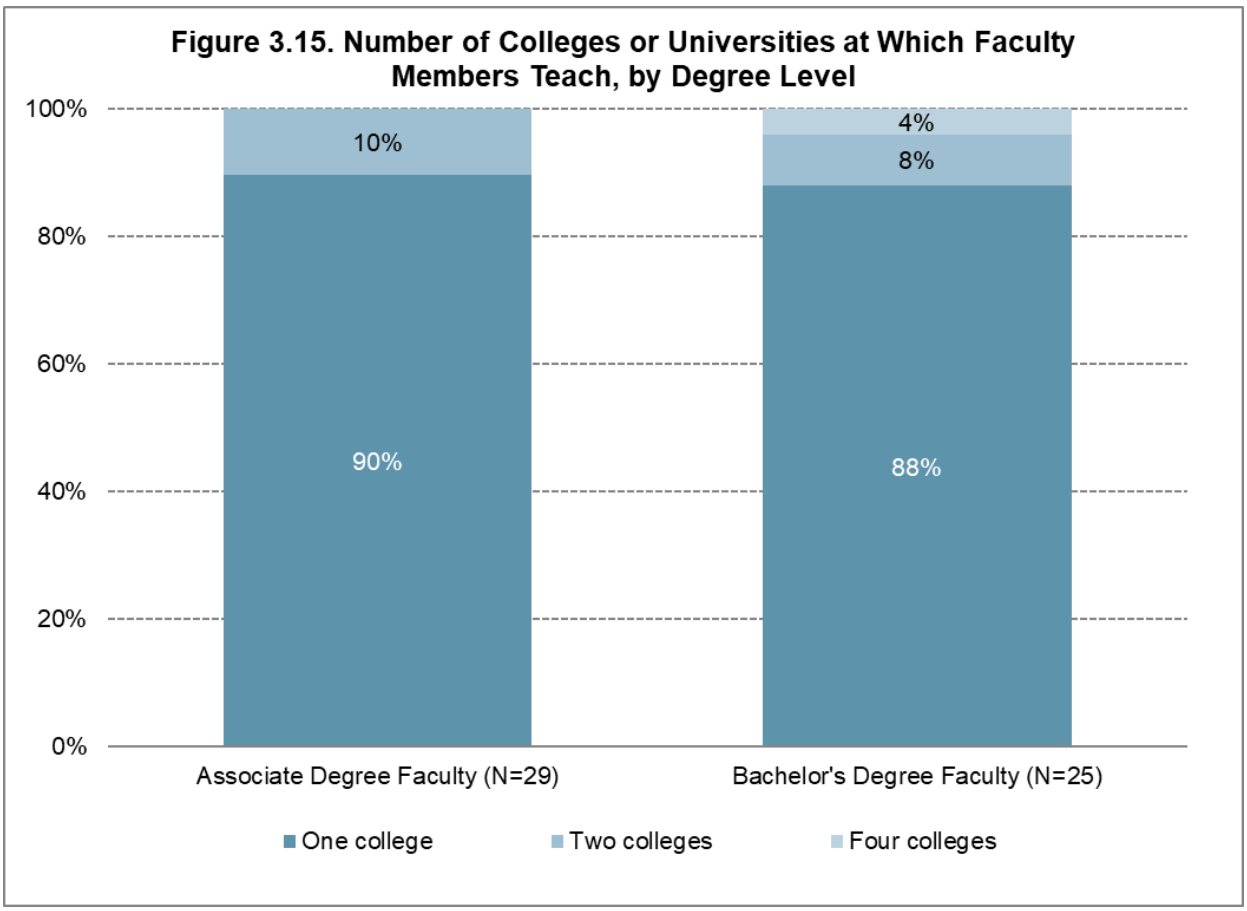


Figure 3.15. Number of Colleges or Universities at Which Faculty Members Teach, by Degree Level
100%
80%
60%
40%
20%
0%
10%
90%
4%
8%
88%
Associate Degree Faculty (N=29)
Bachelor's Degree Faculty (N=25)
One college
Two colleges
Four colleges

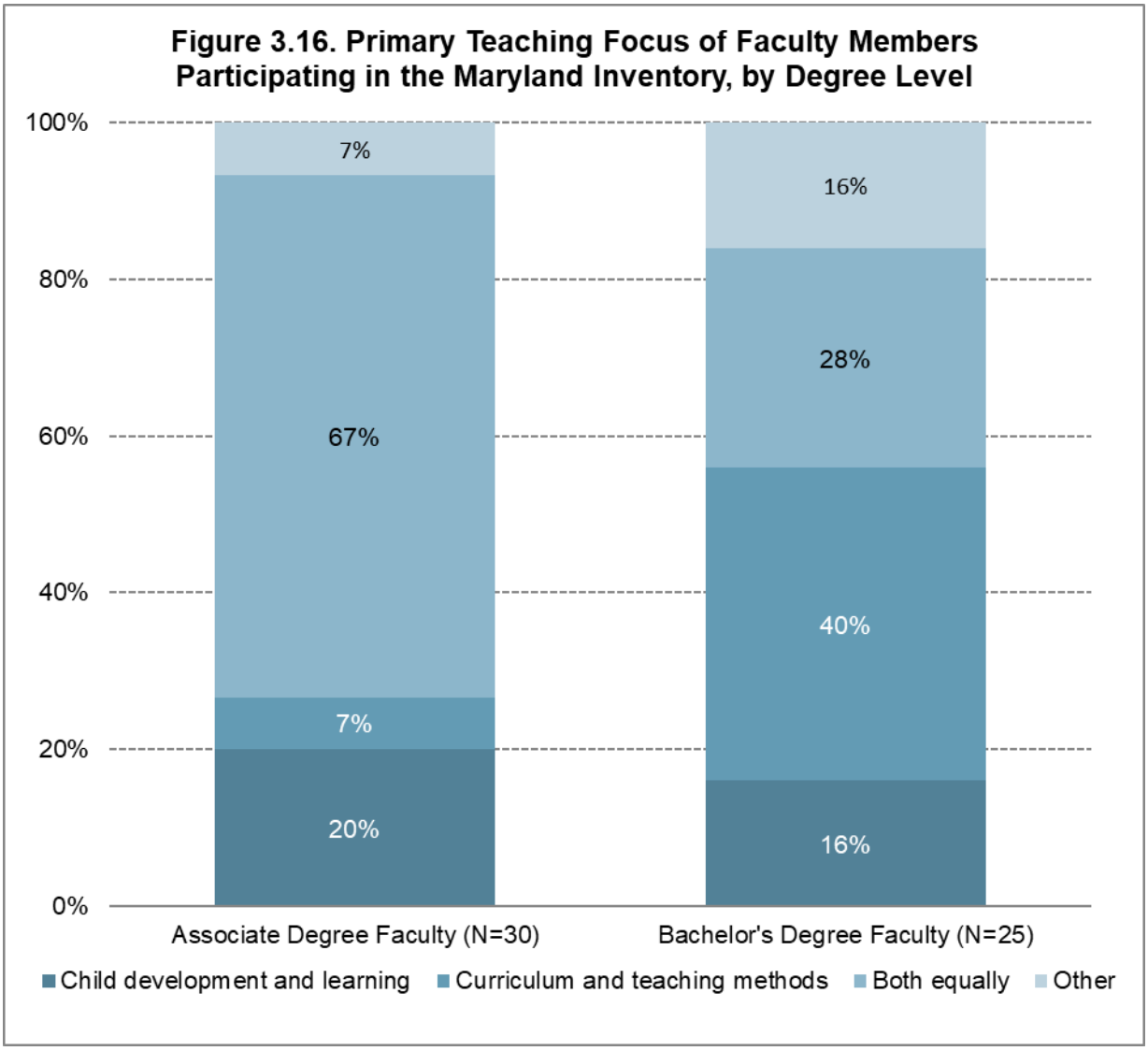
Table 3.1. Number of Courses Taught in a Typical Academic Year by Faculty Members Participating in the Maryland Inventory, by Degree Level

	Associate Degree Faculty (N=29)	Bachelor's Degree Faculty (N=25)
Credit-Bearing Courses		
Mean	7.4	5.92
Range	1-30	1-24
Non-Credit-Bearing Courses		
Mean	0.7	
Range	0-4	

Table 3.2. Number of Students Advised in a Typical Academic Year by Faculty Members Participating in the Maryland Inventory, by Degree Level

	Associate Degree Faculty (N=25-28)	Bachelor's Degree Faculty (N=25)
Credit-Bearing Courses		
Mean	29.7	17.1
Range	0-200	0-45
Non-Credit-Bearing Courses		
Mean	8.16	
Range	0-100	

Teaching Focus of Faculty Members Participating in the Maryland Inventory



Faculty Perspectives on the Importance of Learning Domains

What we asked about the importance of learning domains:

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

- **Early mathematics**: Understanding the domains and sequence of mathematical knowledge in young children and how to promote their mathematical understanding and ability to solve problems;
- **Literacy**: Understanding the components and sequence of literacy development in young children and how to promote their skills related to oral and written language;
- **Socioemotional development**: Understanding socioemotional development, its relationship to learning, and how to support children's socioemotional skills;
- **Motor development**: Understanding normal and atypical motor development in young children, its relationship to learning, and how to support the development of children's motor skills;
- **STEM development:** Understanding STEM (science, technology, engineering, and math) development, its relationship to learning, and how to support the development of children's STEM skills;
- **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;
- **Assessment**: Utilizing assessment effectively to inform and individualize instruction;
- **Collaboration**: Collaborating with community organizations to support children and families;
- **Dual language learners**: Supporting the cognitive and social development of young dual language learners;
- **Children with disabilities or developmental delays:** Supporting the cognitive and social development of children with disabilities or developmental delays; and
- **Diverse families**: Working with families of various ethnic, racial, and cultural backgrounds.

Table 3.3. Importance of Including Select Topics in Early Childhood Degree Programs, as Reported by Faculty Members, by Age Group and Degree Level

Topic and Age-Group Focus	1- Not Important	2	3	4 - Very Important
Associate Degree Faculty (N=30)				
Understanding the domains and sequence of mathematical knowledge in young children and how to promote mathematical understanding and ability to solve problems				
Birth to 2 years	7%	17%	33%	43%
3 and/or 4 years (pre-K)	0%	10%	33%	57%
K-grade 3 or higher	0%	0%	20%	80%
Understanding the components and sequence of literacy development in young children and how to promote their skills related to oral and written language				
Birth to 2 years	0%	7%	30%	63%
3 and/or 4 years (pre-K)	0%	0%	23%	77%
K-grade 3 or higher	0%	0%	7%	93%
Understanding socioemotional development, its relationship to learning, and how to support children's socioemotional skills				
Birth to 2 years	0%	0%	13%	87%
3 and/or 4 years (pre-K)	0%	0%	7%	93%
K-grade 3 or higher	0%	0%	0%	100%
Understanding typical and atypical motor development in young children, its relationship to learning, and how to facilitate motor skills				
Birth to 2 years	0%	0%	10%	90%
3 and/or 4 years (pre-K)	0%	3%	10%	87%
K-grade 3 or higher	0%	3%	23%	73%
Understanding STEM (science, technology, engineering, and math) development, its relationship to learning, and how to support children's early STEM skills				
Birth to 2 years	13%	17%	40%	30%
3 and/or 4 years (pre-K)	0%	7%	40%	53%
K-grade 3 or higher	0%	0%	23%	77%
Understanding and implementing an integrated strategy to engage families in ongoing and reciprocal partnerships and the relationship of such partnerships to outcomes for children				
Birth to 2 years	0%	0%	13%	87%
3 and/or 4 years (pre-K)	0%	0%	13%	87%
K-grade 3 or higher	0%	0%	13%	87%

Table 3.3. Importance of Including Select Topics in Early Childhood Degree Programs, as Reported by Faculty Members, by Age Group and Degree Level (Continued)

Topic and Age-Group Focus	1- Not Important	2	3	4 - Very Important
Associate Degree Faculty (Continued) (N=30)				
Utilizing assessment effectively to inform and individualize instruction				
Birth to 2 years	10%	10%	27%	53%
3 and/or 4 years (pre-K)	3%	3%	20%	73%
K-grade 3 or higher	0%	3%	17%	80%
Collaborating with community organizations to support children and families				
Birth to 2 years	0%	13%	17%	70%
3 and/or 4 years (pre-K)	0%	7%	20%	73%
K-grade 3 or higher	0%	7%	17%	77%
Supporting the cognitive and social development of young dual language learners				
Birth to 2 years	0%	0%	17%	83%
3 and/or 4 years (pre-K)	0%	0%	17%	83%
K-grade 3 or higher	0%	0%	17%	83%
Supporting the cognitive and social development of children with disabilities or developmental delays				
Birth to 2 years	0%	0%	13%	87%
3 and/or 4 years (pre-K)	0%	0%	10%	90%
K-grade 3 or higher	0%	0%	10%	90%
Working with families of various ethnic, racial, and cultural backgrounds				
Birth to 2 years	0%	0%	7%	93%
3 and/or 4 years (pre-K)	0%	0%	10%	90%
K-grade 3 or higher	0%	0%	7%	93%

Table 3.3. Importance of Including Select Topics in Early Childhood Degree Programs, as Reported by Faculty Members, by Age Group and Degree Level (Continued)

Topic and Age-Group Focus	1- Not Important	2	3	4 - Very Important
Bachelor's Degree Faculty (N=25)				
Understanding the domains and sequence of mathematical knowledge in young children and how to promote mathematical understanding and ability to solve problems				
Birth to 2 years	8%	20%	36%	36%
3 and/or 4 years (pre-K)	0%	8%	28%	64%
K-grade 3 or higher	0%	0%	12%	88%
Understanding the components and sequence of literacy development in young children and how to promote their skills related to oral and written language				
Birth to 2 years	4%	0%	40%	56%
3 and/or 4 years (pre-K)	0%	4%	4%	92%
K-grade 3 or higher	0%	0%	8%	92%
Understanding socioemotional development, its relationship to learning, and how to support children's socioemotional skills				
Birth to 2 years	0%	0%	8%	92%
3 and/or 4 years (pre-K)	0%	0%	8%	92%
K-grade 3 or higher	0%	4%	8%	88%
Understanding typical and atypical motor development in young children, its relationship to learning, and how to facilitate motor skills				
Birth to 2 years	0%	0%	24%	76%
3 and/or 4 years (pre-K)	0%	0%	29%	71%
K-grade 3 or higher	0%	8%	24%	68%
Understanding STEM (science, technology, engineering, and math) development, its relationship to learning, and how to support children's early STEM skills				
Birth to 2 years	4%	52%	32%	12%
3 and/or 4 years (pre-K)	0%	4%	56%	40%
K-grade 3 or higher	0%	0%	20%	80%
Understanding and implementing an integrated strategy to engage families in ongoing and reciprocal partnerships and the relationship of such partnerships to outcomes for children				
Birth to 2 years	4%	0%	4%	92%
3 and/or 4 years (pre-K)	0%	0%	8%	92%
K-grade 3 or higher	0%	0%	12%	88%

Table 3.3. Importance of Including Select Topics in Early Childhood Degree Programs, as Reported by Faculty Members, by Age Group and Degree Level (Continued)

Topic and Age-Group Focus	1- Not Important	2	3	4 - Very Important
Bachelor's Degree Faculty (Continued) (N=25)				
Utilizing assessment effectively to inform and individualize instruction				
Birth to 2 years	12%	16%	28%	44%
3 and/or 4 years (pre-K)	0%	12%	32%	56%
K-grade 3 or higher	0%	0%	20%	80%
Collaborating with community organizations to support children and families				
Birth to 2 years	0%	4%	24%	72%
3 and/or 4 years (pre-K)	0%	0%	36%	64%
K-grade 3 or higher	0%	0%	28%	72%
Supporting the cognitive and social development of young dual language learners				
Birth to 2 years	0%	4%	20%	76%
3 and/or 4 years (pre-K)	0%	0%	16%	84%
K-grade 3 or higher	0%	0%	16%	84%
Supporting the cognitive and social development of children with disabilities or developmental delays				
Birth to 2 years	0%	0%	8%	92%
3 and/or 4 years (pre-K)	0%	0%	16%	84%
K-grade 3 or higher	0%	4%	8%	88%
Working with families of various ethnic, racial, and cultural backgrounds				
Birth to 2 years	0%	0%	12%	88%
3 and/or 4 years (pre-K)	0%	0%	8%	92%
K-grade 3 or higher	0%	0%	8%	92%

Teaching Capacity of Faculty Members Participating in the Maryland Inventory

What we asked about teaching capacity of faculty members:

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

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

Table 3.4. Capacity to Prepare Teachers, as Reported by Faculty Members, by Age Group and Degree Level

Age-Group Focus	Associate Degree Faculty (N=30)	Bachelor's Degree Faculty (N=25)
Scaffolding children's mathematical development and promoting their ability to solve problems		
Birth to 2 years	56%	32%
3 and/or 4 years (pre-K)	77%	64%
K-grade 3 or higher	67%	64%
Scaffolding children's literacy development and promoting their oral and written skills		
Birth to 2 years	57%	48%
3 and/or 4 years (pre-K)	77%	64%
K-grade 3 or higher	77%	60%
Supporting children's socioemotional development and skills		
Birth to 2 years	63%	68%
3 and/or 4 years (pre-K)	70%	80%
K-grade 3 or higher	90%	88%
Facilitating the developmental course of motor development in young children		
Birth to 2 years	63%	32%
3 and/or 4 years (pre-K)	77%	44%
K-grade 3 or higher	73%	52%
Integrating families in partnerships to support children's learning		
Birth to 2 years	67%	76%
3 and/or 4 years (pre-K)	73%	80%
K-grade 3 or higher	87%	92%
Utilizing assessment effectively to inform and individualize instruction		
Birth to 2 years	60%	56%
3 and/or 4 years (pre-K)	70%	68%
K-grade 3 or higher	90%	72%
Collaborating with community organizations to support children and families		
Birth to 2 years	67%	60%
3 and/or 4 years (pre-K)	73%	64%
K-grade 3 or higher	87%	76%
Supporting the cognitive and social development of young dual language learners		
Birth to 2 years	43%	28%
3 and/or 4 years (pre-K)	57%	36%
K-grade 3 or higher	57%	44%

Table 3.4. Capacity to Prepare Teachers, as Reported by Faculty Members, by Age Group and Degree Level (Continued)

Age-Group Focus	Associate Degree Faculty (N=30)	Bachelor's Degree Faculty (N=25)
Working with families of various ethnic, racial, and cultural backgrounds		
Birth to 2 years	63%	64%
3 and/or 4 years (pre-K)	70%	72%
K-grade 3 or higher	83%	84%

Capacity to Prepare Teachers to Teach Early Mathematics

Table 3.5. Capacity to Teach Coursework on the Development of Children's Mathematical Understanding, as Reported by Faculty Members, by Age Group and Degree Level

Age-Group Focus	Associate Degree Faculty (N=29)	Bachelor's Degree Faculty (N=30)
Building on children's natural interest in mathematics and using everyday activities as natural vehicles for developing children's mathematical knowledge		
Birth to 2 years	59%	48%
3 and/or 4 years (pre-K)	69%	68%
K-grade 3 or higher	79%	64%
Encouraging children's inquiry and exploration to foster problem solving and mathematical reasoning		
Birth to 2 years	55%	36%
3 and/or 4 years (pre-K)	69%	68%
K-grade 3 or higher	79%	64%
Introducing explicit mathematical concepts through planned experiences		
Birth to 2 years	55%	32%
3 and/or 4 years (pre-K)	69%	60%
K-grade 3 or higher	79%	60%
Creating a mathematically rich environment		
Birth to 2 years	55%	44%
3 and/or 4 years (pre-K)	69%	64%
K-grade 3 or higher	79%	64%
Developing children's mathematical vocabulary		
Birth to 2 years	55%	36%
3 and/or 4 years (pre-K)	69%	64%
K-grade 3 or higher	79%	60%
Assessing children's mathematical development to inform and individualize instruction		
Birth to 2 years	55%	36%
3 and/or 4 years (pre-K)	72%	60%
K-grade 3 or higher	76%	60%

Table 3.6. Capacity to Teach Coursework on Teaching Children Specific Math Skills, as Reported by Faculty Members, by Age Group and Degree Level

Age-Group Focus	Associate Degree Faculty (N=30)	Bachelor's Degree Faculty (N=25)
Teaching children number sense (counting and cardinality)		
Birth to 2 years	57%	52%
3 and/or 4 years (pre-K)	73%	64%
K-grade 3 or higher	67%	64%
Teaching children operations and algebraic thinking		
Birth to 2 years	50%	32%
3 and/or 4 years (pre-K)	73%	52%
K-grade 3 or higher	63%	60%
Teaching children measurement skills		
Birth to 2 years	57%	40%
3 and/or 4 years (pre-K)	73%	68%
K-grade 3 or higher	77%	64%
Teaching children geometry skills		
Birth to 2 years	57%	40%
3 and/or 4 years (pre-K)	77%	64%
K-grade 3 or higher	67%	64%
Teaching children mathematical reasoning/practices		
Birth to 2 years	57%	32%
3 and/or 4 years (pre-K)	77%	52%
K-grade 3 or higher	70%	64%

Recent Teaching Experience of Faculty Members Participating in the Maryland Inventory

What we asked about recent teaching experience of faculty members:

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

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

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

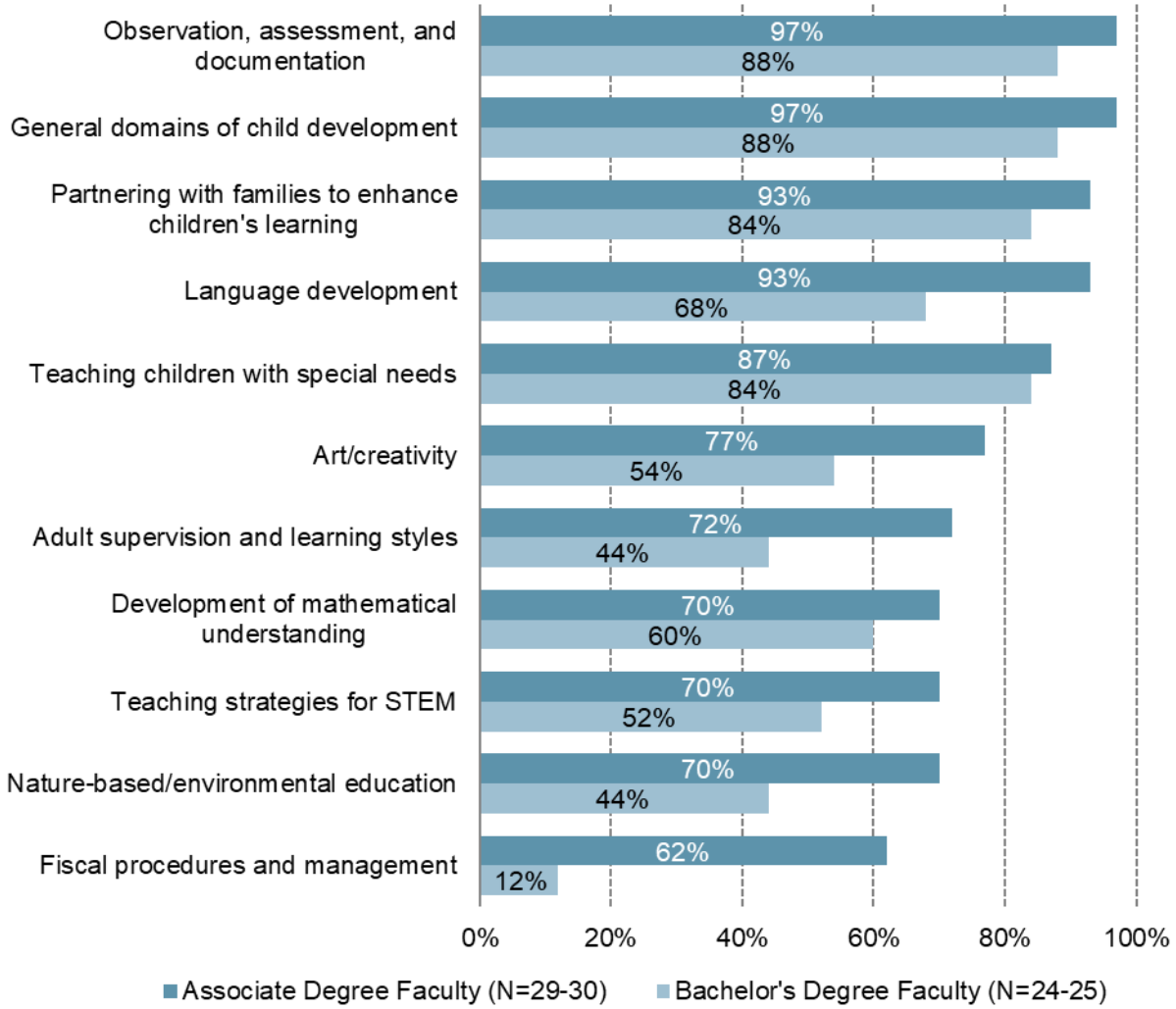


Table 3.7. Structure of Recent Teaching Experience, Percentage of Faculty Members Reporting Having Taught Content Area in the Past Two Years, by Degree Level

Course Content Structure	Associate Degree Faculty (N=29-30)	Bachelor's Degree Faculty (N=24-25)
General domains of child development (e.g., cognitive development, socioemotional development, physical development)		
Taught as a separate course	13%	8%
Taught within a broader course	33%	64%
Taught both as a separate course and embedded within a broader course	50%	16%
Not taught	3%	12%
Development of mathematical understanding		
Taught as a separate course	3%	8%
Taught within a broader course	53%	44%
Taught both as a separate course and embedded within a broader course	13%	8%
Not taught	30%	40%
Language development (e.g., first and second language acquisition)		
Taught as a separate course	17%	8%
Taught within a broader course	57%	48%
Taught both as a separate course and embedded within a broader course	20%	12%
Not taught	7%	32%
Teaching strategies for STEM (science, technology, engineering, math)		
Taught as a separate course	7%	4%
Taught within a broader course	57%	44%
Taught both as a separate course and embedded within a broader course	7%	4%
Not taught	30%	48%
Teaching children with special needs		
Taught as a separate course	7%	8%
Taught within a broader course	53%	64%
Taught both as a separate course and embedded within a broader course	27%	12%
Not taught	13%	16%
Observation, assessment, and documentation to inform teaching and learning		
Taught as a separate course	7%	4%
Taught within a broader course	60%	64%
Taught both as a separate course and embedded within a broader course	30%	20%
Not taught	3%	12%

Table 3.7. Structure of Recent Teaching Experience, Percentage of Faculty Members Reporting Having Taught Content Area in the Past Two Years, by Degree Level (Continued)

Course Content Structure	Associate Degree Faculty (N=29-30)	Bachelor's Degree Faculty (N=24-25)
Adult supervision and learning styles		
Taught as a separate course	7%	4%
Taught within a broader course	59%	24%
Taught both as a separate course and embedded within a broader course	7%	16%
Not taught	28%	56%
Fiscal procedures and program management		
Taught as a separate course	17%	8%
Taught within a broader course	31%	0%
Taught both as a separate course and embedded within a broader course	14%	4%
Not taught	38%	88%
Partnering with families to enhance children's learning in school and at home		
Taught as a separate course	7%	24%
Taught within a broader course	77%	44%
Taught both as a separate course and embedded within a broader course	10%	16%
Not taught	7%	16%
Art/creativity (e.g., dance, drawing, designing, painting)		
Taught as a separate course	7%	4%
Taught within a broader course	63%	46%
Taught both as a separate course and embedded within a broader course	7%	4%
Not taught	23%	46%
Nature-based/environmental education		
Taught as a separate course	0%	4%
Taught within a broader course	63%	36%
Taught both as a separate course and embedded within a broader course	7%	4%
Not taught	30%	56%

Professional Development Participation and Interest

What we asked about professional development:

The *Inventory* asked faculty members if they had participated in professional development opportunities over the past three years. The *Inventory* then listed 42 topics and asked faculty members to indicate the opportunities in which they had participated. The list included multiple topics related to:

- Diverse child populations;
- Adult learners;
- Teaching skills and assessment;
- Early childhood administration and leadership;
- Family engagement;
- Early mathematical development; and
- Working with dual language learners.

The next series of questions asked faculty members to indicate areas in which they would be interested in gaining additional knowledge or training. Faculty members were provided with a list of 42 topics and asked to rate their interest in obtaining additional knowledge or training on these topics using a scale of 1 to 5, with 1 being "not at all interested" and 5 being "very interested." The list included multiple topics related to the areas indicated above.

Professional Development Participation

Table 3.8. Participation in Professional Development Related to Diverse Child Populations in the Past Three Years, by Degree Level

Professional Development Topic	Associate Degree Faculty (N=27)	Bachelor's Degree Faculty (N=23)
Teaching practitioners to work with children from diverse backgrounds	67%	74%
Teaching practitioners to work with children with special needs	59%	48%
Teaching practitioners to work with children who have experienced trauma	70%	48%
None of the above	15%	17%

Table 3.9. Participation in Professional Development Related to Adult Learners in the Past Three Years, by Degree Level

Professional Development Topic	Associate Degree Faculty (N=27)	Bachelor's Degree Faculty (N=23)
Strategies and techniques for mentoring/coaching adult students	59%	22%
Strategies to supervise adult students in clinical/field experiences	33%	35%
Strategies to provide quality academic/career advising to adult students	44%	22%
Using technology to promote adult learning	52%	30%
Teaching adult students who are English-language learners	26%	0%
Teaching culturally and ethnically diverse college students	56%	30%
Teaching economically diverse college students	48%	17%
None of the above	7%	30%

Table 3.10. Participation in Professional Development Related to Teaching Skills and Assessment in the Past Three Years, by Degree Level

Professional Development Topic	Associate Degree Faculty (N=27)	Bachelor's Degree Faculty (N=23)
Teaching practitioners to use technology with children	41%	27%
Child assessment (e.g., portfolios, using particular assessment tools)	63%	48%
Early childhood program assessment (e.g., Environment Rating Scale)	56%	30%
Early childhood teacher assessment (e.g., CLASS)	33%	17%
Teaching practitioners developmentally appropriate practice in infant and toddler settings	44%	26%
None of the above	11%	30%

Table 3.11. Participation in Professional Development Related to Administration and Leadership in the Past Three Years, by Degree Level

Professional Development Topic	Associate Degree Faculty (N=26)	Bachelor's Degree Faculty (N=23)
Early childhood systems and policy	50%	13%
Organizational development	31%	17%
Theories of leadership	42%	17%
None of the above	35%	65%

Table 3.12. Participation in Professional Development Related to Family Engagement in the Past Three Years, by Degree Level

Professional Development Topic	Associate Degree Faculty (N=26)	Bachelor's Degree Faculty (N=23)
Evidence-based research on the importance and value of building respectful and trusting relationships with families	61%	52%
Considering family structure when engaging with children and families	54%	17%
Working with families with foster children	21%	0%
Working with families experiencing homelessness	25%	17%
Working with immigrant families	29%	30%
Working with families to help them enhance their children's learning at home	61%	39%
Techniques for engaging families in classroom, program, and/or school activities	68%	43%
Strategies to effectively communicate with families	61%	43%
Techniques for gathering and using knowledge about children's families in curriculum planning	43%	22%
None of the above	14%	30%

Table 3.13. Participation in Professional Development Related to Early Mathematical Development in the Past Three Years, by Degree Level

Professional Development Topic	Associate Degree Faculty (N=27)	Bachelor's Degree Faculty (N=23)
Teaching practitioners to implement instructional strategies that support mathematical understanding in children from birth through age 2	26%	13%
Teaching practitioners to implement instructional strategies that support mathematical understanding in children ages 3 and 4 (pre-K)	26%	17%
Teaching practitioners to implement instructional strategies that support mathematical understanding in children in K-3 or higher	26%	48%
Teaching practitioners how to effectively use assessment to inform and individualize their mathematical instruction	30%	35%
Strategies to help practitioners who struggle with math build confidence in their ability to facilitate children's mathematical understanding and skill	15%	26%
None of the above	59%	52%

Table 3.14. Participation in Professional Development Related to Dual Language Learners (DLLs) in the Past Three Years, by Degree Level

Professional Development Topic	Associate Degree Faculty (N=26)	Bachelor's Degree Faculty (N=23)
Importance and benefits of bilingualism for young children's development	42%	35%
Role of home language development in helping young children learn English	38%	39%
Strategies to support the cognitive development of young DLLs	19%	39%
Strategies to support the language development of young DLLs	35%	43%
Strategies to support the literacy development of young DLLs	35%	39%
Strategies to support the development of mathematical knowledge and understanding of young DLLs	19%	22%
Strategies to support the socioemotional development of young DLLs	35%	30%
How to use appropriate teaching strategies for young DLLs within various classroom language models	35%	30%
How to use observation, assessment, and documentation to inform strategies for teaching DLLs	23%	26%
Strategies for engaging families from linguistically diverse backgrounds	50%	43%
None of the above	35%	48%

Professional Development Interest

Table 3.15. Interest in Professional Development Topics Related to Diverse Child Populations, by Degree Level

Professional Development Topic	Not interested				Very interested
	1	2	3	4	5
Associate Degree Faculty (N=30)					
Teaching practitioners to work with children from diverse backgrounds	0%	0%	13%	30%	57%
Teaching practitioners to work with children with special needs	0%	3%	10%	23%	63%
Teaching practitioners to work with children who have experienced trauma	0%	3%	7%	23%	67%
Bachelor's Degree Faculty (N=25)					
Teaching practitioners to work with children from diverse backgrounds	0%	0%	12%	16%	72%
Teaching practitioners to work with children with special needs	0%	0%	12%	12%	76%
Teaching practitioners to work with children who have experienced trauma	0%	0%	24%	36%	40%

Table 3.16. Interest in Professional Development Topics Related to Adult Learners, by Degree Level

Professional Development Topic	Not interested				Very interested
	1	2	3	4	5
Associate Degree Faculty (N=30)					
Strategies and techniques for mentoring/coaching adult students	0%	7%	20%	20%	53%
Strategies to supervise adult students in clinical/field experiences	3%	3%	30%	13%	50%
Strategies to provide quality academic/career advising to adult students	3%	10%	17%	17%	53%
Using technology to promote adult learning	3%	7%	13%	13%	63%
Teaching adult students who are English-language learners	0%	7%	23%	20%	50%
Teaching culturally and ethnically diverse college students	0%	7%	7%	27%	60%
Teaching economically diverse college students	3%	7%	3%	23%	63%
Bachelor's Degree Faculty (N=25)					
Strategies and techniques for mentoring/coaching adult students	12%	4%	24%	32%	28%
Strategies to supervise adult students in clinical/field experiences	12%	4%	24%	24%	36%
Strategies to provide quality academic/career advising to adult students	4%	16%	40%	12%	28%
Using technology to promote adult learning	4%	16%	36%	8%	36%
Teaching adult students who are English-language learners	8%	12%	32%	12%	36%
Teaching culturally and ethnically diverse college students	4%	0%	24%	16%	56%
Teaching economically diverse college students	4%	4%	28%	12%	52%

Table 3.17. Interest in Professional Development Topics Related to Teaching Skills and Assessment, by Degree Level

Professional Development Topic	Not interested				Very interested
	1	2	3	4	5
Associate Degree Faculty (N=30)					
Teaching practitioners to use technology with children	0%	10%	27%	20%	43%
Using child assessment effectively (e.g., portfolios, using particular assessment tools)	3%	3%	17%	23%	53%
Using early childhood program assessment effectively (e.g., Environment Rating Scale)	0%	17%	27%	20%	37%
Using early childhood teacher assessment effectively (e.g., CLASS)	0%	17%	17%	17%	50%
Teaching practitioners developmentally appropriate practice in infant and toddler settings	0%	7%	20%	7%	67%
Bachelor's Degree Faculty (N=23)					
Teaching practitioners to use technology with children	4%	4%	52%	16%	24%
Using child assessment effectively (e.g., portfolios, using particular assessment tools)	4%	4%	24%	24%	44%
Using early childhood program assessment effectively (e.g., Environment Rating Scale)	4%	16%	44%	20%	16%
Using early childhood teacher assessment effectively (e.g., CLASS)	0%	17%	17%	17%	50%
Teaching practitioners developmentally appropriate practice in infant and toddler settings	0%	7%	20%	7%	67%

Table 3.18. Interest in Professional Development Topics Related to Administration and Leadership, by Degree Level

Professional Development Topic	Not interested				Very interested
	1	2	3	4	5
Associate Degree Faculty (N=30)					
Early childhood systems and policy	3%	7%	23%	17%	50%
Organizational development	10%	17%	20%	20%	33%
Theories of leadership	7%	17%	33%	20%	23%
Bachelor's Degree Faculty (N=25)					
Early childhood systems and policy	3%	13%	40%	13%	30%
Organizational development	7%	10%	33%	27%	23%
Theories of leadership	7%	17%	23%	13%	40%

Table 3.19. Interest in Professional Development Topics Related to Family Engagement, by Degree Level

Professional Development Topic	Not interested				Very interested
	1	2	3	4	5
Associate Degree Faculty (N=30)					
Evidence-based research on the importance and value of building respectful and trusting relationships with families	3%	3%	30%	13%	50%
Considering family structures when working with children and families and having strategies to partner effectively with a variety of family types	0%	7%	27%	17%	50%
Working with families with foster children	0%	17%	33%	20%	30%
Working with immigrant families	6%	6%	25%	31%	31%
Working with families experiencing homelessness	0%	6%	50%	25%	19%
Working with families to help them enhance their children's learning at home	0%	3%	17%	17%	63%
Techniques for engaging families in classroom, program, and/or school activities	0%	3%	20%	10%	67%
Strategies to effectively communicate with families	3%	7%	10%	13%	67%
Techniques for gathering and using knowledge about children's families in curriculum planning	0%	3%	17%	20%	60%
Bachelor's Degree Faculty (N=25)					
Evidence-based research on the importance and value of building respectful and trusting relationships with families	0%	8%	32%	20%	40%
Considering family structures when working with children and families and having strategies to partner effectively with a variety of family types	0%	4%	28%	36%	32%
Working with families with foster children	0%	8%	36%	28%	28%
Working with immigrant families	0%	4%	12%	44%	40%
Working with families experiencing homelessness	0%	4%	16%	44%	36%
Working with families to help them enhance their children's learning at home	0%	8%	12%	40%	40%
Techniques for engaging families in classroom, program, and/or school activities	0%	8%	16%	16%	60%
Strategies to effectively communicate with families	0%	0%	32%	12%	56%
Techniques for gathering and using knowledge about children's families in curriculum planning	0%	3%	17%	20%	60%

Table 3.20. Interest in Professional Development Topics Related to Early Mathematical Development, by Degree Level

Professional Development Topic	Not interested				Very interested
	1	2	3	4	5
Associate Degree Faculty (N=30)					
Teaching practitioners to implement strategies that support mathematical understanding in children birth to age 2	7%	3%	33%	17%	40%
Teaching practitioners to implement strategies that support mathematical understanding in children ages 3 and 4 (pre-K)	7%	10%	23%	17%	43%
Teaching practitioners to implement strategies that support mathematical understanding in children in grades K-3 or higher	10%	10%	20%	17%	43%
Teaching practitioners how to effectively use assessment to inform and individualize instruction	7%	3%	10%	27%	53%
Strategies to help practitioners who struggle with math build confidence in their ability to facilitate children's mathematical understanding and skill	7%	3%	27%	10%	53%
Bachelor's Degree Faculty (N=25)					
Teaching practitioners to implement strategies that support mathematical understanding in children birth to age 2	12%	16%	40%	8%	24%
Teaching practitioners to implement strategies that support mathematical understanding in children ages 3 and 4 (pre-K)	12%	12%	23%	31%	23%
Teaching practitioners to implement strategies that support mathematical understanding in children in grades K-3 or higher	8%	16%	20%	20%	36%
Teaching practitioners how to effectively use assessment to inform and individualize instruction	4%	16%	16%	16%	48%
Strategies to help practitioners who struggle with math build confidence in their ability to facilitate children's mathematical understanding and skill	12%	4%	24%	20%	40%

Table 3.21. Interest in Professional Development Topics Related to Dual Language Learners (DLLs), by Degree Level

Professional Development Topic	Not interested				Very interested
	1	2	3	4	5
Associate Degree Faculty (N=30)					
Importance and benefits of bilingualism for young children's development	0%	3%	27%	27%	43%
Role of home-language development in helping young children learn English	0%	0%	27%	23%	50%
Strategies to support the cognitive development of young DLLs	0%	0%	20%	30%	50%
Strategies to support the language development of young DLLs	0%	0%	20%	30%	50%
Strategies to support the literacy development of young DLLs	0%	0%	20%	30%	50%
Strategies to support the development of mathematical knowledge and understanding of young DLLs	0%	0%	30%	23%	47%
Strategies to support the socioemotional development of young DLLs	0%	0%	17%	23%	60%
How to use appropriate teaching strategies for young DLLs within various classroom language models	0%	0%	20%	33%	47%
How to use observation, assessment, and documentation to inform strategies for teaching DLLs	0%	7%	20%	23%	50%
Strategies for engaging families from linguistically diverse backgrounds	0%	3%	17%	27%	53%

Table 3.21. Interest in Professional Development Topics Related to Dual Language Learners (DLLs), by Degree Level (Continued)

Professional Development Topic	Not interested				Very interested
	1	2	3	4	5
Bachelor's Degree Faculty (N=25)					
Importance and benefits of bilingualism for young children's development	0%	4%	20%	16%	60%
Role of home-language development in helping young children learn English	4%	0%	20%	28%	48%
Strategies to support the cognitive development of young DLLs	0%	0%	28%	16%	56%
Strategies to support the language development of young DLLs	0%	4%	24%	20%	52%
Strategies to support the literacy development of young DLLs	0%	0%	28%	16%	56%
Strategies to support the development of mathematical knowledge and understanding of young DLLs	0%	12%	20%	20%	48%
Strategies to support the socioemotional development of young DLLs	0%	0%	12%	20%	68%
How to use appropriate teaching strategies for young DLLs within various classroom language models	0%	0%	24%	20%	56%
How to use observation, assessment, and documentation to inform strategies for teaching DLLs	0%	8%	28%	12%	52%
Strategies for engaging families from linguistically diverse backgrounds	0%	0%	16%	20%	64%

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

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

The *Inventory* asked program leads whether their degree programs were facing any challenges. Program leads who responded "yes" were then asked to identify the challenges from two broad lists:

1) challenges related to a lack of resources and/or support; and
2) challenges related to a need for additional faculty expertise.

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

1) program-related resources; and
2) faculty-related resources.

Challenges Facing Early Childhood Degree Programs

Table 4.1. Challenges Facing Maryland Early Childhood Degree Programs Related to Lack of Resources and/or Support

	Associate Degree Programs (N=20)	Bachelor's Degree Programs (N=9)
Difficulty recruiting or retaining students related to the low pay of the ECE field	60%	56%
Faculty administrative responsibilities interfere with time with students	55%	33%
Inequitable distribution of resources compared to other programs in the institution	20%	22%
Insufficient ability to recruit students	40%	44%
Insufficient ability to support students to complete the program (e.g., basic skills supports, tutoring)	5%	22%
Insufficient academic support for students for whom English is a second language	15%	33%
Insufficient access to quality clinical experience sites	0%	33%
Insufficient course content focused on children younger than five	0%	11%
Insufficient number of full-time faculty	15%	11%
Insufficient number of part-time faculty	0%	0%
Insufficient resources to offer enough courses/sections to meet student needs	5%	22%
Lack of opportunities for non-traditional/working students to complete clinical experiences	20%	56%
Lack of opportunities for non-traditional/working students to complete coursework	10%	56%
Lack of recognition of the value of early childhood from within the department or school	35%	33%
Lack of time or resources to sufficiently support students for whom English is a second language	20%	33%
None of the challenges listed	10%	22%

Table 4.2. Challenges Facing Maryland Early Childhood Degree Programs Related to Need for Additional Faculty Expertise in Selected Areas/Topics

Additional Faculty Expertise Needed in…	Associate Degree Programs (N=20)	Bachelor's Degree Programs (N=8)
Math pedagogy for young children	30%	13%
Promoting literacy for young children	20%	13%
Science pedagogy for young children	20%	0%
Socioemotional development of young children	5%	13%
Teaching infants and toddlers	20%	38%
Teaching preschool-age children	10%	0%
Teaching young children who are dual language learners	50%	25%
Teaching young children with special needs	10%	25%
Working with and engaging diverse populations of families	10%	13%
Working with college students who are English learners	30%	25%
Working with diverse populations of college students	5%	0%
Working with diverse populations of young children	5%	13%
None of the areas/topics listed	30%	25%

Additional Resources Needed to Improve Early Childhood Degree Programs

Figure 4.1. Program-Related Resources Needed to Improve Early Childhood Degree Programs, as Reported by Faculty Members, by Degree Level

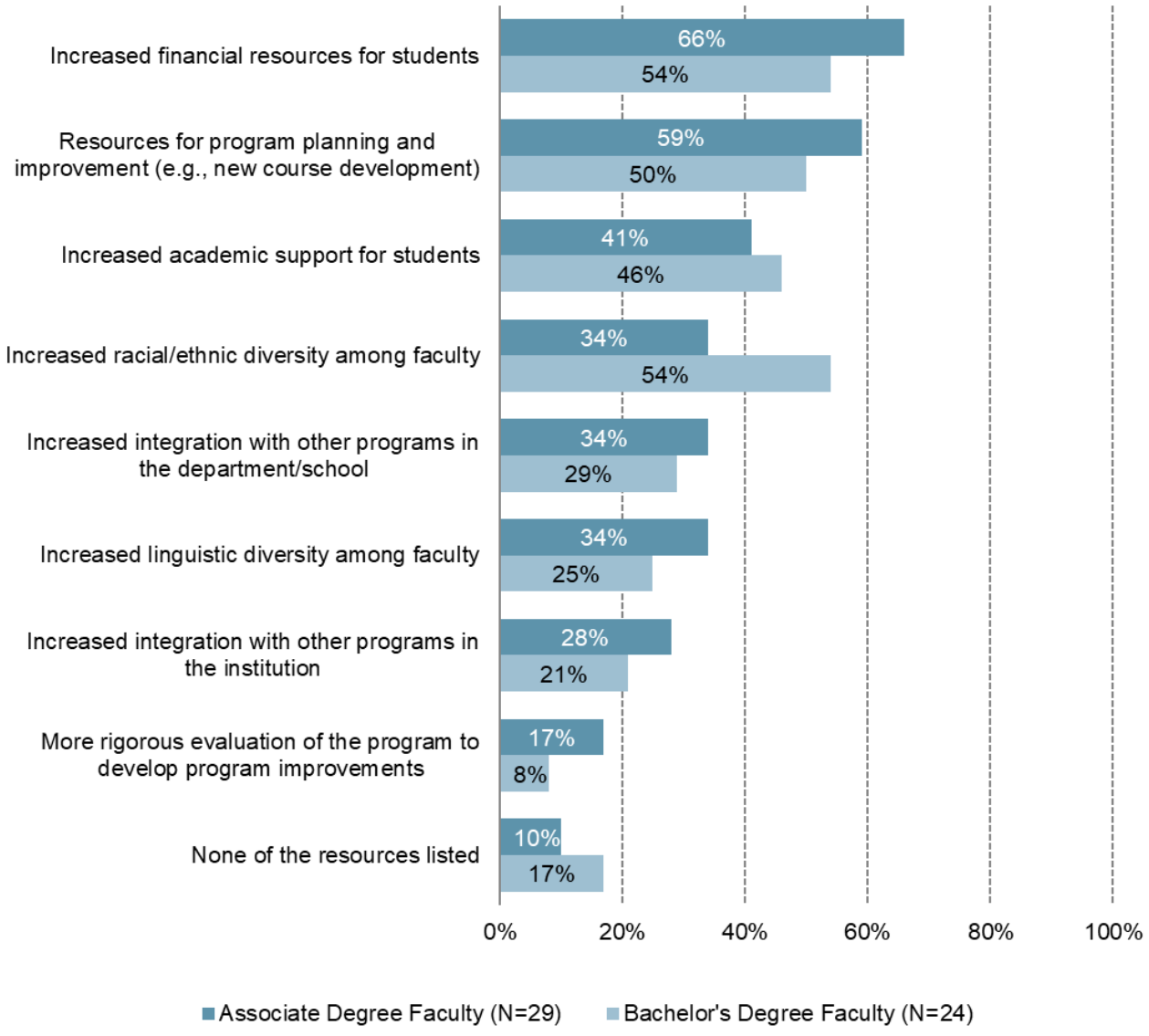
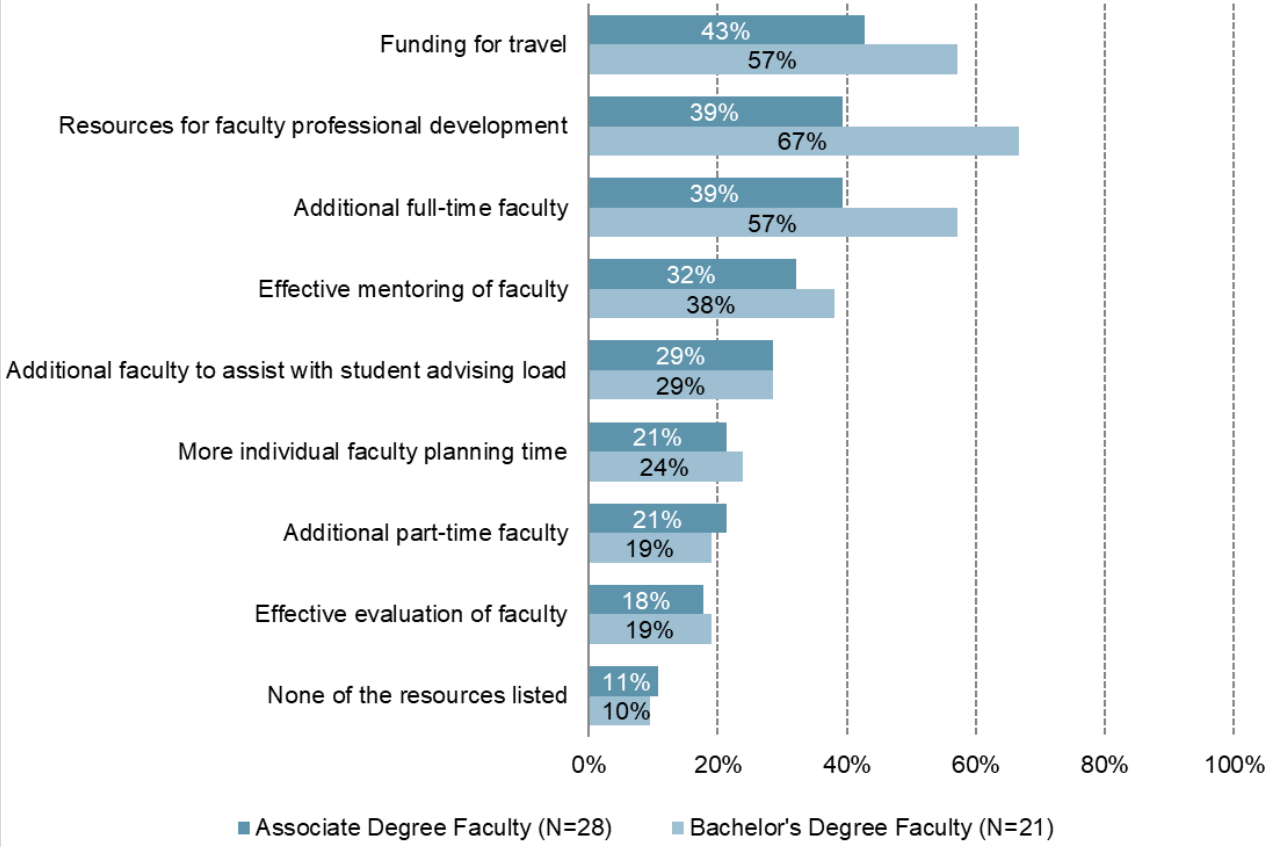


Figure 4.2. Faculty-Related Resources Needed to Improve Early Childhood Degree Programs, as Reported by Faculty Members, by Degree Level



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