2017

Teaching the Teachers of Our Youngest Children:

The State of Early Childhood Higher Education in Florida

Narrative Report

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Introduction

The importance of early care and education (ECE) to children's lifelong learning and to our nation's economic well-being is recognized up to the highest levels of government and in businesses, schools, and living rooms across the country. This understanding represents a dramatic shift from earlier decades and carries with it heightened expectations for what teachers of young children should know and be able to do (Whitebook, Phillips, & Howes, 2014), especially in light of mounting evidence about inadequate and unequal educational quality for many children, particularly those of color and those living in low-income families (Hernandez, 2011; Karoly, 2009; Yoshikawa et al., 2013).

In 2015, the Institute of Medicine and the National Research Council of the National Academy of Sciences 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 early care and education professionals, including practice-based and supervised learning opportunities. The report offers further considerations for strengthening early educator competencies along multiple dimensions, including mathematics, family engagement, and support for dual language learners (IOM & NRC, 2015).[1]

Florida is home to more than 1 million children under the age of five, nearly 70 percent of whom attend some type of early care and education program (Florida Department of Education, Office of Early Learning, n.d.). Like many states in recent years, Florida has committed public and private resources toward multiple efforts to improve early care and education services and to ensure that teacher education degree and certification programs can better prepare their graduates to meet the complex needs of young children (Hyson, Horm, & Winton, 2012; Ray, Bowman, & Robbins, 2006; Swartz & Johnson, 2010). Critical to these efforts is the establishment of a well-coordinated, comprehensive professional preparation and development system that can prepare an incoming generation of educators, while also strengthening the skills of the existing early education workforce. Institutions of higher education are critical to meeting the evolving and increasing demands identified to improve developmental and learning outcomes for the state's young child population.

In light of the changing expectations for effective preparation recommended by the Institute of Medicine and National Research Council, it seemed the appropriate time to examine the status of early childhood higher education offerings in Florida to allow policymakers, institutions of higher education, and other stakeholders to assess the capacity of the state's higher education system and to inform policy, practice, and investment.

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[1] Adapted from *Transforming the Workforce for Children Birth Through Age 8: A Unifying Foundation,* by the Institute of Medicine and National Research Council, copyright 2015 by the National Academy of Sciences.

To undertake this assessment, the Center for the Study of Child Care Employment (CSCCE) implemented the *Early Childhood Higher Education Inventory II* (CSCCE, 2016), a research tool used to describe the landscape of a state's early childhood degree program offerings at the associate, bachelor's, master's, and doctoral levels and to provide a portrait of early childhood faculty members.[2] (See **Box 1** for a description of *Inventory* methodology.)

The Early Childhood Higher Education Landscape in Florida

A network of 24 state colleges[3] and 13 public and private universities offers a complex array of early childhood degree programs, serving more than 3,403 prospective and current early childhood practitioners across the state.[4] This network includes 24 state colleges that offer 19 associate degree programs. It also includes 12 state colleges and 11 public universities that offer 20 bachelor's degree programs, four master's degree programs, and one doctoral program in early childhood. In the current study, approximately three-quarters (74 percent) of associate degree programs and two-thirds (67 percent) of bachelor's degree programs reported serving a mix of those already working in the early childhood field as well as more traditional pre-service students.

The *Inventory* findings are presented in two sections. The first section, "Early Childhood Higher Education Today," examines the extent to which Florida ECE higher education programs:

- Offer the knowledge, skills, and experiences associated with effective teaching practice and program leadership;
- Have a faculty workforce prepared to provide early childhood practitioners with the necessary knowledge and skills associated with effective teaching practice and program leadership; and
- Have the resources to support student and faculty success.

The second section of this report, "Early Childhood Higher Education, An Evolving Landscape," examines how these institutions of higher education are adapting to emerging knowledge about children's learning and development. Specifically, the report explores the extent to which Florida ECE higher education programs have incorporated recent findings related to the importance of:

- Promoting early mathematical understanding;
- Engaging families to support young children's optimal development, learning, and school success; and
- Teaching young dual language learners.

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[2] Florida is one of eight states (along with California, Indiana, Nebraska, New Hampshire, New Jersey, New York, and Rhode Island) in which the *Inventory* has been completed at the time of publication of this report.

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

[4] Based on information provided by the programs that participated in the *Inventory*, it is estimated that during the 2015-2016 academic year, 2,249 students were registered in associate degree programs, 1,071 students were registered in bachelor's degree programs, and 83 students were registered in graduate degree programs. During this same time period, the colleges and universities that participated in the *Inventory* estimated that they conferred 281 associate degrees, 281 bachelor's degrees, and 30 graduate degrees.

Box 1. Study Design

In the 2016-2017 academic year, researchers from CSCCE implemented the *Early Childhood Higher Education Inventory II*, which consists of three modules: a mapping of the population of higher education programs within a state; an online program survey completed by the degree program leader (e.g., dean, chair, or coordinator); and an online faculty survey completed by individual faculty members. The program findings reported here are drawn from a final sample of 19 associate and 14 bachelor's degree programs.[5]

The faculty findings are drawn from a final sample of 122 faculty members. Fifty of these faculty members teach only in associate degree programs, 23 teach only in bachelor's degree programs, another 28 teach in both associate and bachelor's programs (herein referred to as "dual-level faculty"), and 21 teach in graduate programs[6] (e.g., those offering master's or doctoral degrees).[7]

See the Technical Report for a detailed description of the methods of this study, including the sampling frame and selection, field procedures, response rate, and survey questions, along with findings from the *Inventory*.

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

[6] Faculty members teaching in graduate programs may also teach in bachelor's degree programs and, rarely, in associate degree programs.

[7] The sample included in this report likely represents a fraction of the early childhood degree programs and faculty in the state, and thus, findings may not be generalizable to the wider population of early childhood degree programs or faculty.

Distribution of Florida Early Childhood Degree Programs
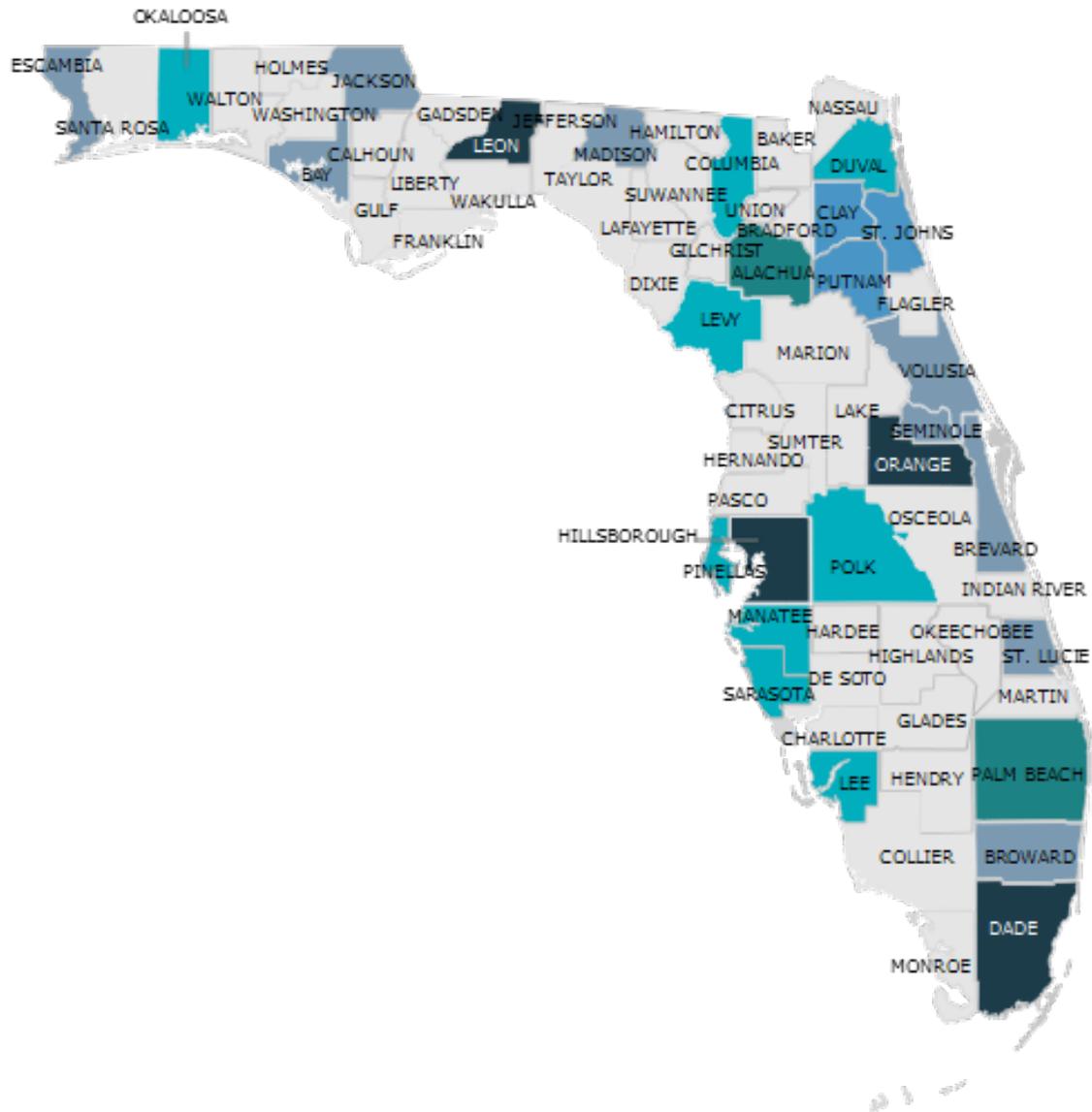
Legend:
- ⬤ None
- ⬤ Associate
- ⬤ Bachelor's
- ⬤ Associate and Bachelor's
- ⬤ Associate, Bachelor's, and Master's
- ⬤ Associate, Bachelor's, Master's, and Doctoral

Part 1: Early Childhood Higher Education Today

This section of the report examines program offerings, faculty characteristics, student supports, and institutional challenges.

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

Program leaders participating in the *Inventory* (e.g., deans, coordinators) were asked to indicate the primary goal of their degree program(s) from among four options:

1. To prepare students for teaching and/or administrative roles in early childhood education settings *only*;
2. To prepare students for teaching and/or administrative roles in early childhood *and* elementary education settings;
3. To prepare students for the role of early interventionist or early childhood special educator; and
4. To prepare students for multiple roles involving young children, working in many types of settings.

Program leaders were also asked to identify course content topics for the degree related to:

1. Child development and learning;
2. Teaching, with three primary categories:
   - Teaching diverse child populations;
   - Teaching and curriculum; and
   - Teaching skills in early childhood settings; and
3. Administration and leadership.

For the child development and learning domain, as well as the teaching domains, respondents were asked to indicate whether a series of specific topics were required, and if so, the specific age-group or grade-level focus of each topic. For the leadership and administration domain, respondents were asked to identify course content topics offered to students in the degree program (see **Table 1**).

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Most Florida early childhood degree programs identify their primary goal as preparing students to be teachers or administrators, though the age-group focus varies by degree level. While these programs offer a range of topics related to child development and approaches to teaching — a reflection of their program goals — associate degree programs tend to require more content focused on children birth through age five, and bachelor's degree programs require more content related to children in preschool or older. Across degree levels, the availability of content related to administration and leadership is inconsistent.

Like most states across the country, education requirements in Florida for those administering or teaching in early care and education programs vary and depend more on the program's funding source than children's developmental needs (Whitebook, McLean, & Austin, 2016; see **Box 2**). Requirements for those working in private settings (i.e., licensed family day care home, center-based child care facility) range from no required education or training to at least a Child Development Associate (CDA), active Florida Staff Credential, or an equivalent early childhood certificate. In contrast, those working in publicly funded programs (i.e., publicly sponsored preschool, Head Start) are typically required to have completed at least some higher education and/or professional learning. Preschool and child care center directors, teachers, assistants, and substitutes in private and publicly funded child care centers or homes are not required to hold an associate or bachelor's degree (Florida Department of Children and Families, n.d; Florida Department of Education, Office of Early Learning, n.d.).

Educators teaching in the 300-hour summer Voluntary Prekindergarten Education Program (VPK; free for four-year-olds) are required to hold a bachelor's degree or higher in a field related to education or early childhood, but those teaching in the 540-hour academic-year VPK programs are only required to hold an Active Florida Staff Credential.

It is likely, however, that many early childhood teaching staff in Florida mirror their counterparts nationally who possess higher levels of education and training than may be required (National Survey of Early Care and Education Project Team, 2013). Additionally, other initiatives have supported many professionals in the ECE workforce in their pursuit of college-level education. For example, locally operated Quality Rating and Improvement Systems (QRIS) across the state[8] require higher levels of staff education to achieve higher ratings (National Center on Early Childhood Quality Assurance, n.d.), and T.E.A.C.H.® Early Childhood® awarded nearly 3,800 scholarships for education to early educators in Florida during the 2015-2016 academic year (Children's Forum, n.d.).

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[8] Across the state, 30 regional early learning coalitions (ELCs) provide services and support to children, families, and early educators. Fourteen of these ELCs have implemented or are piloting a QRIS, including those ELCs located in the most populated areas of the state (e.g., Miami, Tampa, Palm Beach, Orlando, Jacksonville).

Box 2. Minimum Education Requirements for Teachers and Administrators in Early Care and Education Programs in Florida

Director - Voluntary Pre-Kindergarten (VPK) Program (Level 1, 2, Advanced)

- High School Diploma or GED;
- Active Florida Staff Credential;
- VPK Endorsement (Department of Education)
- Director Credential

Director - Licensed Child Care Facility or Private Preschool

- High School Diploma or GED,
- Active Florida Staff Credential;
- Director's Credential

Teacher - VPK Program (academic year program)

- Child Development Associate (CDA) OR
- A credential approved by the Department of Children and Families as being equivalent or greater than the CDA

Teacher - VPK Program (summer program)

- B.A., B.S. or advanced degree in a related field (e.g., early childhood education, special education, family and consumer sciences)

Staff - Licensed Child Care Facility
For every 20 children cared for in the center, there must be at least one staff with one of the following:

- National Early Childhood Certificate (e.g., CDA or equivalent)
- Active Birth through Five Child Care Credential
- Active School-Age Child Care Credential
- Associate's degree or higher WITH at least six college credit hours in early childhood education/child development AND at least 480 hours experience in a child care setting serving children ages birth through eight

Operator - Large Family Child Care Home

- Active Florida Staff Credential

Employee - Large Family Child Care Home

- No requirement

Operator/Employee-Licensed Family Day Care Home

- No requirement[9]

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[9] Director and staff requirements were retrieved from the Florida Department of Children and Families and Florida Department of Education websites.

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Program Goals

More than 80 percent of associate degree programs identified teacher and administrator preparation as their primary goal, and more than 90 percent of bachelor's degree programs identified this as their primary goal, as well (see **Figure 1**). In general, associate degree programs reported preparing educators for teaching roles in ECE settings, and bachelor's degree programs were more likely to prepare educators for roles in ECE and elementary education settings. Few programs reported that their primary goal was to "prepare students to work in multiple roles involving young children, working in many types of settings." Although none of the programs participating in the *Inventory* listed their primary goal as preparing early interventionists or early special education teachers, these programs may offer degrees and certificates in early intervention and early childhood special education. It is important to recognize that even if programs reported a primary goal other than teacher or administrator preparation, these degree programs may still be preparing students for teaching and administrative roles.[10]

Figure 1: Primary Goal of Florida Early Childhood Higher Education Degree Programs

ASSOCIATE DEGREE (N=19): 16%, 21%, 63%

BACHELOR'S DEGREE (N=14): 7%, 64%, 29%

- ■ To prepare students for multiple roles involving young children, working in many types of settings
- ■ To prepare students for teaching and/or administrative roles in early childhood and elementary education settings
- ■ To prepare students for teaching and/or administrative roles - only in early childhood education settings - for children birth to five

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[10] In addition, none of the program leads participating in the *Inventory* reported that the primary goal of the program was "to prepare students for a career as a researcher or college-level faculty member."

Course Content

There is broad consensus that early childhood education degree programs should include course content that encompasses theories of development and learning, subject matter content (e.g., literacy), and methods of teaching and pedagogy (IOM & NRC, 2015). In addition, leadership preparation, program administration and principles, and practices related to adult learning are considered key content for creating high-quality experiences for children (IOM & NRC, 2015; Whitebook et al., 2012; Whitebook & Ryan, 2011).

Table 1. List of Domains and Topics of Course Content Included in the Florida Early Childhood Higher Education Inventory	
Domains	**Topics**
Child Development and Learning	Domains of development
	Effects of culture, gender, class, and race on development
	Effects of disability on development
	Development of children's early literacy skills
	Child development theory and its relationship to teaching
	Development of children's scientific understandings
Teaching	*Teaching diverse child populations*: Teaching children from diverse cultural backgrounds, who are living in poverty, who have special needs, who exhibit challenging behaviors, or who have experienced trauma
	Teaching and curriculum: Using integrated curriculum and play in teaching; implementing inclusion strategies; supporting social and physical development; and teaching art, literacy, science, and social studies
	Teaching skills in early childhood settings: Using observation, assessment, and documentation to inform teaching and learning; different teaching techniques; and classroom management
Leadership and Administration	*Supervision and operations*: Building relationships with other teachers and/or early childhood professionals; guiding practitioners in implementing curriculum and appropriate teaching strategies; adult supervision; strategies to support adult learning; assessment and documentation to inform teaching and learning and program quality; program planning, development, and operations; and preparation to provide professional development services
	Organization and systems: Human resources/personnel policies; fiscal procedures and management; grant management and proposal writing; organizational development and change; the early childhood system and public policy, effective advocacy, and policy analysis and development; and building community partnerships and developing familiarity with community resources for children and families

Child Development and Learning

Nearly all associate and bachelor's degree programs reported requiring the course content topics related to the domain of child development and learning, with a few exceptions. Approximately 85 percent of

associate degree programs required content related to the "development of children's scientific understanding" and "effects of race, gender, and culture on children's development."

Teaching

Similar to the child development and learning domain, course content in each of the three dimensions of the teaching domain (teaching diverse child populations, teaching and curriculum, and teaching skills in ECE) was required by at least 84 percent of associate and bachelor's degree programs, with a few exceptions. Seventy-nine percent of associate degree programs require students to take course content addressing "children who have experienced trauma." In the dimension of teaching and curriculum, 77 percent of bachelor's programs required students to take coursework on "supporting and extending children's physical skills," and 78 percent of associate degree programs required content on "teaching children science skills."

Administration and Leadership

Course content was not consistently offered to prepare practitioners for early childhood supervisory, administrative, or other leadership roles. Overall, a smaller percentage of degree programs reported offering coursework related to this domain than any others. Associate degree programs were much more likely than bachelor's degree programs to offer this coursework, in every topic area. In fact, 21 percent of bachelor's programs reported that they did not offer any of the topics listed in this section of the *Inventory.*

The topics most often offered in associate degree programs were "building relationships with other teachers and/or early childhood professionals," "guiding practitioners in implementing curriculum and appropriate teaching strategies," "program planning, development, and operations," and "building community partnerships," each of which was offered by at least 84 percent of associate degree programs. At the bachelor's degree level, the most commonly offered topics were "guiding practitioners in implementing curriculum and appropriate teaching strategies," "assessment and documentation to inform teaching and learning," and "building community partnerships," each of which was offered by at least one-half of the 14 programs.

In addition, we asked if programs offered coursework designed to prepare students to provide professional development services (e.g., mentoring, coaching, or training other ECE professionals). Only one-quarter (26 percent) of associate degree and just under one-half (46 percent) of bachelor's degree programs reported offering courses related to the provision of professional development services.

Age-Group Focus

Depending on the ages of children they serve and the setting in which they work, teachers of young children are often perceived as requiring different levels of skill and knowledge and are expected to meet significantly more or less rigorous qualifications. These differing expectations contribute to long-standing variations in content and design among early childhood higher education programs (Whitebook et al., 2012; Whitebook & McLean, 2017). The Institute of Medicine and the National Research Council conclude that educators working with children at any age from birth to eight require equivalent levels of education and training, and this variability in preparation is both inconsistent with the science of early

development and learning and unlikely to produce consistently effective preparation of teachers and administrators for early learning programs serving children in this age span (IOM & NRC, 2015).

Thus, creating an integrated birth-to-age-eight early care and education system, inclusive of the institutions preparing the ECE workforce, has emerged as a major goal and as a metric by which to measure progress toward it. The *Inventory* intentionally sought to compare differences among programs along the age continuum. When child development and learning and teaching topics were required, programs across degree levels consistently reported a focus on preschool-age children. Associate degree programs required content related to infants and toddlers nearly as often (two-thirds to three-quarters of associate degree programs required content for these two age groups, depending on the topic). About one-third of associate degree programs required content related to children kindergarten through third grade and higher, across all topics. On average, one-quarter of associate degree programs that required students to learn content related to child development and learning reported that this content was not required to be focused on a specific age group or grade level (see Figure 2 for an example).

Bachelor's degree programs were more likely to require content related to child development and learning and teaching skills for educators working with children preschool-age and older, than for children birth through age two. Of the programs requiring these topics, about three-quarters required content to be focused on preschool-age children and children kindergarten through third grade or higher. However, a smaller percentage of bachelor's degree programs required content on infants and toddlers, with as few as one-half of these programs requiring content around the development of infants' and toddlers' scientific understanding, for example.

Figure 2: Development of Children's Early Literacy Skills: Age-Group Focus of Programs Participating in Florida Early Childhood Higher Education Inventory, by Degree Level

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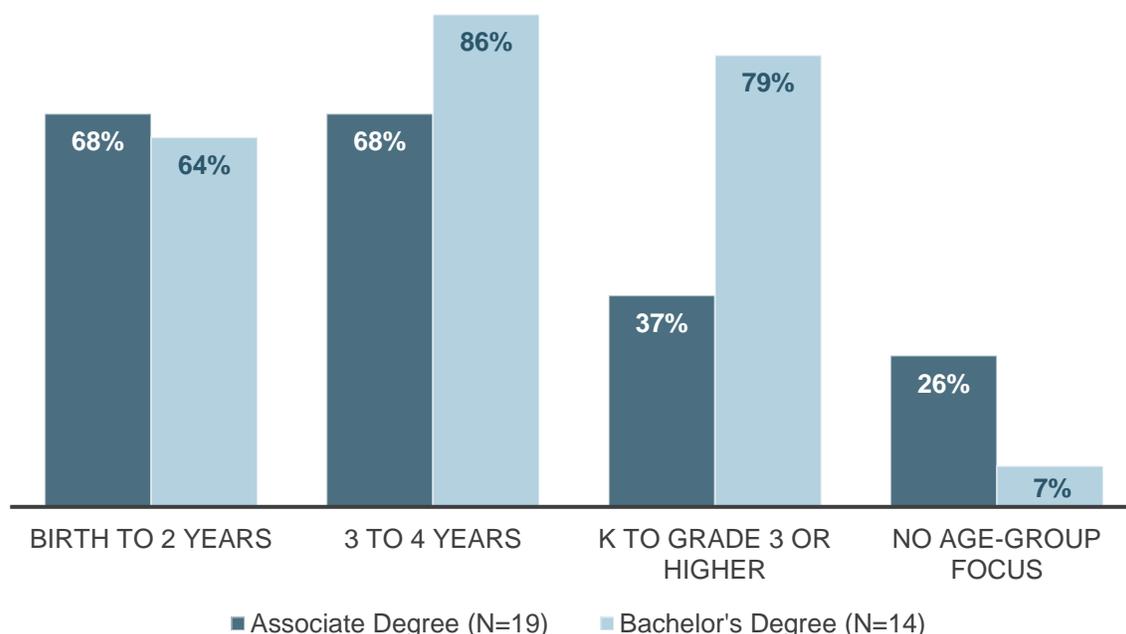
FINDING TWO: FIELD-BASED LEARNING EXPERIENCES:
Requirements and Age-Group Focus

Students earning a bachelor's degree in early childhood are typically required to complete a student teaching experience and participate in additional practica. In contrast, the majority of students completing an associate degree in early childhood participate only in practica, and there is little consistency as to the duration and frequency of the experiences.

What we asked about field-based experiences:

Program leaders were asked about two distinct types of field experiences: student teaching and practica. By student teaching, we mean a full-time immersion in a classroom, with increasing responsibility for curriculum planning and teaching and supervision by a faculty member and/or cooperating teacher and/or mentor. By practica, we mean an experience, associated with a course, which is short in duration, often focused on a particular skill or population, and includes supervision by faculty member and/or cooperating teacher and/or mentor. For each, respondents were asked to indicate whether the field-based experience was required in order to attain the degree, and if so, they were asked a series of questions pertaining to the field experience, including timing, duration, and differences in field experience structures for pre-service and experienced teachers.

Program leaders were also asked whether students in student teaching and practica were required to work with specific age groups of children, children with particular characteristics (e.g., children who are dual language learners, children with special needs), or families.

Finally, program leaders were asked to identify practices that students were required to incorporate during student teaching and practica, including the following:

- Scaffolding children's mathematical development and promoting their ability to solve problems;
- Scaffolding children's literacy development and promoting their oral and written skills;
- Supporting children's socioemotional development and skills;
- Facilitating the developmental course of motor development in young children;
- Integrating families in partnerships to support children's learning;
- Utilizing assessment effectively to inform and individualize instruction; and
- Collaborating with community organizations to support children and families.

There is widespread agreement that field-based learning experiences for teachers working with children of all ages are critically important for developing new teaching skills or improving existing ones (IOM & NRC, 2015; NCATE, 2010b; Whitebook et al., 2012). In the K-12 community, this recognition has led to efforts to increase the length of student teaching, to introduce it earlier into a program of study, and to strengthen student supervision during field experience (CSCCE, 2017; Whitebook et al., 2012). In early childhood, however, there is no widely implemented standard of field experience, such as student teaching (Whitebook, 2014; Whitebook & Ryan, 2011). This structural divide in educator preparation runs counter to the call by many experts, policymakers, and stakeholders for a more integrated birth-to-age-eight educational system (IOM & NRC, 2015).

Required Field-Based Experiences

Associate degree students have limited opportunities to participate in field-based experiences. Reflecting alignment with state program standards for Florida teacher preparation programs, all bachelor's degree programs surveyed required at least one practicum course, and nearly all (92 percent) required a student teaching experience. In contrast, nearly three-quarters (72 percent) of associate degree programs required at least one practicum, and only one-quarter (26 percent) required student teaching (see **Figure 3**). The results that follow are based on the 26 programs (13 associate degree programs and 13 bachelor's degree programs) that required practica for their students.

Figure 3: Field-Based Experiences Required in Florida Early Childhood Higher Education Degree Programs, by Degree Level

■ Associate Degree (N=18-19)   ■ Bachelor's Degree (N=13)
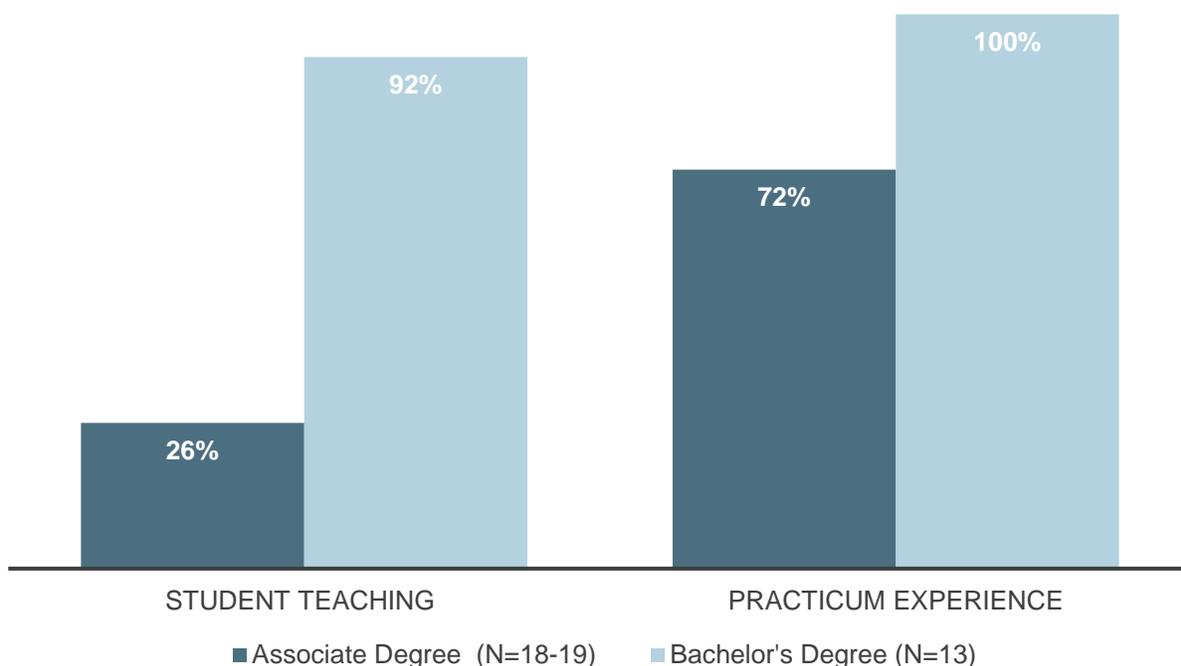
Number, Duration, and Timing of Practica

Practica are the most common (and for many students, the only) type of field-based learning experience required across Florida early childhood degree programs.[11] The total number of practica and total hours that students were engaged in practica is difficult to assess; the number of experiences varied, as did the number of hours per practicum (see **Table 2**).

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[11] Because practica were the primary strategy for field-based experiences required by degree programs, they are the focus of this section of the report. For details related to the number, duration, and timing of required student teaching experiences, see the Technical Report.

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Table 2. Number and Mean Hours of Practica Required by Programs Participating in the Florida Early Childhood Higher Education Inventory, by Degree Level

Degree Level	One practicum required	Two practica required	Three practica required	Four or more practica required	Mean number of hours typically required to complete a practicum course
Associate Degree (n=13)	46%	31%	8%	15%	137
Bachelor's Degree (n=13)	15%	15%	23%	46%	107

Perhaps reflecting the differences in the total number of practica required, the first practicum experience occurred at different times for students at different degree levels. Bachelor's degree programs (69 percent) were more likely than associate degree programs (38 percent) to require that the first practicum occur at the beginning of the course of study. Practica for early childhood students were relatively unlikely to reflect student's status as either novice or experienced teachers. Fewer than one-quarter of degree programs at all levels reported structuring practica differently for novice and experienced teachers.

Requirements of Practica Experiences

Slightly more than one-half (54 percent) of both associate and bachelor's degree programs required a focus on preschool-aged children within the practicum experience. Slightly more than one-third (39 percent) of associate degree programs required a focus on infants and toddlers, and fewer than 10 percent required students to work with children in early elementary grades. Three-fifths (61 percent) of bachelor's degree programs required a focus on children in early elementary grades, while fewer than one-quarter (23 percent) required a focus on infants and toddlers.

Slightly more than one-half (54 percent) of bachelor's degree programs reported requiring students to complete practica that involved working with children who are dual language learners or children who have disabilities. Thirty-nine percent of bachelor's degree programs required students to work with families during their practica experiences. Fewer associate degree programs required these elements; fewer than one-quarter of associate degree programs required working with dual language learners, children with disabilities, or families.

The *Inventory* also asked about specific practices that students may be required to incorporate into their practica (see **Figure 4** for select practices). The practices most likely to be required by both associate and bachelor's degree programs were scaffolding children's literacy development (85 percent of both bachelor's and associate degree programs) and utilizing assessment to inform and individualize instruction (100 percent of bachelor's and 83 percent of associate degree programs).

Figure 4: Select Practices Required for Students in their Practica, by Degree Level

	Scaffolding Literacy Development		Using Assessment to Inform Instruction		Scaffolding Mathematical Development		Developing Partnerships with Families	
	Associate Degree (N=13)	Bachelor's Degree (N=13)	Associate Degree (N=13)	Bachelor's Degree (N=13)	Associate Degree (N=13)	Bachelor's Degree (N=13)	Associate Degree (N=13)	Bachelor's Degree (N=13)
Not Offered			17%				33%	31%
Optional	15%	15%			33%	23%	25%	23%
Required	85%	85%	83%	100%	67%	77%	42%	46%

Legend: ■ Required ■ Optional ■ Not Offered

FINDING THREE: PORTRAIT OF FACULTY
Employment Status, Demographics, Professional Background, and Professional Development Interests

Florida early childhood degree programs are staffed mostly by part-time faculty. While Florida's early childhood workforce closely reflects the racial, ethnic, and linguistic composition of the state, the faculty members are predominantly white and monolingual. Most faculty members report having had academic preparation specific to early childhood, and most dual-level faculty report having worked in an array of ECE professional roles in the past decade. Most faculty members, however, have not had recent experience teaching children, particularly infants and toddlers. Florida early childhood degree program faculty are particularly interested in professional development related to working with infants and toddlers, children with special needs, and children experiencing trauma; utilizing teacher and child assessments effectively; and mentoring/coaching adult students.

What we asked about and of faculty members:

Program leaders were asked to provide information about the number of full- and part-time faculty members employed in their degree programs during the term in which the survey was administered. Individual faculty members were asked to identify:

1. Their employment status;
2. Their demographic characteristics, including: a) age; b) race/ethnicity; and c) linguistic capacity;
3. Their academic background;
4. The primary focus of their teaching and expertise related to children across the birth-to-age-eight continuum;
5. Their professional experiences in addition to college-level teaching in the previous 10 years;
6. Their perspectives on the importance of content in early childhood degree programs, their capacity to teach certain content, and recent teaching experiences; and
7. Professional development in which they had participated, and topics in which they are interested in gaining additional knowledge and training.

The faculty findings discussed below are drawn from a final sample of 122 faculty members, out of 198 faculty who received the *Inventory*.[12] Fifty of these faculty members teach only in associate degree programs, 23 teach only in bachelor's degree programs, another 28 teach in both associate and bachelor's programs (referred to as "dual-level faculty"), and 21 teach in graduate programs.

Employment Status

Part-time faculty members constitute two-thirds or more of faculty in colleges and universities nationwide (Center for Community College Student Engagement [CCCSE], 2014; Curtis & Thornton, 2014) and can pose multiple challenges for both faculty and students. Part-time faculty members are often not as integrated into the department in which they teach and not engaged in curriculum planning; furthermore,

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[12] This sample likely represents a fraction of the faculty who are currently teaching in early childhood degree programs in Florida. Thus, findings from this *Inventory* may not be generalizable across the population of early childhood degree program faculty in the state.

they are typically paid to teach particular courses and are not paid for additional responsibilities, such as student advising or program evaluation (CCCSE, 2014). This situation can lead to full-time faculty taking on a greater share of administrative, institutional, and student advising responsibilities in addition to their teaching load (CCCSE, 2014; Curtis & Thornton, 2014; Early & Winton, 2001; Maxwell, Lim, & Early, 2006; Whitebook, Bellm, Lee, & Sakai, 2005).

Among those who participated in the *Inventory*, 62 percent of associate degree, 70 percent of bachelor's degree, and 64 percent of dual-level faculty identified themselves as adjunct faculty members or part-time lecturers. In contrast, only 29 percent of graduate degree program faculty participating in the *Inventory* identified themselves as adjunct faculty members or part-time lecturers. As discussed in more detail below, challenges related to insufficient staffing were cited by program leads and faculty members alike.

Demographic Characteristics

The well-documented absence of racial and ethnic minorities among early childhood higher education faculty, in contrast to their students and the child populations that these ECE professionals will serve, has implications for the degree of focus on diversity in coursework and the availability of role models for students (Bornfreund, 2011; Early & Winton, 2001; Johnson, Fiene, McKinnon, & Bahu, 2010; Lim, Maxwell, Able-Boone, & Zimmer, 2009; Maxwell, Lim, & Early, 2006; Ray, Bowman, & Robbins, 2006; Whitebook et al., 2005).

Racial, Ethnic, and Linguistic Diversity

Most faculty members participating in the *Inventory* identified as white/Caucasian and monolingual (see **Figure 5**). Associate degree program faculty members were less diverse than the state college student body population, which is about 42 percent white (non-Hispanic) (Florida Department of Education, 2016). Similarly, the bachelor's and graduate degree program faculty members were less diverse than the student body population across the University of Florida system and across independent colleges and universities, which had student body populations that were between 50 percent and 63 percent white (non-Hispanic) (Independent Colleges and Universities of Florida, n.d.; Office of Institutional Research, 2015-2016). Dual-level faculty were more diverse than other faculty in the sample, with one-quarter identifying as Hispanic. In general, faculty members were less diverse than the early childhood teaching workforce in Florida, with 43 percent of ECE teachers identifying as white, 27 percent as African American, and another 27 percent as Hispanic (Children's Forum, 2013). Similarly, census data point to an increasingly diverse population in the state, with the child population under the age of five being 44 percent white (non-Hispanic), 23 percent African American, and 30 percent Hispanic or Latino (The Annie E. Casey Foundation, 2017). However, faculty members participating in the *Inventory* and teaching in programs in the southern region of the state[13] were more diverse than their peers in the Central or Northern regions; 59 percent identified as white/Caucasian; 16 percent identified as black/African American, and 23 percent identified as Hispanic or Latino.

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[13] For purposes of this report, the southern region of the state includes the counties along the southeastern and southern coasts: Indian River, Okeechobee, St Lucie, Martin, Palm Beach, Broward, Miami-Dade, and Monroe.

Figure 5: Race/Ethnicity of Faculty Members Participating in the Florida Early Childhood Higher Education Inventory, by Degree Level

Legend: ■ White/Caucasian ■ Black/African American ■ Hispanic ■ Asian ■ Decline to State

Associate Degree Faculty (N=46): White/Caucasian 80%, Black/African American 11%, Hispanic 4%, Asian 2%, Decline to State 2%

Bachelor's Degree Faculty (N=22): White/Caucasian 73%, Black/African American 14%, Hispanic 9%, Decline to State 5%

Dual-Level Faculty (N=28): White/Caucasian 61%, Black/African American 14%, Hispanic 25%

Graduate Degree Faculty (N=21): White/Caucasian 76%, Hispanic 5%, Asian 5%, Decline to State 14%

While all faculty members at all degree levels reported fluency in English, few reported fluency in another language. Of the 14 faculty who reported fluency in Spanish, 12 are faculty in degree programs located in the southern region of the state. More than one-half of associate degree faculty members and approximately one-third of faculty members teaching at all other degree levels identified Spanish as a language they would like to know in order to communicate better with their students. Of note, Florida has the third-highest number of English-language learners (ELLs; ages 5-18) in the nation, and although Spanish is the major native language of these students, ELLs in K-12 education speak more than 300 different languages (Florida Department of Education, n.d.).

Age

Bachelor's degree program faculty members were, on average, slightly younger than their colleagues teaching in other programs. The average age of associate degree program faculty was 53 years; for dual-level faculty it was 50; and for graduate degree program faculty, it was 58. In contrast, the average age of bachelor's degree program faculty was 46 years. Graduate degree program faculty were more likely to report being 60 years (thus potentially close to retirement) than associate and bachelor's degree program faculty members (see **Figure 6**).

Figure 6: Age of Faculty Members Participating in the Florida Early Childhood Higher Education Inventory, by Degree Level

Legend: Younger than 40 Years | 40-49 Years | 50-59 Years | 60 Years or Older

	Younger than 40 Years	40-49 Years	50-59 Years	60 Years or Older
ASSOCIATE DEGREE FACULTY (N=49)	16%	14%	45%	24%
BACHELOR'S DEGREE FACULTY (N=22)	32%	23%	32%	14%
DUAL-LEVEL FACULTY (N=28)	18%	36%	14%	32%
GRADUATE DEGREE FACULTY (N=21)	24%	29%		48%
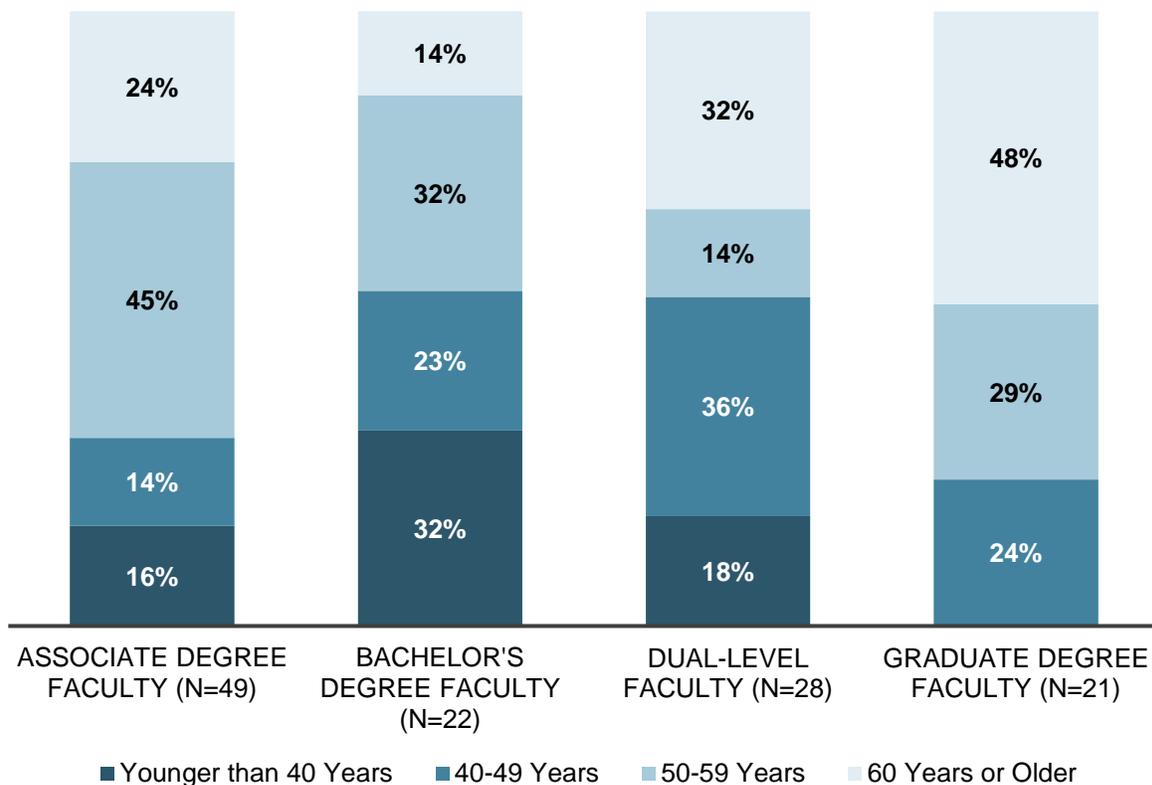
Academic and Professional Background

Teachers of adults, like those who teach children, require appropriate preparation as well as ongoing opportunities to refine their knowledge and skills (Whitebook & Ryan, 2011). Based on a review of the extant research, the Institute of Medicine and National Research Council (2015) have called for early childhood higher education faculty to be versed in the foundational theories of development and learning, subject matter content, and methods of pedagogy that comprise the basic competencies expected of ECE practitioners working with young children. Additionally, teacher educators themselves are increasingly called upon to be effective practitioners, preferably having had classroom experience with children within the last decade (National Council for Accreditation of Teacher Education [NCATE], 2010a & 2010b). On

average, faculty members in early childhood higher education programs in Florida have been teaching at the college/university level for nine and a half years and at their current college/university for about seven and a half years. Faculty members teaching in graduate programs typically have more years of experience. In addition, tenure working at both the college/university level and at their current institution varied by faculty employment status. On average, adjunct faculty members reported working at the college/university level for eight years, non-tenured full-time faculty nine years, and tenured faculty 13 years. Employment at their current institution averaged six years for adjunct faculty, nine years for non-tenured full-time faculty, and 11 years for tenured faculty.

Academic Preparation and Teaching Focus Related to Early Childhood

Three-quarters (77 percent) of associate degree program faculty members and more than 80 percent of bachelor's degree, graduate degree, and dual-level faculty members had earned at least a bachelor's degree in early childhood education or child development. While we did not ask faculty members about the primary focus of their own early childhood degrees, faculty were asked to indicate whether the primary focus of their teaching in the degree program was "child development and learning," "curriculum and teaching methods," or "both equally." They were also asked about their expertise related to various age groups of children. Most faculty members across degree levels reported focusing on both "curriculum and teaching methods" and "child development and learning." While nearly all faculty members across degree levels reported that their teaching expertise included preschool-age children, dual-level faculty members (64 percent) were also more likely to report that their teaching expertise included infants and toddlers than associate (56 percent), bachelor's (39 percent) or graduate (57 percent) degree program faculty members.

Professional Teaching and Administrative Experience

The majority of faculty members across degree levels reported experience in other professional roles in the past 10 years (69 percent of associate degree, 64 percent of bachelor's degree, 79 percent of dual-level faculty, and 52 percent of graduate degree faculty members). Among the faculty members who reported working in other roles, the most common roles[14] were "classroom teacher" and "ECE program director/administrator." About one-half of associate (47 percent) and bachelor's (57 percent), and three-quarters (73 percent) of dual-level faculty members reported working as classroom teachers, and one-third of bachelor's degree faculty and 41 percent of dual-level faculty reported working as special education teachers. Classroom teaching experience was most likely to have occurred with kindergarten through third grade or preschool-age children. Fewer than 10 percent of faculty members in all degree levels reported working as classroom teachers of infants and/or toddlers. About one-third of all faculty reported working as an ECE director or other administrator within the last decade, with 29 percent of associate and bachelor's degree faculty, 41 percent of dual-level faculty, and 45 percent of graduate faculty reporting that role.

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[14] In addition to the teaching and administrative experiences described here, about one-quarter of faculty members also reported that they had held the position of school principal within the last 10 years.

Perspectives on Program Content, Capacity to Teach Content, and Recent Teaching Experience

We also asked faculty their opinions about the importance of including particular domains of development and learning in early childhood degree programs (see **Box 3** for a description of how we gathered this information). On average, 80 percent of faculty members rated these domains as "very important" for teachers working with preschool-age children and children in kindergarten or higher. For teachers working with children birth to age two, the percentage of faculty members rating domains as "very important" decreased slightly to about 70 percent (see **Figure 7**). Faculty members across degree levels varied in their ratings of importance across domains and age groups.

Box 3. Faculty Perspectives on Including Various Domains of Development and Learning in Teacher Preparation Programs

The *Inventory* assessed faculty perspectives on the relative importance of various domains of development and learning in teacher preparation programs. Faculty members were asked to use a Likert scale of 1 to 4, with 1 meaning "not important" and 4 meaning "very important," to indicate their views on including various domains for different age groups of children. The domains were:

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

Figure 7: Importance of Inclusion of Domains in Teacher Preparation Programs: Percentage of Faculty Reporting "Very Important" for Infants and Toddlers, by Degree Level

- Associate Degree Faculty (N=49-50)
- Bachelor's Degree Faculty (N=23)
- Dual-Level Faculty (N=28)
- Graduate Degree Faculty (N=19-21)
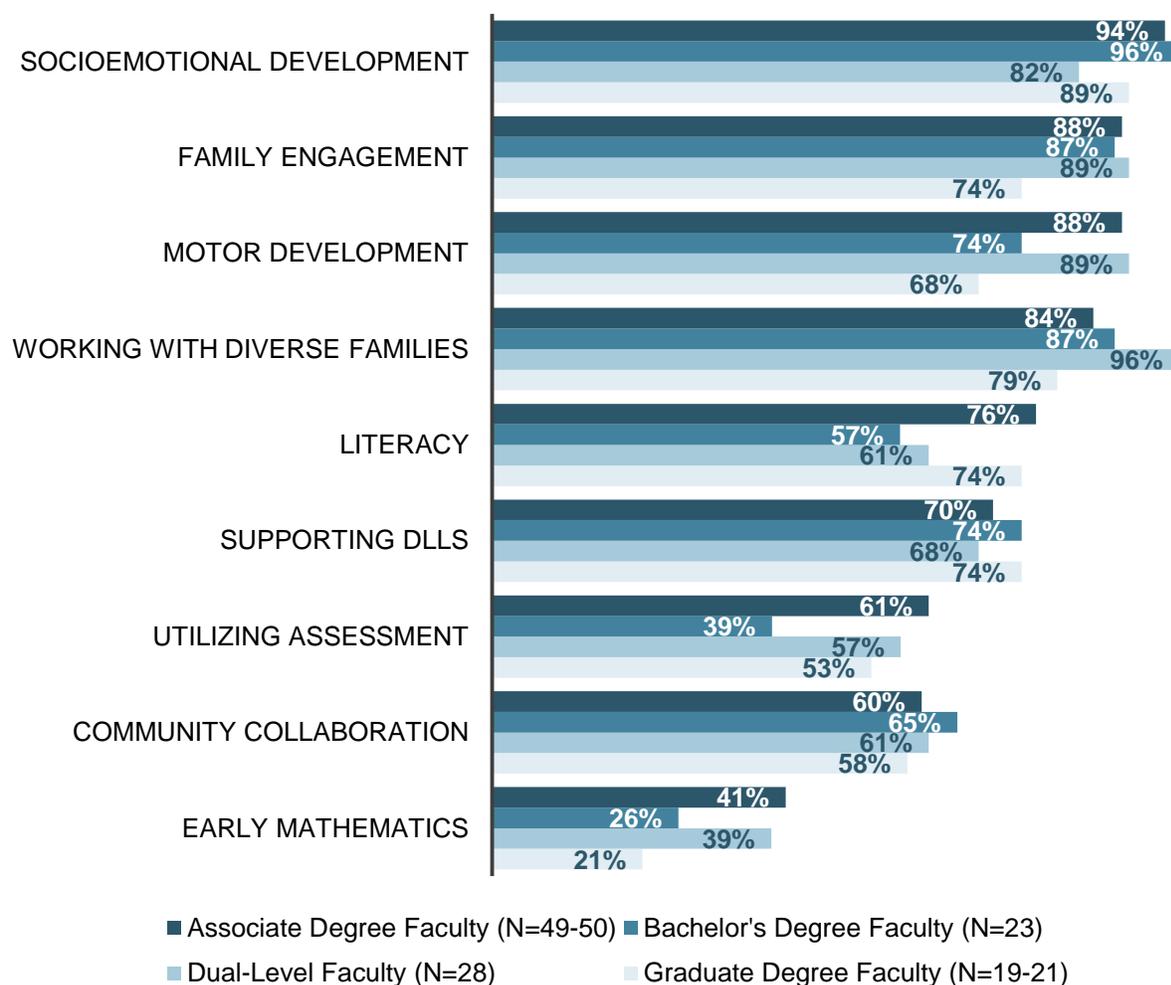
Faculty Capacity for Teaching

The *Inventory* asked faculty members to assess their capacity to prepare early educators to promote children's development and learning on the following topics:

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

For each of the nine topics (see **Box 3**), faculty members were asked to identify whether they:

1. Had limited familiarity;
2. Were knowledgeable but not prepared to teach others; or
3. Were capable of preparing teachers working with children in each of the following age groups:

   - Birth to two years;
   - Three to four years (Pre-K); and
   - Kindergarten to Grade 3 or higher.

For each topic, 90 percent (or more) of faculty members across degree levels reported feeling capable of teaching content to students.[15] In general, higher percentages of faculty reported feeling capable of preparing teachers to work with preschool-age children and older, as compared to infants and toddlers. Looking across degree levels, faculty members teaching solely in bachelor's degree programs were less likely to report feeling capable of teaching as compared with faculty teaching in other degree programs in certain topics (e.g., only 70 percent felt capable of facilitating children's motor development).

Recent Teaching Experience

Faculty were asked about their experience teaching a variety of topics during the past two academic years and whether they taught the following content areas either as a separate course, embedded within a broader course, or both. Nearly all the faculty members participating in the *Inventory* reported teaching content related to "observation, assessment, and documentation to inform teaching and learning," "general domains of child development," "teaching children with special needs," and "language development" (see **Figure 8**). Faculty were less likely to report having taught courses related to program management (e.g., "adult supervision and learning styles" and "fiscal procedures and management") and teaching strategies for science, technology, engineering, and math (STEM) content.

Faculty members reported that topics listed in the *Inventory* were most likely taught within a broader course or within a broader course and as a separate course (rather than *only* as a separate course). More than 90 percent of faculty members across degree levels reported teaching "general domains of child development," primarily within a broader course. Similarly, more than 89 percent of faculty members across degree levels reported teaching "partnering with families to enhance children's learning in school and at home," primarily embedded within a broader course.

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[15] Capacity to teach topics related to family engagement, early mathematical development, and working with dual language learners is described in detail in Part 2 of this report.

Figure 8: Current Teaching Experience: Percentage of Faculty Reporting Having Taught Content Area in Past Two Years, by Degree Level

OBSERVATION, ASSESSMENT, AND DOCUMENTATION
- 96%
- 100%
- 96%
- 95%

CHILD DEVELOPMENT
- 94%
- 91%
- 93%
- 100%

TEACHING CHILDREN WITH SPECIAL NEEDS
- 88%
- 91%
- 82%
- 90%

LANGUAGE DEVELOPMENT
- 84%
- 78%
- 82%
- 90%

ADULT SUPERVISION AND LEARNING STYLES
- 84%
- 48%
- 68%
- 62%

TEACHING STRATEGIES FOR STEM
- 63%
- 50%
- 71%
- 52%

FISCAL PROCEDURES AND MANAGEMENT
- 59%
- 22%
- 52%
- 42%

■ Associate Degree Faculty (N=49-50) ■ Bachelor's Degree Faculty (N=22-23)
■ Dual-Level Faculty (N=28) ■ Graduate Degree Faculty (N=21)

Professional Development Participation and Interest

Professional Development[16]

The vast majority of faculty members across degree levels reported participating in professional development during the last three years. The five most frequently reported professional development opportunities, participated in by 50 percent or more of faculty members at all degree levels included "teaching practitioners to work with children from diverse cultural backgrounds," "teaching practitioners to work with children with special needs," "strategies and techniques for mentoring/coaching of adult students," "using technology to promote adult learning," and "child assessment (e.g., portfolios, using

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[16] Professional development focused on family engagement, early mathematical development, and working with dual language learners is described in detail in Part 2 of this report.

particular assessment tools such as the Work Sampling System)."

Faculty members at all degree levels indicated a number of areas in which they were interested in gaining additional knowledge or training. The most commonly identified topics focused on teaching practitioners to work with particular groups of children (e.g., infants and toddlers; children who have experienced trauma; children with special needs); using early childhood teacher and child assessments effectively; and strategies and techniques for mentoring/coaching adult students.

Florida early childhood degree programs offer multiple types of support services specifically tailored to help ECE students access resources and strengthen their academic skills. Associate degree programs are more likely to make coursework accessible in multiple formats by offering courses online or during alternative hours, such as evenings and weekends. Primary challenges for many institutions include having sufficient full-time faculty, having sufficient faculty with expertise related to teaching children who are dual language learners, and difficulty recruiting and retaining students related to the low pay of the ECE field.

What we asked about supporting students:

Program leads were asked about three general categories of services offered to students in their programs:

1. Skill support;
2. Counseling and cohort models; and
3. Access supports.

Typically, higher education students who work in early childhood settings are classified as non-traditional students because, in addition to working full-time, they are frequently older than recent high school graduates, are among the first in their families to attend college, often represent linguistic and/or ethnic minorities, and may also be parents of children who are school-age or younger (Sakai, Kipnis, Whitebook, & Schaack, 2014). Programs that offer support specifically designed for non-traditional early childhood students are associated with greater-than-average success in helping students achieve their educational goals in a timely fashion (e.g., transferring to a four-year institution or completing a degree) (Chu, Martinez-Griego, & Cronin, 2010; Kipnis, Whitebook, Almaraz, Sakai, & Austin, 2012; Sakai et al., 2014; Whitebook, Schaack, Kipnis, Austin, & Sakai, 2013).

Services Offered

Program leads were asked whether a range of services were *specifically* tailored to ECE students in the degree program or department. For example, while colleges and universities typically offer academic counseling to all students, we were interested in learning whether ECE students had access to dedicated academic counseling to help them plan a course of study that met specific ECE certification/licensing requirements. The services offered by degree programs ranged by type of services and degree level.

Skill Support

One-half of associate degree programs and about one-quarter of bachelor's degree programs reported offering academic tutoring tailored for ECE students in mathematics, reading, and writing. Fewer than one-quarter of degree programs, at any level, offered tailored assistance for ECE students who are English-language-learners.

Counseling and Cohort Models

About one-third (36 percent) of bachelor's degree programs reported offering cohort programs tailored to students in the degree program, while only one in 10 associate degree programs reported that this service was available. Most programs across degree levels reported offering tailored academic counseling. Fewer offered financial aid counseling, although one-half or more of programs offered financial assistance specifically dedicated to their ECE students.

Access Supports

Associate degree programs were more likely to offer formats other than (or in addition to) a traditional/on-campus program. One-quarter (26 percent) of associate degree programs offered the degree as an "online/distance learning" program compared to 14 percent of bachelor's degree programs. More than three-quarters (84 percent) of associate degree programs offered a "blended" program (combining online and in-person courses), compared to 50 percent of bachelor's degree programs.

Three-quarters of associate and bachelor's degree programs (78 percent and 73 percent, respectively) offered alternative class schedules for working adults. However, degree programs were not likely to offer classes off-campus in community-based settings; fewer than one-fifth (17 percent) of associate and one-quarter (27 percent) of bachelor's degree programs reported doing so.

Florida early childhood degree programs experience challenges related to time and resources required to fulfill faculty responsibilities, as well as the need for faculty members with specific expertise and who represent diverse racial and ethnic backgrounds. Early childhood faculty members are likewise in need of resources to support their ability to participate in professional development and program planning.

What we asked about faculty- and program-related challenges:

Program leads were asked to identify any challenges facing their degree programs. Faculty members were asked to identify any resources needed in order to improve the early childhood degree program.

Faculty-Related Challenges

Two major faculty-related challenges were identified: lack of support for faculty and a shortage of faculty members with specific expertise.

Support for Faculty

Among faculty members, more than one-third across all degree levels identified needing "resources for faculty professional development," "funding for travel," and "additional full-time faculty." Among program leads, the most commonly identified challenges were an "insufficient number of full-time faculty" and "faculty administrative responsibilities that interfered with time for students." Two-thirds of bachelor's and one-third of associate degree programs noted a need for additional full-time faculty in their degree programs. One faculty participant noted "As an adjunct professor, I am not involved in the 'life' of the college as a full-time professor would be."

Faculty Diversity and Expertise

Among all faculty members, approximately one in five identified the need for "increased racial/ethnic diversity among faculty" or "increased linguistic diversity among faculty." Bachelor's degree program faculty were somewhat more likely to identify increased diversity than faculty employed in associate or dual degree programs. Among program leads of associate degree programs, the need most frequently identified, by far, was for "additional faculty expertise in teaching young children who are dual language learners" (44 percent). Program leads of bachelor's degree programs most often reported a need for "additional faculty expertise in teaching infants and toddlers" (36 percent), math and science pedagogy for young children (36 percent for each), and "teaching young children who are dual language learners" (27 percent).

Program-Related Challenges

Among all degree programs, the most frequently reported challenge was "difficulty recruiting and retaining students related to the low pay of the ECE field," identified by 89 percent of associate degree programs and 42 percent of bachelor's degree programs. Among faculty members, more than one-third of faculty members across degree program levels identified "increased financial resources for students" or "increased academic support for students" as needs.

Nearly one-half (48 percent) of faculty members across degree levels identified a need for "resources for program planning and improvement (e.g., new course development)." One-quarter (28 percent) of associate degree programs and one-half (50 percent) of bachelor's degree programs identified a "lack of recognition of the value of early childhood from within the department or school" as a challenge. About one-quarter (28 percent) of associate and one-third (33 percent) of bachelor's degree program leaders identified insufficient access to quality clinical sites as a challenge. Fewer than one-quarter of degree programs identified other program-related challenges, including articulation between two- and four-year college early childhood programs.

Part 2: Early Childhood Higher Education, An Evolving Landscape

This section of the report examines how institutions of higher education are adapting to emerging research related to three key domains.

FINDING SIX: FAMILY ENGAGEMENT
Required Offerings, Faculty Attitudes, Teaching Experience, and Professional Development Interests

Faculty members consider the inclusion of family engagement to be very important in the preparation of early childhood teachers and rank its importance on par with the domain of socioemotional development. Multiple topics related to family engagement are embedded in all levels of degree programs, with some variation in age-group focus by degree level and topic. Faculty members expressed varied levels of interest in professional development in this topic area.

What we asked about family engagement:

Program leaders were asked to identify family engagement-related course content topics that were required for the degree. We asked faculty about:

1. Attitudes/beliefs about the importance of inclusion of family engagement relative to other domains;
2. Capacity to teach students about specific family engagement topics;
3. Experience with teaching specific family engagement content in the last two years; and
4. Level of participation and interest in professional development focused on topics related to family engagement.

The family engagement learning domain focuses on the environment of young children's relationships and the knowledge and skills that early childhood educators need in order to help families support children's development and learning. Over the last two decades, mounting evidence has demonstrated how family involvement in children's learning at home and school contributes to school success (Dearing & Tang, 2010; Reynolds & Shlafer, 2010). As a consequence, the importance of including family engagement in teacher preparation has gained traction, particularly in light of research suggesting limited attention in teacher education programs to building student competence in this area (Epstein, Sanders, & Clark, 1999; Nathan & Radcliffe, 1994; Shartrand, Weiss, Kreider, & Lopez, 1997).

Required Family Engagement Topics in Degree Programs

Program leads were asked about required course content and age-group focus related to eight topics of family engagement (see **Table 3** for list of topics). Across the eight topics, at least 70 percent of both associate and bachelor's degree programs reported requiring the topic, with one exception ("working with families of children exposed to trauma," required by 53 percent of associate and 62 percent of bachelor's degree programs). Age-group and grade focus for these content areas was highly variable, depending on topic and degree level. One-third to one-half of associate degree programs requiring these topics did not require content focused on a particular age group or grade level (see **Figure 9** for an example). When a certain age level was required, it was most often for children birth through preschool age (three to four years old). Fewer than one-third of associate degree programs required this content for children in kindergarten through third grade or above. In contrast, most bachelor's degree programs requiring these topics required them for teachers working with preschoolers and, to a slightly lesser extent, those working with children K-3 or above.

Table 3. List of Family Engagement Topics Included in the Florida Early Childhood Higher Education Inventory
Topic
Research on the importance and value of building respectful and trusting relationships with families
Working with various family structures
Working with families of children with special needs
Working with families of children exposed to trauma
Helping families enhance their children's learning at home
Engaging families in classroom, program, and/or school activities
Effective communication strategies with families
Techniques for gathering knowledge about children's families

Figure 9: Working With Families to Enhance Children's Learning at Home: Required Age-Group Focus of Programs Participating in Florida Early Childhood Higher Education Inventory, by Degree Level
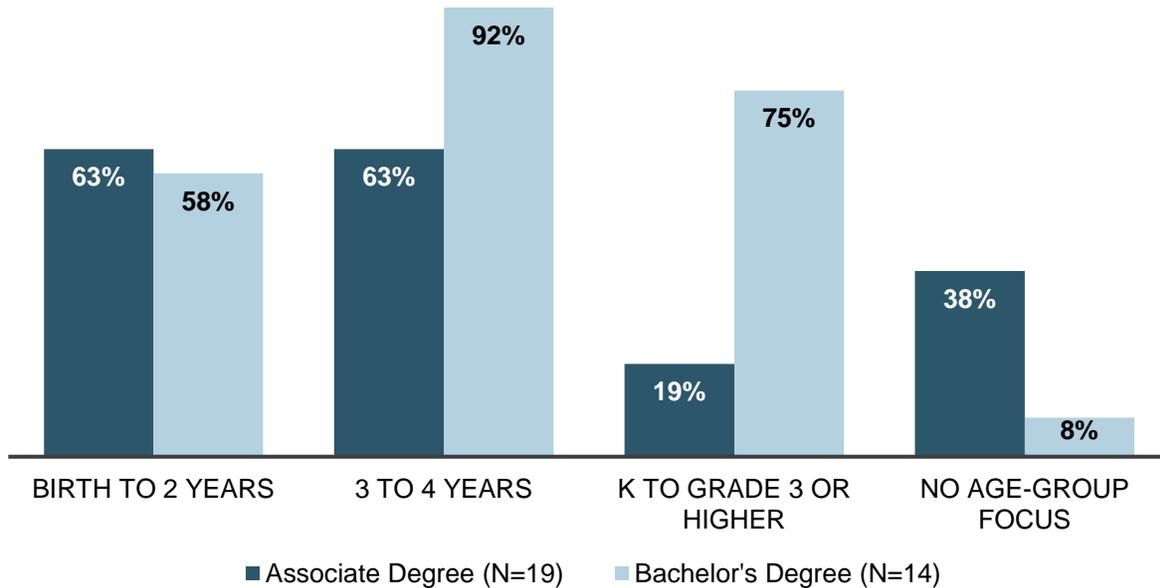
Faculty Attitudes About the Importance of Family Engagement in Degree Programs

The importance of understanding and implementing integrated strategies to engage families to support children's development and learning was considered "very important" by the vast majority of faculty members across degree levels and ranked on a par with the domain of socioemotional development (see **Box 3** for how this assessment was conducted). Approximately three-quarters or more of faculty members at each degree level considered it "very important" to include family engagement as well as socioemotional development in courses for teachers of all age groups of children, including infants and toddlers. Faculty rated the inclusion of family engagement content in higher education programs as more important than literacy and mathematical development for those preparing to work with very young children (see **Figure 6** in the previous section).

Teaching Capacity and Experience Teaching Coursework on Family Engagement

In addition to noting the importance of this topic, faculty members across degree levels report feeling capable of teaching content related to engaging with families. Nearly every faculty member (96 percent)

noted that they felt capable of preparing teachers to "integrate families in partnerships to support children's learning." When asked about their current and recent experience teaching courses related to family engagement, nearly all faculty members (91 percent) reported that they had taught coursework related to "partnering with families to enhance children's learning in school and at home" during the past two years. Most often, faculty reported teaching this content embedded within a broader course, rather than as a separate course.

Faculty Participation and Interest in Professional Development on Family Engagement

More than three-quarters of faculty members across degree levels reported having participated in professional development related to family engagement in the past two years. The most common topics covered were "working with families of children with special needs" (46 percent) and "research on the importance and value of building respectful and trusting relationships with families" (45 percent).

Using a Likert scale of 1 to 5, with 1 being "not at all interested" and 5 being "very interested," faculty members were asked to rate their interest levels in eight topics related to family engagement. Faculty interest was high for all topics across all degree levels with faculty members most interested in professional development related to "working with families of children with special needs" and "working with families to help them enhance their children's learning at home" (see **Table 3**).

Faculty consider the inclusion of early mathematics to be less important than other domains in the preparation of teachers. Nevertheless, multiple topics of early mathematics content are embedded in required course content, with variation among degree levels by topic and age-group focus. Most faculty members consider themselves prepared to teach early math content. Interest in ongoing math-related professional development varies by degree level and topic area.

What we asked about early mathematics:

Program leaders were asked to identify early math-related course content topics that were required for the degree. We asked faculty members about:

1. Attitudes/beliefs about the importance of inclusion of early mathematics relative to other domains;
2. Capacity to teach students about specific math-related topics;
3. Experience with teaching specific early math course content in the last two years; and
4. Level of participation and interest in professional development focused on topics related to early mathematics.

The early mathematics domain addresses key areas of children's cognitive development and important foundational knowledge and intellectual skills associated with school success. The link between school success and math competency in young children has been documented in recent research, yet there is concern that teachers of our youngest children are not adequately prepared by institutions of higher education to assess or facilitate children's mathematical understanding and skills (Ryan, Whitebook, & Cassidy, 2014).

Required Early Math Topics in Degree Programs

Program leaders were asked about required course content and age-group focus related to 11 topics of early mathematics (see **Table 4**). All 11 early math topics were required by three-quarters or more of bachelor's degree programs. In contrast, only four early math topics were required by three-quarters or more of associate degree programs. In the associate degree programs, when an early mathematics topic was required, it was much more likely to be focused on preschoolers — and somewhat on infants and toddlers — than on older children, and in bachelor's degree programs, the math topics were more likely to be focused on preschoolers and older children than on infants and toddlers (see **Table 4**).

Table 4. List of Early Mathematics Topics Included in the Florida Early Childhood Higher Education Inventory, by Degree Level		
	Topic is Required by at Least 75% of Programs	
Topic	**Associate Degree (N=19)**	**Bachelor's Degree (N=13)**
Number sense for children	✓	✓
Operations and algebraic thinking for children		✓
Measurement skills for children		✓
Geometry skills for children		✓
Children's mathematical reasoning/practices		✓
Building on children's natural interest and using everyday activities to develop children's mathematical knowledge	✓	✓
Encouraging children's inquiry and exploration to foster problem solving and mathematical reasoning	✓	✓
Introducing explicit mathematical concepts through planned experiences		✓
Creating a mathematically rich environment		✓
Developing children's mathematical vocabulary	✓	✓
Assessing children's mathematical development		✓

Faculty Attitudes About the Importance of Early Math in Teacher Preparation Degree Programs

Faculty members at all degree levels were less likely to consider it "very important" to include the early mathematics domain than other domains in teacher preparation programs for practitioners working with infants and toddlers. Only one-quarter (26 percent) of bachelor's degree program faculty and one-fifth (21 percent) of graduate degree program faculty considered it "very important" to include the math domain in teacher preparation programs for teachers of very young children. In contrast, two-thirds or more of faculty members, across degree levels, considered it "very important" to include motor development for teachers of infants and toddlers and nearly all faculty members considered "working with families of various ethnic, racial, and cultural backgrounds" to be "very important" for teachers working with children under age three.

Faculty members at all degree levels were more likely to consider it "very important" to include the early mathematics domain for practitioners working with older children. Although not rated as important as

literacy or socioemotional development, between one-half and three-quarters of faculty members across degree levels considered the inclusion of early math "very important" for those teaching preschool-age children. Nearly all faculty members (92 percent) considered the inclusion of early math "very important" for teaching children in kindergarten or higher grades; faculty members rated the importance of early math for older children equal to that for literacy and socioemotional domains.

Teaching Capacity and Experience Teaching Coursework on Early Mathematics Topics

In addition to the broad question regarding capability of preparing teachers to scaffold children's mathematical development, the *Inventory* also asked more specific questions related to capacity of teaching early-math related content. For each of the 11 specific math topics (see **Table 4**), nearly two-thirds of faculty members across all degree levels reported being capable of preparing teachers working with preschool-age children. Fewer faculty members reported being capable of teaching the topics to practitioners working with infants and toddlers or the elementary grades (see **Figure 10** for an example). Across three of the four faculty groups (associate only, bachelor's only, and graduate degree programs), only one-half of faculty report feeling prepared to teach math content related to infants and toddlers. Dual-level faculty members were more likely to report being capable of preparing teachers working with children birth through age two, while faculty members teaching only in bachelor's degree programs were more likely to report being capable of preparing teachers working with children kindergarten through third grade or higher. Across all math topics, graduate degree faculty members were more likely to report being knowledgeable of the topic but not prepared to teach others.

Faculty members were asked whether they had taught "development of mathematical understanding" in the past two years and, if so, whether it was taught as a separate course or embedded within a broader course. Eighty-two percent of dual-level faculty members reported teaching "development of mathematical understanding" in the past two years, while fewer than three-quarters of associate, bachelor's, and graduate degree program faculty members reported teaching this topic. Mathematical understanding was more likely to be taught embedded within a broader course rather than as a separate course. More than fifty percent of faculty members across degree levels reported teaching mathematical understanding within a broader course.

Figure 10. Scaffolding Children's Mathematical Development: Capability of Preparing Teachers Working with Children of Various Ages, as Reported by Faculty Members Participating in Florida Early Childhood Higher Education Inventory, by Degree Level

Legend: ■ Birth to 2 Years ■ 3 to 4 Years ■ K to Grade 3 or Higher
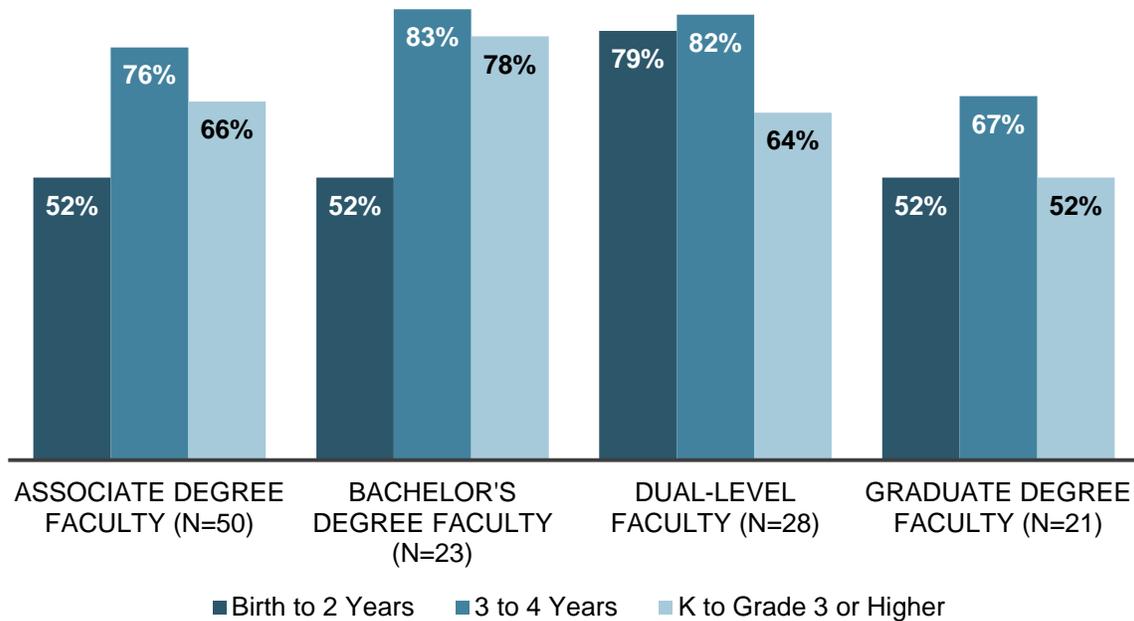
Faculty Participation and Interest in Professional Development on Early Math

Faculty members were asked if they had participated in professional development opportunities focused on early math development in the past three years. Although nearly all faculty across degree levels reported participating in some type of professional development, one-half (51 percent) of faculty members participating in the *Inventory* did not participate in professional development related to any of the early mathematics topics provided.

Using a Likert scale of 1 to 5, with 1 being "not at all interested" and 5 being "very interested," faculty members were asked to rate their interest levels in five topics related to early mathematics. Faculty interest varied by topics across all degree program levels; it was somewhat lower in early math topics than in family engagement topics among bachelor's and graduate degree program faculty members and somewhat higher among associate degree program faculty. In particular, about one-half or more of associate, bachelor's, and dual-level faculty members identified being very interested in professional development topics related to teaching math skills and strategies. Graduate degree faculty members were less likely to be "very interested."

Faculty members consider the inclusion of teaching young dual language learners to be important in the preparation of teachers, but not as important as socioemotional development or family engagement. Multiple topics focused on dual language learners are embedded in required course content, with variation among degree levels by topic and age-group focus. Many faculty members consider themselves prepared to teach topics related to dual language learners, yet interest in ongoing dual language learner-related professional development varies by degree level and topic area.

What we asked about dual language learners:

Program leads were asked to identify course content topics related to teaching dual language learners and diverse families[17] that were required for the degree. We asked faculty members about:

1. Attitudes/beliefs about the importance of including support for the cognitive and social development of young dual language learners and working with families of various ethnic, racial, and cultural backgrounds relative to other domains;
2. Capacity to teach students about specific topics related to dual language learners and diverse families; and
3. Level of participation and interest in professional development focused on topics related to dual language learners.

Required Dual Language Learner Topics in Degree Programs

Program leads were asked about required course content and age-group focus related to 10 topics on dual language learners (see **Table 5**). All 10 dual language learner topics were required by 68 percent or more of associate and 85 percent or more of bachelor's degree programs. In the associate degree programs, when an age group was required, it was much more likely to be focused on preschoolers, infants, and toddlers than on older children, and in bachelor's degree programs, the topics were more likely to be focused on preschoolers and older children than on infants and toddlers (see **Table 5).**

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[17] The topics included in the *Inventory* were adapted from recommended teacher competencies developed by experts in the field of dual language learning in early childhood education (Espinosa & Calderon, 2015; Lopez, Zepeda, & Medina, 2012).

Topic	Focus on Infants and Toddlers is Required by at Least 50% of Programs	
	Associate Degree (N=19)	Bachelor's Degree (N=13)
Importance and benefits of bilingualism for young children's development	✔	
Role of home language development in helping young children learn English	✔	
Strategies to support the cognitive development of young DLLs	✔	
Strategies to support the language development of young DLLs	✔	
Strategies to support the literacy development of young DLLs	✔	
Strategies to support the development of mathematical knowledge and understanding of young DLLs	✔	
Strategies to support the socioemotional development of young DLLs	✔	✔
How to use appropriate teaching strategies for young DLLs within various classroom language models	✔	
How to use observation, assessment, and documentation to inform strategies for teaching DLLs	✔	
Strategies for engaging families from linguistically diverse backgrounds		

Table 5. List of Topics Related to Teaching Young Dual Language Learners (DLLs) Included in the Florida Early Childhood Higher Education Inventory, by Degree Level

Faculty Attitudes About the Importance of Teaching Young Dual Language Learners in Teacher Preparation Degree Programs

The importance of understanding and implementing strategies to support dual language learners was considered "very important" by a majority of faculty across degree program levels (see **Box 3** in previous section for how this assessment was conducted). However, faculty members were less likely to consider it as important as the domains of socioemotional development or family engagement. Faculty members at all degree levels were more likely to consider it "very important" to include teaching dual language learners for practitioners working with older children than younger children. Although not rated as important as socioemotional development, literacy development, or working with families of various ethnic, racial, and cultural backgrounds, nearly three-quarters or more of faculty across degree levels considered the inclusion of teaching dual language learners "very important" for those teaching preschool-age children and children in kindergarten or higher grades.

Teaching Capacity Related to Dual Language Learning

In addition to noting the importance of this topic, faculty members reported feeling prepared to teach content related to supporting dual language learners. The majority (84 percent) of faculty members noted that they felt capable of preparing teachers to "support the cognitive and social development of young dual language learners."

Faculty Participation and Interest in Professional Development Around Dual Language Learners and Diverse Families

Faculty members were asked if they had participated in professional development opportunities focused on 11 topics related to teaching dual language learners and diverse families in the past three years. Participation rates across degree levels were consistently low. Although 60 percent or more of faculty members across degree levels reported participating in professional development on "teaching practitioners to work with children from diverse cultural backgrounds," fewer than 50 percent of faculty members across degree levels reported participation in any of the other topics related to dual language learners. Nearly one-half (45 percent) of faculty members participating in the study did not participate in professional development related to any of the dual language learner topics listed in the *Inventory*.

Using a Likert scale of 1 to 5, with 1 being "not at all interested" and 5 being "very interested," faculty members were asked to rate their interest levels in 11 topics related to teaching dual language learners and diverse families. Faculty interest varied by topics across all degree levels and was somewhat lower for topics on dual language learners than in family engagement topics among bachelor's and graduate

degree program faculty members and somewhat higher among associate degree program faculty members (see **Figure 11**). Overall, about one-third to one-half of faculty members identified being very interested in professional development topics related to teaching dual language learners.

Figure 11: Interest in Professional Development Related to Dual Language Learners Reported by Faculty Members Participating in the Florida Early Childhood Higher Education Inventory: Percentage Reporting "Very Interested", by Degree Level

ROLE OF HOME LANGUAGE DEVELOPMENT IN HELPING YOUNG CHILDREN LEARN ENGLISH
- 39%
- 32%
- 37%
- 26%

STRATEGIES TO SUPPORT THE DEVELOPMENT OF MATHEMATICAL KNOWLEDGE AND UNDERSTANDING OF YOUNG DLLS
- 39%
- 55%
- 39%
- 26%

HOW TO USE OBSERVATION, ASSESSMENT, AND DOCUMENTATION TO INFORM STRATEGIES FOR TEACHING DLLS
- 39%
- 50%
- 36%
- 37%

IMPORTANCE AND BENEFITS OF BILINGUALISM FOR YOUNG CHILDREN'S DEVELOPMENT
- 45%
- 27%
- 44%
- 42%

STRATEGIES TO SUPPORT THE LANGUAGE DEVELOPMENT OF YOUNG DLLS
- 47%
- 55%
- 39%
- 37%

STRATEGIES TO SUPPORT THE COGNITIVE DEVELOPMENT OF YOUNG DLLS
- 49%
- 50%
- 36%
- 32%

HOW TO USE APPROPRIATE TEACHING STRATEGIES FOR YOUNG DLLS WITHIN VARIOUS CLASSROOM LANGUAGE MODELS
- 49%
- 50%
- 46%
- 42%

STRATEGIES TO SUPPORT THE LITERACY DEVELOPMENT OF YOUNG DLLS
- 49%
- 50%
- 43%
- 42%

STRATEGIES FOR ENGAGING FAMILIES FROM LINGUISTICALLY DIVERSE BACKGROUNDS
- 49%
- 52%
- 50%
- 50%

STRATEGIES TO SUPPORT THE SOCIOEMOTIONAL DEVELOPMENT OF YOUNG DLLS
- 53%
- 45%
- 43%
- 42%

TEACHING PRACTITIONERS TO WORK WITH CHILDREN FROM DIVERSE CULTURAL BACKGROUNDS
- 58%
- 59%
- 54%
- 70%

■ Associate Degree Faculty (N=49-50) ■ Bachelor's Degree Faculty (N=21-22)
■ Dual-Level Faculty (N=27-28) ■ Graduate Degree Faculty (N=19-20)

Discussion and Recommendations

In this final section, we outline an approach to strengthening early childhood workforce development in Florida, with an emphasis on higher education. We identify four discrete elements that together constitute a strategy for aligning the current system with 21st-century expectations. The success of this approach requires ensuring that its various components be implemented in unison, calling for a research agenda to measure progress and challenges over time, and learning more about the depth of instruction delivered in higher education programs. The efforts should be coordinated among key stakeholders in Florida (including the Early Learning Advisory Council and representatives from the higher education community) and are predicated on identifying new resources from state, federal, and philanthropic sources.

We call upon policymakers, philanthropists, higher education faculty and administrators, advocates, teachers, and other stakeholders across the state to advance the following approach.

1. Unify expectations and strengthen competencies for early childhood workforce preparation

Findings from *Inventories* conducted in other states suggest that when states intentionally redesign their certification system for early childhood educators, higher education systems adjust by making changes in required course content, age-group focus, and field-based practice, as appropriate. In Florida, standards that apply to early childhood teachers and administrators across the state vary somewhat according to program type and, in general, are very minimal (e.g., many positions only required a high school diploma or GED). Thus, institutions of higher education in Florida offer programs that vary widely in course content and field experiences required for student learning.

In the absence of consistent certification standards that apply to all early childhood teachers and administrators across the state—regardless of the auspice of the ECE programs in which students are or will be employed and the age group of children with whom they will work—Florida institutions of higher education have largely placed an emphasis on preschool-age children, which affects only limited segments of the workforce. However, programs responsible for preparing early educators have the opportunity to go above and beyond the minimum standards and ensure that practitioners have the foundational knowledge and skills necessary to support young children's development.

Clarity among degree programs as to their purpose and a revision of Florida's current system for certifying teachers, administrators, and other practitioners is required in the effort to erase the divisions in professional expectations and preparation across and within age groups on the birth-to-age-eight continuum in line with the Institute of Medicine recommendations and to clarify the purpose of early childhood higher education programs (IOM & NRC, 2015). To initiate this process, we recommend:

- Establishing a more uniform system for certifying teachers, administrators, and other practitioners across age-groups and auspices throughout the state;

- Providing clear roadmaps to identify whether the course of study is intended to prepare practitioners for the demands of teaching young children and/or for leading ECE programs, or whether the course of study is designed for other purposes;
- Convening stakeholders (e.g., state regulatory agencies, representatives from the state colleges and universities, advocates) to review and revise standards and educational requirements for professionals caring for and educating young children;
- Aligning early education degree program requirements with revised state standards, including foundational knowledge and skills for incoming educators and progressively greater knowledge, skills, and competencies for educators in leadership roles; and
- Providing resources and supports to ensure that a diverse current and incoming workforce can successfully meet standards and attain competency.

2. Strengthen program content and equity across the age span

Many ECE stakeholders emphasize the importance of relying on research findings to guide ECE policy and practice, yet our findings suggest uneven application of such evidence across multiple domains of early learning and development for children from infancy through the early elementary grades. Infants and toddlers were most likely to be disadvantaged, with fewer Florida early childhood degree programs requiring the inclusion of the youngest children in the course content and field-based experiences compared to preschool-age children. Additionally, the diversity of Florida's population suggests a need to prepare teachers to work with a broad range of children, particularly those who are Hispanic or Latino and who are learning more than one language.

To strengthen required content and align it with child development and teacher preparation research and to equalize required content for all children across the birth-to-age-eight continuum, we recommend:

- **Child Development and Pedagogy:** Providing resources and support to enable faculty members across degree programs and institutions to collaborate with other experts to develop program content standards and/or faculty professional development related to preparing teachers to work with infants and toddlers, including:

  - Infant development and learning across multiple domains; and
  - Methods of teaching and pedagogy for children of different ages;

- **Early Mathematics:** Providing resources and support to enable faculty members across degree programs and institutions to collaborate with other experts to develop program content standards and/or faculty professional development related to children's mathematical understanding, including:

  - Children's mathematical understanding from infancy through early elementary grades; and
  - Developmentally appropriate pedagogy for early mathematics instruction, in particular for infants, toddlers, and preschool-age children; and

- **Dual Language Learning:** Providing resources and support to enable faculty members across degree programs and institutions to collaborate with other experts to develop program content standards and/or faculty professional development related to preparing teachers of dual language learners, including:

  - Recognition of the value and importance of supporting children's home language development as they also learn English;
  - Working with children from diverse linguistic, racial/ethnic, and cultural backgrounds, with an emphasis on very young children; and
  - Understanding the strengths and needs of adults from diverse linguistic, racial/ethnic, and cultural backgrounds to support their entry and retention in the ECE field.

To strengthen the application of field-based learning experiences, we recommend:

- Providing resources and support to faculty members across degree programs and institutions to develop degree program standards for the timing, frequency, and duration of field-based experiences, with opportunities focused on children from infancy through preschool and the differentiation of experiences for pre- and in-service students; and

- Providing field-based learning opportunities for students to engage with:
  - Children with special needs;
  - Children who are dual language learners;
  - Families; and
  - Community organizations that support children and families.

3. Build a leadership pipeline

In Florida, PK-12 principals are required to have a master's degree and to develop their leadership skills by earning an administrative certificate; however, they are not required to take ECE coursework during their educational preparation or to have experience teaching. In contrast, child care and preschool center directors are required to hold a Florida Director's Credential and to have experience working with young children prior to becoming a director, but they are not required to have earned a college degree (Lieberman, 2017). Mentors and coaches in K-12 are typically drawn from the teaching ranks and receive specific training (Isner et al., 2011), yet there are no widely applied qualifications for mentors and coaches working with teachers of younger children. Similarly, educational requirements for teachers vary and, in general, are minimal, often requiring only a high school diploma or GED. In light of these inconsistent and nominal expectations for ECE leadership positions, it is not surprising that across degree levels, program course content was not routinely offered to prepare practitioners for early childhood supervisory, administrative, or other leadership roles.

To create a defined leadership pipeline and to ensure that leaders have comparable skills across age groups and settings, we recommend:

- Establishing a process to identify the specific skills, knowledge, and competencies needed for common leadership roles in ECE (teacher leaders, coaches, site administrators, program/quality improvement managers, and teacher educators);
- Identifying the appropriate course of study and degree level (lower division, upper division, graduate) for each leadership role based on the specific skills and knowledge identified above;
- Identifying options to create leadership pathways and/or programs, particularly at the master's degree level; and
- Ensuring an adequate number of degree programs at both the graduate and undergraduate level that offer the appropriate course content.

In addition to gaps in course content related to leadership development, the demographics of the faculty participating in the *Inventory* indicate an aging faculty workforce that is primarily white/Caucasian and English-speaking. To increase the diversity of the ECE faculty, we recommend:

- Investigating strategies used in other professions (e.g., health, education, social welfare); creating a faculty development program, such as a fellowship, intended to increase diversity among faculty, particularly in key leadership positions; and developing a diversity plan tailored to the ECE field.

4. Increase faculty supports

Early childhood degree programs in Florida rely heavily on part-time faculty and report being under-resourced and requiring additional support to allow faculty members to engage in program planning and improvement. They also identify the need for greater opportunities for faculty members to engage in their own professional growth in response to new developments in the field and changing characteristics of the populations they serve.

To decrease the reliance on part-time faculty in ECE programs, we recommend:

- Identifying the number of full-time faculty positions needed to allow for adequate advising and time with students;
- Calculating the costs associated with a proposed increase in full-time ECE faculty positions; and
- Proposing strategies for securing potential sources of public and private funds to address the faculty shortage.

To facilitate improvements in program offerings and to support faculty to engage in their own professional development, we recommend:

- Establishing an ongoing fund with well-articulated expectations for faculty members' professional development honoraria and program improvement grants; and
- Ensuring adequate resources, including funding, staffing, and dedicated time for program planning and improvement.

Concluding Thoughts

The call for an integrated system of early learning for all young children rests upon an understanding of the critical importance of early childhood, beginning at birth and extending through the first years of elementary school. But the early childhood service system and infrastructure—of which higher education is a cornerstone—is poorly integrated, ascribing differing expectations for teacher preparation across the birth-to-age-eight continuum and assigning different resources to teachers across settings. In addition, the current early education system undervalues and poorly compensates its workforce, requiring innovative solutions to attract and retain high-quality teachers. An early care and education system that is fully prepared to support the well-being of both young children and the adults who educate them calls for coordinated efforts on multiple fronts.

Institutions of higher education can play a lead role in elevating the preparation of a high-quality workforce by aligning curriculum and field-based experiences with the standards and competencies developed by early care and education experts. In addition, supportive work environments, increased compensation, and parity across age groups and settings would address the challenge of recruiting students identified by program leads participating in the *Inventory*. Programs such as T.E.A.C.H.® and W.A.G.E.$.®, although not a replacement for increased compensation, are one strategy for providing some relief to the low wages endemic to the field. System-wide improvement requires a continued discourse among multiple stakeholders on how our nation prepares, supports, and rewards the early care and education workforce.

This report provides a portrait of Florida's early childhood higher education landscape amid efforts to invest in, strengthen, and coordinate early childhood workforce development efforts. A strong preparation system for Florida's early childhood teachers and administrators is central to these efforts aimed at ensuring that all young children in Florida have access to high-quality early learning experiences.

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