

FEBRUARY 2018

# It Takes a Community

Leveraging Community College Capacity to Transform the Early Childhood Workforce



Marnie Kaplan



# Table of Contents

*Click on each title below to jump directly to the corresponding section.*

Introduction	<b>4</b>
Current State of Community College Early Childhood Education Programs	<b>6</b>
Maximizing the Potential of Community College Early Childhood Preparation: Envisioning a Path Forward	<b>19</b>
Recommendations	<b>36</b>
Conclusion	<b>40</b>
Appendix—Interviewees	<b>41</b>
Endnotes	<b>43</b>
Acknowledgments	<b>51</b>
About the Author	<b>52</b>
About Bellwether Education Partners	<b>52</b>

## Introduction

Over the past decade, educators and policymakers have sought to increase the number of students pursuing and completing postsecondary credentials. There's a good reason for this: In today's economy, most jobs that pay enough to support a family will require some kind of postsecondary education or training. At the same time, policymakers and early childhood advocates have sought to increase the number of early childhood workers with postsecondary training in early childhood, as a way both to improve quality of teaching in early childhood settings and to elevate the status of the early childhood profession.

Community colleges play an important role in efforts to increase the percentage of Americans with postsecondary education. Nearly half of American college students will spend some time in community colleges<sup>1</sup>—and they are a particularly important entry point to higher education for students from underrepresented populations: 44 percent of low-income students and 38 percent of first-generation students attend community college as their first postsecondary institution.<sup>2</sup> Further, community colleges also play an important role in delivering tailored workforce training in response to local employer needs, and in enabling mid-career adults to advance their educations or acquire new workforce skills.

Thus it's not surprising that policymakers and advocates seeking to increase the knowledge, credentials, and professional prestige of the early care and education workforce would also look to community colleges to play a role in these efforts. For starters, that's where most early childhood students are: The majority of early childhood degree programs are at two-year institutions.<sup>3</sup> Moreover, community colleges offer benefits of affordability and accessibility that are important for current early childhood workers attempting to increase their credentials.

*To maximize the value of community colleges in developing both the current and future early childhood workforce, policymakers and advocates need a clear understanding of the roles that community colleges currently play in preparing and developing early childhood workers and the quality of existing programs, as well as a clear vision for the role that these institutions should play going forward.*

Yet the same factors that make community colleges attractive—both for those seeking to boost postsecondary attainment generally and for efforts to increase the knowledge and skills of early childhood workers—also create challenges. The very affordability and accessibility that make community colleges an entry point to higher education for many students also mean that they attract a population of students who face numerous challenges—including financial, family, and academic barriers—to completing degrees. And early childhood workers enrolled in community colleges face many of these same challenges. The variety of roles that community colleges play enables them to respond to different community needs, but can also make it difficult for early childhood workers to navigate a variety of program options or successfully complete degrees. Further, broader postsecondary policy efforts to improve degree attainment and completion at community colleges can have unintended negative consequences for early childhood programs and students.

Community colleges play an important role in educating the early childhood workforce today—and will continue to do so for the foreseeable future. Thus it's important to ensure that community college early childhood programs are high quality, provide the supports that early childhood workers need to successfully complete degrees, and enable graduates to successfully transition to four-year degree programs. At the same time, policymakers and advocates must be realistic in their expectations for the role community colleges can play in supporting degree attainment for early childhood educators. Early childhood workers in many settings earn low wages, and increased education often doesn't translate into substantially higher earnings. Until these labor market factors change, it will be difficult to attract and retain skilled workers to the early childhood field. Innovative community college programs, such as those profiled later in this report, can help more early childhood educators improve their knowledge, skills, and credentials. But they are not a substitute for addressing broader labor market realities.

To maximize the value of community colleges in developing both the current and future early childhood workforce, policymakers and advocates need a clear understanding of the roles that community colleges currently play in preparing and developing early childhood workers and the quality of existing programs, as well as a clear vision for the role that these institutions should play going forward. This paper seeks to help early childhood stakeholders understand the role that community colleges play in preparing and developing early childhood workers and the challenges they face in doing so. First, it provides an overview of the current state of community college early childhood programs, the students they serve, and the outcomes they produce. Then it highlights models of innovative strategies—at both the institution and state policy level—to help early childhood educators succeed in community college programs and go on to obtain higher levels of credentials. Finally, it offers recommendations for community college leaders, early childhood advocates, and policymakers seeking to maximize the potential of community colleges to support professional development and credential attainment for early childhood educators.

## Current State of Community College Early Childhood Education Programs

The mission of public two-year colleges has shifted tremendously since they first emerged in the early 1900s. Originally called junior colleges, they were viewed as extensions of secondary schools that would help students prepare to attend four-year colleges. Over time, as the vocational role of community colleges grew, policymakers and business leaders began to view community colleges as vehicles to provide a range of skills needed in the labor market. As community colleges adapted to serve community needs, they transformed into complex institutions that serve various community functions, including workforce training.<sup>4</sup> Today, community colleges provide many services beyond just transfer degrees, including vocational programs, developmental education, continuing education, English as a second language instruction, industry-specific certification, workforce development, dual credit programs with high schools, and, in some cases, baccalaureate degrees. Additionally, community colleges serve as both an entry point to postsecondary education and a re-entry point to higher education for mid-career adults seeking a new or expanded skill set.

### Early Childhood Programmatic Offerings at Community Colleges

Across the United States there are 1,047 public community colleges.<sup>5</sup> More than 75 percent of these community colleges have an early childhood or family studies program.<sup>6</sup>

Community college early childhood education programs play a number of roles. They serve as entry points for students hoping to pursue a bachelor's degree, they provide mid-career early childhood workers with trainings, and they serve local early childhood

education (ECE) community needs. Most community colleges offer at least one of three distinct types of credentials and courses of study relevant to early childhood educators:

- 1 certificates focused on preparing professionals for specific roles,
- 2 terminal associate degrees in early childhood education, and
- 3 associate degrees that allow students to transfer into a four-year child development or elementary education teaching program.

Some community colleges also offer applied bachelor's degrees and post-baccalaureate or alternative certification programs, although these are much less common than certificates and associate degrees. Additionally, early childhood departments at community colleges often provide professional development for local ECE programs and serve other community-based roles.

The following paragraphs provide more information about each of these types of credentials or other programmatic offerings.

### **Certificates Focused on Preparing Professionals for Specific Roles**

Most community colleges offer an array of certificates for those working in early childhood, including the nationally recognized Child Development Associate (CDA) credential, state-specific professional certificates that are analogous to the CDA (e.g., California confers a Child Development permit), as well as certificates for specific roles including early childhood program directors, child care workers, paraeducators, and home visitors. Although the CDA was initially developed outside of higher education and can be earned from non-higher education providers, the CDA Professional Preparation Program allows candidates to complete the CDA through a combination of community college courses and fieldwork. One survey found that 80 percent of associate degree programs in early childhood education offer the CDA or other non-degree certificates.<sup>7</sup>

### **Terminal Associate Degrees**

Terminal associate degrees are associate degrees that were intended to enable individuals to meet training requirements for certain jobs, rather than prepare them to transfer to a baccalaureate program. Many associate degree programs in early childhood education were developed to serve teachers who needed to obtain an associate degree to meet state or federal regulatory requirements. In 1998, Congress passed legislation requiring half of all teachers in federally funded Head Start programs to have an associate degree by 2003 (a requirement that was increased in 2007 to require all Head Start lead teachers to have an associate degree and half to have a bachelor's degree by 2013).<sup>8</sup> Many states require center directors in licensed child care programs to hold an associate degree, and five states require teachers to have an associate degree to work in state-funded pre-k programs.<sup>9</sup> When most early childhood associate degree programs were established, they were viewed as

the end of a pathway and thus administrators designing these programs rarely considered the possibility of transfer. This expectation is changing, however, as requirements for teachers in publicly funded preschool programs have increased. But the legacy of design choices made when these programs were established continues to complicate efforts to make them an on-ramp for further postsecondary education. Programs designed as terminal associate degrees typically focus on skills and content relevant to working in early childhood programs, and include fewer general education courses than most courses of study designed to articulate to four-year baccalaureate programs. If a program awards an Associate of Arts, Associate of Science, or Associate of Applied Science in early childhood education, this often signifies that the program was designed as a terminal degree program.

### **Associate Degrees That Transfer**

While many community college associate degree programs in early childhood are designed to be terminal degrees, some associate degrees in early childhood education are intended to transfer. Washington state, for example, created an Associate of Applied Science–Technical (A.A.S.T.) degree in early childhood education that prepares students for immediate employment while also allowing them to transfer to a four-year institution’s children’s studies department.<sup>10</sup>

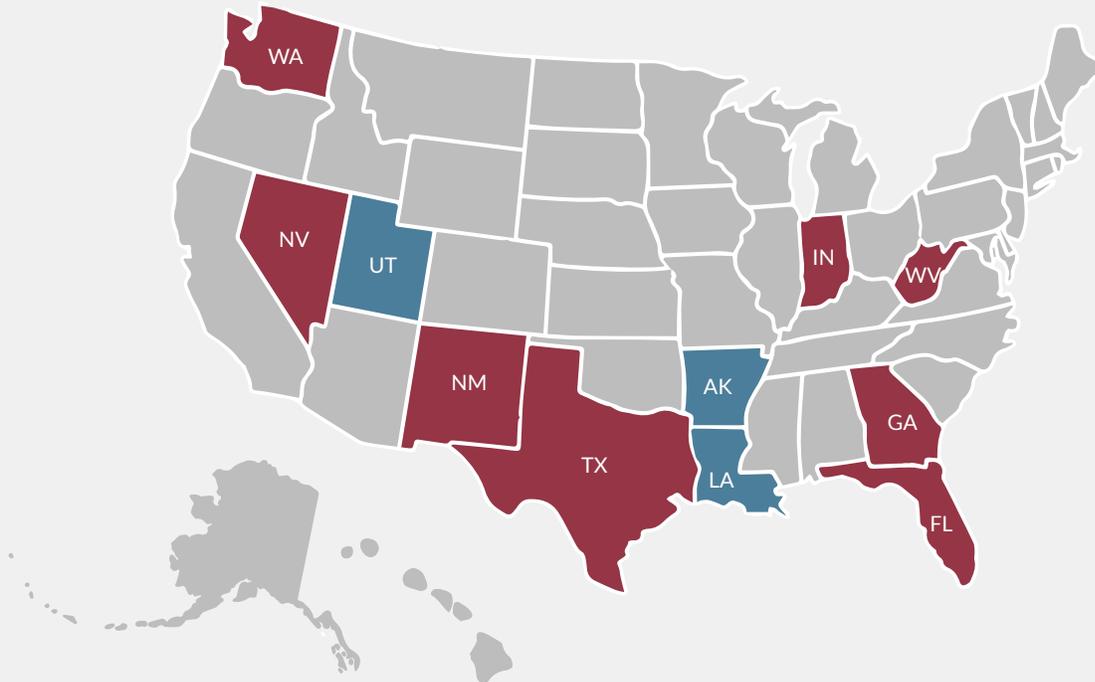
Many community colleges also offer Associate of Arts in Teaching (A.A.T.) degrees for students who wish to go on to earn a bachelor’s degree and state certification to teach in the public education system. In the last two decades, 15 states have developed a statewide Associate of Arts in Teacher Education (A.A.T.) with the goal of aligning systemic pathways for students who begin at community colleges and desire to become teachers.<sup>11</sup> The A.A.T. is intended to provide students with their core requirements (usually 60 undergraduate courses) and education major prerequisites before they transfer to a four-year education school to complete their upper-level requirements. Ideally, these programs also offer support to facilitate successful transfer to a four-year partner institution.

In the 32 states that require lead teachers in state-funded pre-k programs to hold both a bachelor’s degree<sup>12</sup> and state teacher certification, an A.A.T. degree offers the most expeditious pathway for early childhood educators who enroll at community colleges seeking to become qualified to work in pre-k classrooms. Because the A.A.T. requirements typically focus on core requirements and education prerequisites, most programs include relatively little coursework focused on child development or skills that early childhood educators can use in their current classrooms. As a result, early childhood educators may enroll in terminal associate degree programs that are more relevant to their current roles, only to learn that credits earned in such programs may not transfer to meet requirements for a teaching certificate.

Figure 1

## States that Allow Community Colleges to Offer Bachelor's Degrees in Education or Early Childhood Education

- Currently allow certain community colleges to offer bachelor's degree in Education or ECE
- Previously authorized limited number of community colleges to offer bachelor's degrees in Education



Source: The Community College Baccalaureate Association, "Baccalaureate Conferring Institutions," <http://www.accbd.org/wp-content/uploads/2013/10/Conferring-Institutions.pdf?ct=US&stp=CO>.

### Bachelor's Degrees

States generally prohibit community colleges from granting baccalaureate degrees. However, since the 1990s, a number of states have enacted legislation allowing at least some community colleges to offer bachelor's degrees in high-need subjects. Currently, 23 states allow community colleges to award bachelor's degrees in specific subject areas.<sup>13</sup> Eight states allow community colleges to award bachelor's degrees in education.<sup>14</sup> Seventeen community colleges in five states currently offer a bachelor's degree in early childhood education.<sup>15</sup> The majority of these programs are in Florida.<sup>16</sup>

### Post-Baccalaureate/Alternative Teacher Certification

Forty-eight states and Washington, D.C. allow teachers to complete alternative routes to certification.<sup>17</sup> Community colleges in a number of states offer post-baccalaureate or alternative certification programs that allow individuals who already hold a bachelor's degree

to complete the required courses for teacher licensure. Some of these programs provide coursework on a non-credit basis, whereas others provide individuals the opportunity to apply the credits earned towards a master's degree through a four-year partner. For example, Rio Salado, one of the schools in the Maricopa Community College District in Arizona, provides candidates with the opportunity to receive master's credit through university partners. The majority of community college post-baccalaureate or alternative teacher certification programs are in Arizona,<sup>18</sup> Florida,<sup>19</sup> New Jersey,<sup>20</sup> Nevada,<sup>21</sup> New Mexico,<sup>22</sup> and Texas.<sup>23</sup>

## Professional Development

Professional development is another avenue through which community colleges prepare and train early childhood educators. Most community college early childhood departments provide professional development geared to address specific needs of the local community. In fact, many provide free or low-cost customized professional trainings to school districts and child care centers. Additionally, in some communities, the community college provides facilities as well as expertise.

## Early Childhood Education Students at Community Colleges

Community colleges serve a large proportion of minority, low-income, first-generation, and adult students who face many challenges in their pursuit of educational success.<sup>24</sup> Community college students tend to be older than traditional undergraduate students and more likely to have a full-time job.<sup>25</sup> Twenty-two percent of full-time community college students work full time and 40 percent of full-time community college students work part time.<sup>26</sup> Community college students are also more likely to have familial responsibilities. Seventeen percent are single parents.<sup>27</sup>

While there is some broad demographic information available about the early childhood workforce, there is little national data about students enrolled in community college early childhood programs. The early childhood workforce is almost exclusively female, and the racial and ethnic profile of the workforce varies depending on setting and within setting by role.<sup>28</sup> Child care workers are disproportionately women of color.<sup>29</sup> Approximately two-thirds of child care workers have children present in their homes and at least 17 percent are single mothers.<sup>30</sup> Last year, 46 percent of child care workers were enrolled in at least one public safety net program, compared with 26 percent of those in the broader workforce.<sup>31</sup>

Most early childhood students choose community college programs because they cannot leave their jobs and familial responsibilities to attend a full-time university. In fact, most early childhood education students work full time while pursuing education, which research shows can negatively affect college outcomes including grades, time to degree, and degree attainment.<sup>32</sup> Working students often choose to enroll in school part time, which lengthens their time to completion. The need to balance coursework with full-time

*Most early childhood students choose community college programs because they cannot leave their jobs and familial responsibilities to attend a full-time university.*

employment also limits the number and variety of classes students can take and the community college supports they can access.

In addition to school and work, many early childhood students are also juggling parenting and other familial responsibilities.<sup>33</sup> Forty-three percent of women at two-year colleges who live with dependents say that they are likely or very likely to drop out of school due to their dependent care obligations.<sup>34</sup> Ironically, women who work full time caring for other people's children may find child care a major barrier to their ability to pursue postsecondary coursework. Few community college campuses offer child care, and the number that do so has declined over the last decade even as the number of traditional students has increased.<sup>35</sup>

Beyond the logistical challenges in enrolling in full-time four-year programs, many current child care workers also choose community colleges because they may not meet four-year or education school requirements. ECE students often lack basic skills to succeed in college courses and must enroll in remedial education courses. Roughly 60 percent of students at community colleges take at least one remedial course.<sup>36</sup> This depletes students' financial aid eligibility, even though they receive no college credit, and increases students' time to completion. For early childhood educators seeking to improve their skills, the need to take remedial coursework in basic skills before enrolling in early childhood-focused courses can be an additional barrier that undermines students' confidence and motivation.

Early childhood educators who are not native English speakers face additional challenges to earning postsecondary credentials. The foreign-born share of the early childhood education and care workforce has grown rapidly, doubling between 1990 and 2015.<sup>37</sup> Currently, at least 18 percent of the nation's early childhood education and care workforce are immigrants.<sup>38</sup> Moreover, 54 percent of these foreign-born workers are limited English proficient.<sup>39</sup> As the population of young children becomes increasingly linguistically diverse—32 percent of children under age 5 live in a home where a language other than English is spoken<sup>40</sup>—cultivating a supply of qualified teachers who speak children's home languages is important for the early childhood field. But non-native English speakers often face major challenges in trying to complete college-level work in English.<sup>41</sup> Community colleges often require students to demonstrate a certain level of proficiency in ESL and adult basic education before they are admitted to credited classes. The sequential and standard nature of these ESL courses lead non-native speakers to spend many years in unrelated classes before they can accumulate credits towards a degree in ECE.

Finally, early childhood education students face significant financial barriers as they pursue higher education. Although the federal government spends about \$32.9 billion annually on Pell grants, student loans, and other forms of financial assistance for higher education,<sup>42</sup> current policies often block nontraditional students, including many early childhood education students, from accessing the full amount of aid they need to fund their education.<sup>43</sup> The calculations used to determine eligibility for financial assistance assume that the average college student has relatively small earnings (e.g., from a summer

*Early childhood educators who are not native English speakers face additional challenges to earning postsecondary credentials.*

job), that the earnings will remain constant, and that these earnings can be allocated to cover education expenses. These assumptions both overstate nontraditional students' ability to pay for education and underestimate their financial need.<sup>44</sup> Moreover, federal student loan criteria penalize older students like early childhood workers by requiring enrollment in at least six credits a semester.<sup>45</sup> Many early childhood education students who enroll in one course at a time are therefore unable to obtain federal financial aid.

*Without the promise of higher wages, it makes little sense for students with financial insecurity to take on financial debt to fund higher education.*

Early childhood educators are also reluctant to take out student loans to pay for postsecondary education, because pay for early childhood educators is low and earning postsecondary credentials does not necessarily lead to significant compensation increases.<sup>46</sup> Without the promise of higher wages, it makes little sense for students with financial insecurity to take on financial debt to fund higher education. While a variety of state and federal programs offer loan forgiveness for K-12 teachers, most ECE students are not eligible for these programs. The federal Teacher Loan Forgiveness Program, for example, is available to teachers in public school pre-k settings, but not to those who work in Head Start or community child care.<sup>47</sup> Similarly, most of the 15 state programs that offer loan forgiveness to teachers in public schools do not include early educators who work in non-public settings.<sup>48</sup> Maine is currently the only state that provides loan forgiveness to students pursuing careers in early education or child care through its Educators of Maine Program.<sup>49</sup> Some early educators who work for nonprofits or local districts could be eligible for the Public Service Loan Forgiveness (PSLF) program, but the program requires at least ten years of payments before debts are forgiven and educators who are eligible would have to pay taxes on the amount forgiven as income.

ECE students also struggle to pay for travel, books, and other family expenses. Personal financial emergencies can often lead students to drop out of higher education. Students may step away from a program due to the birth of a child, familial responsibilities, or other financial hardship and later return to their schooling, ultimately taking 8-15 years to complete a two-year degree.<sup>50</sup>

Students enrolled in community college early childhood programs have great assets to contribute to the early childhood field: Experienced child care workers have skills and expertise in working with young children that formal coursework can enhance. And the early childhood field desperately needs more qualified teachers who reflect the cultural and ethnic diversity of young children. For these students, community colleges are a crucial educational option. But policymakers and advocates who see community colleges as a potential asset for increasing the supply of well-trained early educators must also take into account the challenges facing community college early childhood education students—both those currently working in early childhood education and those seeking to become early childhood educators. The characteristics of students and the types of barriers they face also provide important context for understanding and assessing the outcomes of community college early childhood programs.

## Community College Early Childhood Program Outcomes

Community colleges offer a variety of courses of study related to early childhood education, many of which serve students that face significant challenges to successful completion. But what do we know about the results of these programs? Unfortunately, not as much as we should. Limitations in existing data collection make it difficult to accurately assess the rate at which community college early childhood students complete their intended courses of study or how long it takes them to do so. Information on program quality is limited. And we know even less about how or whether these programs are improving the quality of teaching in their students' classrooms or the learning outcomes of children in their care.

### Completion and Degree Attainment

The federal government's Integrated Postsecondary Education Data System (IPEDS) tracks information on postsecondary enrollment and outcomes for students enrolled in postsecondary institutions. But this data source has limitations that make it problematic for evaluating early childhood associate degree program completion rates and quality. Until recently, the traditional graduation rate reported in IPEDS included completion data only for "traditional" or first-time students enrolled in a full-time course load, meaning that it excluded nontraditional students and those enrolled part time—in other words, most early childhood students—as well as students who take time away from school or transfer.<sup>51</sup> As a result, graduation rates reported for early childhood programs presented an inaccurate or incomplete picture of actual student outcomes in these programs.

In October of 2017 the Education Department's National Center for Education Statistics revamped IPEDS to include completion data for part-time and non-first-time students at every two- and four-year degree or certificate-granting institution.<sup>52</sup> This additional data point provides a more accurate picture of outcomes for students enrolled in community college early childhood associate degree programs. However, although the updated IPEDS system now provides graduation rates on students who transfer into an institution, it doesn't reveal where those students transferred from. This means the data cannot be used to identify community colleges or programs that are more successful at preparing students for eventual bachelor's degree completion. Moreover, it is still impossible to examine and evaluate student-level outcomes due to a statutory ban on a federal data system that tracks individual employment and graduation outcomes of college students adopted during the 2008 reauthorization of the Higher Education Act. This ban presents major roadblocks in understanding student-level data on student completion.

In addition to federal data collection, most early childhood programs track the total number of students enrolled in early childhood coursework and the number of graduates from each program annually. Few programs track how long it takes students to complete

*Although accurate data is not available on the percentage of students nationally who successfully complete community college early childhood programs, available data on overall community college graduation rates paints a sobering picture.*

their credential or degree, however, and few have the capacity to track results for students who frequently start or stop their education or transfer between institutions. As a result, many community colleges aren't collecting or tracking the data they need to accurately assess performance of their early childhood programs, identify common challenges or barriers that hinder student success, identify program practices or student characteristics that predict success, and inform development of targeted strategies to improve student retention, completion, and learning outcomes.

Although accurate data is not available on the percentage of students nationally who successfully complete community college early childhood programs, available data on overall community college graduation rates paints a sobering picture. Only 38 percent of community college students (including part-time students) complete a degree program within six years.<sup>53</sup> An additional 17 percent are still enrolled in a community college or four-year institution after six years.<sup>54</sup> And students who start at a community college are less likely to eventually obtain a bachelor's degree. Only 14 percent of students who entered a community college in 2007 transferred and earned a four-year degree within six years.<sup>55</sup>

## Quality

There is very little data or information on the quality of different early childhood education teacher preparation programs. Most information about the field relies on surveys of higher education programs that utilize self-reported data.<sup>56</sup> Research has revealed substantial variability among required coursework across associate degree programs.<sup>57</sup> Furthermore, most programs prepare students to work with a wide age range and therefore may not provide the adequate depth of coverage for each age group.<sup>58</sup>

In the absence of more robust data about program quality or outcomes, accreditation by the National Association for the Education of Young Children (NAEYC) offers one proxy for program quality. NAEYC accredits early childhood professional preparation programs at the associate, baccalaureate, and master's degree levels based on how well each program meets the NAEYC Professional Preparation Standards. NAEYC's Professional Preparation Standards express a national vision for the core knowledge, understanding, and methods early childhood professionals should have across various settings and professional roles. It includes six core standards that all early childhood professionals should know and be able to do: promote child development and learning; build family and community relationships; observe, document, and assess young children; use developmentally effective approaches to connect with children; use content knowledge to build meaningful curriculum; and conduct themselves like professionals.<sup>59</sup> Currently, 181 associate degree programs in 35 states have received NAEYC Early Childhood Associate degree accreditation.<sup>60</sup> At least four states (Colorado, North Carolina, Michigan, and Rhode Island) have set up programs to incentivize community college

ECE programs to pursue NAEYC accreditation.<sup>61</sup> Incentivizing NAEYC accreditation encourages programs to adopt more uniform standards and can help colleges strengthen their programs through self-study and external review from teams from other states.<sup>62</sup> But less than one-quarter of community colleges offering early childhood or family studies programs hold NAEYC accreditation.

Experts in the field also raise a variety of concerns about quality in community college early childhood programs. Faculty capacity and diversity is one area of concern. Most surveys of the field demonstrate that two-year programs have very few full-time staff members and rely heavily on adjunct faculty.<sup>63</sup> This can lead to inconsistent teaching practices, long work hours, high administrative loads, low salaries, and limited opportunities for guidance and mentorship for students.<sup>64</sup>

Early childhood faculty also do not reflect the diversity of their students, or the children those students are preparing to care for and educate.<sup>65</sup> For example, recent studies examining early childhood education programs in California and New York found that the faculty in these programs were much less ethnically and linguistically diverse as a group than their student populations.<sup>66</sup> This lack of diversity may undermine programs' abilities to prepare teachers who are culturally responsive to the children they serve.

Advising capacity is another challenge. Many community college campuses do not fund program-specific advisers and have high general student-to-adviser ratios—sometimes as high as 1,600 to 1.<sup>67</sup> This makes it harder for early childhood education students to access individualized and informed advising. Without such advising, students may select courses that don't contribute to meeting degree requirements for their course of study and as a result take longer to complete a degree.

Experts have also raised concerns about the quality of students' learning experiences in two-year early childhood programs. Quality teacher preparation programs typically include a combination of formal coursework, in which students acquire knowledge of content and child development, and clinical experiences, which enable students to observe classrooms and practice implementing teaching skills. Very little is known about how two-year programs execute these components of their programs.<sup>68</sup> Survey research suggests that program coursework does not include a full array of content for children across the birth-to-age-8 spectrum<sup>69</sup> and that the content of two-year programs differs significantly from that of four-year programs.<sup>70</sup> One study found that two-year programs focus more on practices (i.e., program and classroom management) and that four-year programs focus more on academic instruction, literacy, and assessment.<sup>71</sup>

There is limited data available regarding the characteristics of field experiences in associate degree programs. There is no uniform standard of field experience for teachers working with children under 5 like the student teaching requirement for K-12 teachers. Research suggests that associate degree programs have different requirements than

*Very little is known about how two-year programs execute the formal coursework and clinical experiences that comprise their programs.*

bachelor's degree programs, provide less intensive field experiences, and utilize different settings for placements. Most associate degree programs require students to complete one or more practicum courses in lieu of student teaching.<sup>72</sup> Practicum courses often focus on a particular population of children or a particular skill and are usually supervised by a faculty member or mentor.

Programs often face a dilemma in designing practicum requirements: If they want to ensure that students have opportunities to observe quality teaching practices with children in a variety of age groups, they need to require students to complete practicum experiences in settings that meet high-quality standards and serve children in a variety of age ranges. Yet doing so creates an obstacle for early childhood educators who are currently working in the field, many of whom are in low-quality settings. In addition, most early childhood educators work in classrooms with children in one age range: infants, toddlers, or preschoolers, which means they have limited experience to observe children of different ages as part of their employment. To complete practicum experiences in high-quality settings or with children of varying ages, these students would need to take time off from their jobs—a significant barrier for current early childhood workers who need to work full time and often don't have paid time off.<sup>73</sup> Programs can reduce barriers for such students by allowing them to complete their practicum in their place of employment, but this might result in a lower-quality learning experience. In general, two-year programs are more likely to use Head Start, community-based child care, and family child care as placement settings as opposed to school-based pre-k classrooms.<sup>74</sup> Surveys of the field also suggest that two-year programs face significant challenges identifying appropriate and high-quality placements, and ensuring adequate supervision.

### **Impacts on Teaching Practice and Children's Learning**

Very little research has focused on the impact of higher education programs on graduates' knowledge, skills, and classroom practices, let alone the learning outcomes for children taught by program graduates. Research suggests that teachers with some formal postsecondary training in early childhood education have better classroom quality than those with only a high school diploma.<sup>75</sup> But there is very little research that specifically focuses on teaching practices or child learning outcomes for early educators who complete two-year degree programs. There is almost no research comparing practices or classroom quality of teachers who completed different types of two-year degree programs (e.g., a terminal associate degree vs. a two-year degree that transfers) and few studies examining the results for early educators who attended specific institutions. And there is little research guidance on the best balance between ECE and general education coursework or the characteristics of strong field experiences in early childhood teacher preparation. Moreover, few early childhood preparation programs—at the two- or four-year level—have formal mechanisms to measure improvement in students' teaching practice during the program or to track their employment in the field, teaching practices, classroom quality, or

child learning outcomes after they graduate. Even with an emerging number of researchers focusing on the effects of early childhood education, and repeated calls for a closer analysis of the relative quality of higher education programs, there remains little research evidence on most of the critical issues in early childhood teacher preparation.<sup>76</sup> (A forthcoming Bellwether paper will offer recommendations for strengthening the research base on effective early childhood teacher preparation practices.)

## **Broader Higher Education Policy Landscape**

Broader higher education policy trends, such as gainful employment rules and performance-based financing systems, also affect early childhood education preparation programs. Although both of these policies were designed to hold postsecondary institutions accountable for their results, and to ensure that they are good investments for students, they may unintentionally penalize institutions for offering early childhood and other credential or degree programs that prepare students for socially important but low-paid jobs such as those in early childhood or health fields.

In 2010, the U.S. Department of Education issued “gainful employment” regulations, which seek to hold “career oriented” postsecondary programs accountable for graduates’ ability to afford the debt they have taken on. This policy was designed to ensure career education and for-profit programs were worthwhile investments for students who chose to attend them. The department collects data on the number of students who graduated on time, the percentage of students who borrowed to complete the program, typical student loan debt, and graduates’ post-college earnings for programs offered by private and for-profit providers, as well as all certificate programs offered by public institutions. The department set a series of thresholds on debt-to-earnings ratios, and institutions that fail these thresholds for two out of three consecutive years or are in a middle zone for any three out of four consecutive years no longer qualify for the use of federal loans and Pell grants.<sup>77</sup> According to a 2017 Department of Education report, nearly one in ten programs assessed under the rule failed to meet passing criteria.<sup>78</sup>

State-level performance-based funding policies also affect early childhood programs. In recent years, 32 states have adopted performance-based or outcomes-based funding policies for their public institutions of higher education, and 26 of these states adopted performance-based funding at community colleges.<sup>79</sup> Under a performance-based funding scheme, states allocate a portion of funding based on performance indicators such as course completion, time to degree, transfer rates, the number of degrees awarded, or the number of low-income and minority graduates. Performance-based funding presents a number of challenges for early childhood education two-year programs. Research suggests that performance-based funding may encourage resource-dependent colleges to enroll students who are more likely to graduate and may ultimately decrease the percent enrollment of underserved minority students.<sup>80</sup>

Moreover, performance-based funding regimes that focus on student wages or labor outcomes are likely to make programs that prepare students for careers in socially crucial but low-paid sectors, such as early childhood, some health professions, and social work, seem like a liability due to their low labor market returns. There is already some evidence that certain states have reduced funding for institutions offering early childhood degree programs, closed individual ECE degree programs, and reduced credit hours for ECE associate degree programs.<sup>81</sup>

Policymakers and advocates who seek to encourage community colleges to train more early childhood educators must be aware of these policy trends, and the incentives they create for institutions.

### **Economic Incentives (or Lack Thereof)**

Both gainful employment and performance-based funding systems point to a larger challenge to increasing the supply of well-prepared early childhood educators. Low compensation for early childhood educators is a major obstacle to elevating the skills of current early childhood workers and increasing the supply of well-prepared teachers. Even if community colleges offer a more accessible and affordable postsecondary option for early childhood workers, expanding or improving community college early childhood options is not a substitute for addressing the broader labor market issues in play.

Transforming the early childhood workforce at scale will require increasing compensation levels and ensuring that increased training and/or improved teaching practice provide a pathway to higher pay. Efforts to increase compensation for early childhood teachers and child care workers have met many impediments, however. Only ten states compensate teachers in state-funded pre-k programs on par with K-12 public school teachers.<sup>82</sup> Pay disparities for teachers in Head Start and community-based child care settings are even greater.

Given that staff compensation is by far the largest expense in many child care centers' budgets, programs have limited ability to substantially increase compensation without raising costs for families—which are already a major burden to many working and middle-class parents. Strategies such as shared services, which improve the business operations of child care programs and allow them to benefit from economies of scale, can generate efficiencies that enable providers to increase the compensation of early childhood teachers—but not necessarily enough to make early childhood teaching an attractive field for highly trained teachers.

There is a need for innovative problem-solving to identify viable and sustainable mechanisms for increasing early childhood educator compensation, as well as sound analysis of the levels of compensation needed to make early childhood teaching a competitive employment prospect for educators at all stages along a career pathway that encompasses multiple levels of training and education.

*Low compensation for early childhood educators is a major obstacle to elevating the skills of current early childhood workers and increasing the supply of well-prepared teachers.*

## Maximizing the Potential of Community College Early Childhood Preparation: Envisioning a Path Forward

The preceding section described the types of programs and training that community colleges offer current and prospective early childhood educators, the characteristics of students enrolled in these programs, and the challenges that community college early childhood programs face. The following section highlights a variety of strategies that institutions and states are implementing to eliminate barriers to success in two-year early childhood programs and support successful transition to four-year institutions. These strategies offer models for other institutions and states seeking to leverage the assets that community colleges offer to improve current early educators' knowledge, skills, and credentials, and to grow the supply of qualified, diverse early childhood teachers.

To make the most of these strategies, however, state policymakers must first have a clear understanding of the various roles that community colleges currently play in developing the early childhood workforce, the state's early childhood workforce goals, and the roles they want community colleges to play in achieving those goals.

As more early childhood leaders advocate bachelor's degrees for all lead teachers of children birth to 8 (consistent with the National Academy of Medicine's *Transforming the Workforce for Children Birth Through Age 8: A Unifying Foundation*),<sup>83</sup> there has been increased interest in how community colleges can contribute to increasing the number of lead teachers with bachelor's degrees. A narrow focus on this goal, however, obscures the full scope of services community colleges offer current and prospective early childhood educators and employers. In many ways, focusing on using community colleges to increase bachelor's completion is in direct tension with the distinct needs other early childhood

programs address. The variety of credentials that community colleges offer early childhood educators—from CDAs, to certificates, to terminal associate degrees—provides value to the field. Given that no states currently require infant/toddler teachers or assistant pre-k teachers to have a bachelor’s degree, and ratio requirements result in most classrooms employing at least one assistant teacher, the associate degree or CDA will continue to be crucial. In many states, new early childhood teachers often start out with a CDA or a state-mandated certificate that is the bottom of the states’ stackable pathway, and then go on to complete additional training and coursework. In many states, these teachers may move up the career ladder without pursuing a formal bachelor’s degree. Therefore, credential and associate degree programs still need to be high-quality programs that ensure students receive the skills they need to be effective. These programs must also continue to evolve as the demands of the early childhood education field change and expand. As a result, this paper offers recommendations both for (1) improving quality of and access to traditional community college early childhood offerings, and (2) enabling more community college students to continue on to earn four-year degrees.

## **Promising Strategies for Improving Access and Completion in Community College Early Childhood Programs**

Community colleges and states have adopted a variety of promising practices to reduce barriers that current and prospective early educators face to accessing postsecondary education, and help them successfully complete degrees and credentials. Scheduling accommodations, online programs, supports for English language learners, new approaches to remedial education, and financial assistance can all reduce barriers facing early childhood educators. Improved advising and cohort models can also contribute to higher rates of successful completion and articulation to four-year degree programs.

### **Offering Coursework in Times and Places That Are Accessible to Early Childhood Educators**

Many early childhood programs have adopted scheduling accommodations to ensure students can attend classes while juggling work and familial responsibilities. For example, the Central New Mexico Community College ECE program in Albuquerque, New Mexico, has adopted student centered-scheduling.<sup>84</sup> All classes are available one night a week, in order to decrease the amount of time students spend away from their families. Additionally, while the majority of the program’s classes start at 6 p.m. to accommodate those working during the day, the program offers a morning section for child care workers who work in the afternoon or evening.<sup>85</sup> The program also offers Saturday classes for those who are unable to attend during the week.

Many ECE community college programs have adopted weekend classes to accommodate students. At Bronx Manhattan Community College (BMCC) in New York City, every class offered during the weekday has at least one section offered on evenings and weekends.<sup>86</sup>



## Rio Salado Community College, Online Learning Pioneer

Rio Salado in Tempe, Ariz., was one of the first early childhood programs to embrace online coursework. Rio Salado was established by the Maricopa Community College District's governing board in 1978. By 1996, Rio Salado was the first community college to move completely online. Rio Salado has 40 start dates a year instead of a regular fall, spring, and summer semester schedule. With multiple start dates, students in the same course can start at different times and work at their own pace and timeline. Rio Salado provides student support services—tutoring, library services, and counseling-online as well.

BMCC has classes on Saturdays and Sundays and as late as 10 p.m.<sup>87</sup> Some community college ECE programs also provide classes in community locations to help students who may have trouble driving to campus. For example, De Anza Community College in Silicon Valley, Calif., offers classes at community sites in order to remove transportation as a possible barrier.<sup>88</sup>

Additionally, a number of early childhood programs have adopted part-time or completely online programs to accommodate students who work and/or can't leave their children for night classes. It's unclear exactly how many community college early childhood education programs utilize online courses.<sup>89</sup> A national review of distance learning programs in early childhood professional development found that 27 of 73 surveyed educational institutions offered online coursework leading to the associate degree.<sup>90</sup> Moreover, according to IPEDS data, 58 community colleges offer an online associate degree in early childhood education.<sup>91</sup> Research regarding low-income students and online courses is somewhat mixed,<sup>92</sup> but the flexibility of online courses may make them more accessible to early childhood educators who face transportation or scheduling barriers to accessing traditional in-person courses.<sup>93</sup>

### Flexibility in Practicum Experiences

Practicum requirements can also create barriers for early childhood educators. Many associate degree programs require students to complete practicum placements in a variety of settings that serve children of different age levels and/or in programs that are deemed to be high quality. However, early childhood education students who are already working in the field may struggle to complete practicum placements outside of their current place of employment. Many early childhood degree programs allow early educators already working in the field to complete all or some of their practicum requirements in their current place of employment.

Some individual programs have developed ways to address the specific challenges practicum programs present. For example, Stanly Community College is a fully online program with students from across North Carolina. This program allows most students to

complete their practicum in their place of employment, as long as their center is rated three stars on North Carolina's QRIS system. The community college contracts with individuals across the state so students can be observed in their place of employment and are not forced to lose working hours.

Moreover, the NAEYC accreditation field experience requirement has been designed to balance a student's need to hold her job and income, the need of the children in the student's classroom for stability, and concerns about the quality of field experiences. NAEYC field experiences are designed to support a birth through age 8 experience across multiple program settings (child care, Head Start, and early grades) and to allow most field work to take place at the student's worksite with some time in other age groups and other programs and with additional supports for quality learning experiences when a student's work site is not high quality.

### **Rethinking Remedial Education**

As noted above, the need to complete remedial or developmental education prior to entering credit-bearing coursework can be a major barrier to postsecondary education for many early educators—particularly those who have been in the workforce for many years and have not been enrolled in school in a long time. Several community colleges are experimenting with new ways to better serve students in need of developmental education.

Integrated Basic Skills Training, or I-BEST, is one such model. This model originated in Washington state. The Washington State Board for Community and Technical Colleges (SBTC) developed the model in partnership with the state's 29 community colleges and five technical colleges.<sup>94</sup> In the I-BEST model, a community college can accelerate coursework for low-skilled adults by integrating adult basic education and career technical education through team-taught classes. The goal of I-BEST is to increase the rate at which students with lower academic skills are able to succeed in college-level coursework. Early childhood education was one of the program areas in the initial demonstration project piloted at 10 community and technical colleges in 2004. I-BEST has since been implemented across all 34 colleges in the Washington community college and technical system, including 22 early childhood education programs.<sup>95</sup> Several community colleges in New Mexico have also adopted the I-BEST model in their early childhood education programs. In 2012, a consortium of New Mexico community colleges received funding from the U.S. Department of Labor's Trade Adjustment Assistance Community College and Career Training grant program to create I-BEST programs across a number of majors, including early childhood education.<sup>96</sup> At Central New Mexico Community College, the I-BEST program pairs the first early childhood education course with English as a second language (ESL) instruction. An examination of I-BEST students in Washington found that I-BEST students earned substantially more college credits than their peers, were much more likely to earn an award, and were moderately more likely to achieve a basic skills gain.<sup>97</sup>

*An examination of I-BEST students in Washington found that I-BEST students earned substantially more college credits than their peers, were much more likely to earn an award, and were moderately more likely to achieve a basic skills gain.*

## Promising Practices: T.E.A.C.H. and WAGE\$

T.E.A.C.H. is a three-way partnership among the program, the student, and the student's employer. Under the standard program, a student commits to taking 8-15 credit hours per year and staying with their employer at least a year after the contract. At the end of the contract year, T.E.A.C.H. and the employer both pay the student.

T.E.A.C.H. scholarships provide robust economic supports (tuition and book assistance, paid leave time, internet and/or travel stipend, and completion bonus) as well as individual counselors for each student.

Another national model for implementing state-sponsored incentive programs is the Child Care WAGE\$ Project, which was developed by the creators of T.E.A.C.H. WAGE\$ provides salary stipends to teachers who obtain higher education. Participating educators receive income supplements every six months as long as they remain with the same employer. However, only five states have adopted this model. Currently, only 14 states provide a statewide wage stipend program analogous to WAGE\$ and two states provide tax credits to ECE teachers.

Oregon's Pathways for Adult Basic Skills Transition to Education and Work Initiative (OPABS) is another model. Oregon's Department of Community Colleges and Workforce Development launched the program in 2006 with the goal of transforming the delivery of adult basic skills (ABS) education in the state.<sup>98</sup> Since then, adult basic education/ESL bridge curricula have been introduced for 15 new career pathways, including early childhood education. Lane Community College and Rogue Community College's early childhood education programs have both developed ABS support courses providing contextualized basic skills instruction.<sup>99</sup>

Wisconsin's Technical College System has developed a similar approach for offering blended or contextualized early childhood education courses that are team-taught by early childhood education (ECE) instructors and Adult Basic Education (ABE) instructors.<sup>100</sup> Students can be dual enrolled ABE/ECE students and are allowed to enroll in credit-bearing coursework even when they don't make the school's required test score cutoff. One community college offering this program, Nicolet Community College, has seen a 90 percent increase in adult basic education students' reading and writing levels.<sup>101</sup>

### Supporting Students Who Are English Language Learners

As noted above, demographic changes in the population of children under 5 have increased the need for a diverse, well-trained early childhood workforce that can deliver linguistically and culturally competent care. For example, one in three children enrolled in Head Start is classified as a dual language learner.<sup>102</sup> Recognizing the need to better support development of an increasingly linguistically diverse population of children, the latest

*Community colleges can play an important role in supporting postsecondary access for the many early childhood workers who speak a language other than English.*

Head Start Performance Standards set forth a variety of requirements related to serving dual language learners.<sup>103</sup> These requirements, which reflect research on young children's language and literacy development, will require significant increases in programs' capacity to serve dual language learners. As a result, there is a need to build the skills of early childhood workers who speak languages other than English.

Community colleges can play an important role in supporting postsecondary access for the many early childhood workers who speak a language other than English. A small number of community colleges have adopted coursework in languages other than English or bilingual instruction in early childhood education programs. For example, De Anza Community College has been providing child development courses taught in Spanish since 2004.<sup>104</sup> Before 2004, the De Anza Child Development and Education Department worked with local county agencies to modify their program to help Spanish-speaking students achieve success. This includes scholarships for college fees and supplies, and classes taught in community sites so transportation would not be a challenge.<sup>105</sup> Central New Mexico Community College is another program that has modified its program to meet community needs. CNMCC offers its entire associate degree program in Spanish. Almost 50 percent of its total program population is enrolled in Spanish early childhood courses.<sup>106</sup> Milwaukee Area Technical College is the only program in Wisconsin that offers its entire associate degree in early childhood education in Spanish.<sup>107</sup> The City College of San Francisco offers its 12 core child development courses in Spanish, Cantonese, and Mandarin and offers advising in English, Cantonese, Mandarin, Spanish, and Vietnamese.<sup>108</sup>

### **Providing Financial Assistance**

A number of states utilize scholarships and bonus incentives to increase ECE student degree attainment and reduce the financial burden ECE students face. Yet these funding sources are not sufficient to cover the majority of early childhood educators currently pursuing higher education, let alone those who would be interested in furthering their education if additional financial support were available. Twenty-three states offer T.E.A.C.H. scholarships for current early childhood educators pursuing postsecondary education. In 2016, the program helped 15,523 early childhood professionals across 24 states increase their level of postsecondary education.<sup>109</sup> Several states have adopted other state scholarship or incentive programs for early childhood educators.<sup>110</sup> Between 2012 and 2016, a number of states used Race to the Top Early Learning Challenge (RTT-ELC) funding to expand these programs.<sup>111</sup> A handful of states currently fund early educator scholarships with Child Care and Development and Block Grant (CCDBG) funding.<sup>112</sup>

Some of these programs, however, do not cover the full cost to earn postsecondary credentials. The Virginia Child Care Provider Scholarship, for example, only covers up to eight college courses or a maximum lifetime award of \$2,988, whichever occurs first.<sup>113</sup> As a result, students who cannot afford to pay for additional credits can take much longer to earn an associate degree.

In addition to tuition assistance, some community colleges offer financial assistance to students who suffer financial emergencies.<sup>114</sup> This problem is not unique to early childhood education; other research finds that at least 100 colleges and universities have adopted emergency aid programs as a retention strategy.<sup>115</sup> But because family emergencies can often derail ECE students' educational careers, such financial assistance can play an important role in helping ECE students stay on track.

## Advising

Advising is a key strategy used by community college ECE programs to help students complete their associate degrees and transition to four-year degree programs. Many early childhood programs benefit from campus-wide adoption of intentional advising. For example, Front Range Community College, which has four campuses in Colorado, recently adopted the use of pathway advisers college-wide.<sup>116</sup> Every single early childhood student—whether online or in person is provided with an early childhood-specific adviser whom they meet following a mandatory orientation. The advisers talk with the students and outline the student's degree pathway. Professor Allison Thielke explained: “We were losing students all the time because they weren't following the advising plan. Now we are being very intentional with our pathway advisers.”<sup>117</sup>

*Guided pathways provide students with a clear academic roadmap that outlines a timeline toward completion, courses to take each semester, and career and transfer opportunities.*

Some community colleges are implementing guided pathways as a strategy to help students earn degrees or credentials in a timely fashion. Guided pathways provide students with a clear academic roadmap that outlines a timeline toward completion, courses to take each semester, and career and transfer opportunities. This approach is designed to change the fact that community colleges have historically allowed students to choose their programs and courses with minimal guidance on career alignment. Colleges implementing guided pathways often practice “intrusive advising,” which involves deliberate contact with students intended to develop a caring and beneficial relationship that leads to increased academic motivation and persistence. Intrusive advising often involves utilizing an early warning system that alerts advisers if a student is at risk of academic trouble so the adviser can intervene.<sup>118</sup> The intrusive advising model is effective because it relies on constant, data-driven guidance. Both Miami Dade College and Valencia College in Florida have strong, pathways-centered advising systems across their various programs that are supported by mandatory intrusive advising practices and technology that helps identify students when they fall off track.<sup>119</sup>

The Ivy Tech Community College System in Indiana recently adopted a similar model across its various campuses, including its early education programs. The model, called Ivy Advising, collects data that predicts with 80 percent accuracy which students will be successful and which students will struggle. Students identified as struggling are flagged and their adviser contacts them weekly. Ivy's advising system also sends flags any time a student is late submitting an assignment.<sup>120</sup> Since community colleges often need to take a strategic approach to advising, research suggests that community college advising is best when it's sustained, strategic, intrusive, and integrated and personalized.<sup>121</sup>

## Cohort Models

A number of ECE community college programs have adopted cohort models to help nontraditional students complete courses. Cohort models entail grouping together a small number of students who begin a program of study together and advance through coursework as a group.<sup>122</sup> By grouping nontraditional, adult students together, cohorts can focus on content most relevant to these students and connect their academic work to their classroom experiences. Cohort models have been found to create a support network and a sense of belonging that helps students build confidence. Evaluations of cohort learning programs in other disciplines have found that cohort models have a positive impact on academic achievement, persistence, and attitudes about coursework.<sup>123</sup> Cohort models have been adopted by early childhood programs across California as a result of tobacco-tax money targeted for early childhood services.<sup>124</sup> The practice has also been adopted by community college early childhood programs in Illinois,<sup>125</sup> Massachusetts,<sup>126</sup> North Carolina,<sup>127</sup> Oregon,<sup>128</sup> Rhode Island,<sup>129</sup> Tennessee,<sup>130</sup> Washington,<sup>131</sup> and Wisconsin.<sup>132</sup>

For example, Skagit Valley College in Washington state established a cohort program for teachers pursuing college coursework while working in early childhood programs run by the Washington State Migrant Council, Skagit-Islands Head Start, and the Samish Indian Nation.<sup>133</sup> The City College of San Francisco (CCSF) utilizes a cohort model to serve first-generation and low-income early education students with the ultimate goal of transferring to San Francisco State University, where they can earn a bachelor's degree in Child and Adolescent Development. CCSF uses cohorts, which they call Metro Academies, across program disciplines and envisions them as a comprehensive redesign of the first two years of college. CCSF has two Metro Academies focused on early childhood education. Each academy includes two components: a guided pathway of general education courses required to matriculate into a California State University (CSU), with students taking linked courses each semester, and student services including in-class academic support, tutoring, and academic counselors. Metro Academy CAD students take eight classes together over four semesters.

## Onward and Upward: Innovative Strategies to Address Program Articulation, Shorten Time to Degree, and Address Workforce Realities

Beyond helping early childhood educators complete their course of study at community colleges, some states and institutions have also implemented policies and programs intended to encourage or help community college early childhood students to continue their education at four-year institutions and eventually earn a bachelor's degree and, in some cases, state teaching certificate. Promising approaches include stackable credentials, statewide articulation policies and agreements, competency-based articulation, and credit for prior learning. States that have adopted these strategies can provide key lessons for the broader field.

*In a well-designed stackable credential pathway, community colleges would offer programs of study that stack onto a bachelor's degree, reducing the cost of the first two years of a four-year degree program.*

## Stackable Credentials

Stackable credentials are sequences of credentials that can be accumulated over time to build an individual's qualifications and help them move along a career pathway or up a career ladder.<sup>134</sup> In practice, this means that individuals who pursue a credential can then apply those credits toward an associate degree and subsequently apply associate degree credits toward a bachelor's degree. State Quality Rating and Improvement Systems (QRIS) and workforce systems often support stackable credentials by recognizing completion of incremental credentials leading to the two-year degree. Recognizing incremental progress may help to prevent current early childhood educators, who may take a long time to earn an associate degree, from becoming discouraged, and encourage them to continue their education. As a result, stackable credential models can both increase rates of certificate and two-year degree completion and enable successful completers of those degrees to go on to earn a bachelor's degree. In a well-designed stackable credential pathway, community colleges would offer programs of study that stack onto a bachelor's degree, reducing the cost of the first two years of a four-year degree program. This approach, however, only works in a system that already has strong articulation policies and practices between two- and four-year institutions.

Illinois and Washington both adopted statewide stackable credentials as part of their RTT-ELC efforts.<sup>135</sup> In Washington state, early childhood professionals can obtain three certificates as they work towards an Associate in Arts (A.A.) or an Associate in Applied Science–Transfer (A.A.S.-T) degree—the initial certificate, the short ECE certificate of specialization, and the ECE state certificate, which build on one another in a sequential manner.<sup>136</sup> This process has been standardized across the state and aligned with the Washington State Core Competencies for Early Care and Education Professionals, the Washington State Career Lattice for Early Care and Education Professionals, and NAEYC Standards for Teacher Preparation. As a result, community colleges offer common courses, course titles, course numbers, course descriptions, and student outcomes.

## Articulation

A major obstacle facing early childhood community college programs is that current academic policies and practices limit the transfer and articulation of credits between community colleges and four-year colleges and universities. The general lack of alignment between two-year and four-year programs leads students to lose credits, take duplicative courses, and lengthen their time to completion.

A number of factors contribute to this problem. First, many early childhood education students enter community colleges through programs like the A.A.S., which have traditionally been understood to be terminal degrees. In many states, schools of education that confer bachelor's degrees leading to teacher licensure would prefer community college students complete core courses instead of the early childhood-specific coursework that

constitutes most A.A.S. programs. In many cases, Council for the Accreditation of Educator Preparation (CAEP) accreditation and teacher certification requirements contribute to transfer and continuation challenges. For example, sometimes even when program offerings between two- and four-year institutions appear congruent, four-year institutions will not allow students to receive credit for taking a course at a two-year institution if the course is required for teacher certification. In some states these courses are called key assessments or gateway courses, and students are required to pass these courses in order to receive admittance to an education school and be able to pursue licensure.<sup>137</sup> This leads students to take duplicative coursework, lengthening their time to completion and making it more costly. In some cases, associate degree students who complete coursework with a minimum GPA may be guaranteed acceptance into a four-year institution but still face the barrier of course requirements they must take at the four-year institution before they can be admitted to the education program.<sup>138</sup>

Additionally, disparate articulation agreements with different four-year partners creates further complications for students. While a handful of states have statewide articulation, community college ECE programs in most states have numerous articulation agreements. This creates further hurdles for students who may not understand the difference between four-year programs or have a clear sense of which institution they want to or can afford to attend to complete their degree.

Many states have addressed articulation issues between public two-year and four-year programs through legislation or higher education governing board policies.<sup>139</sup> These approaches do not traditionally focus on early childhood education programs or completely resolve the many issues associated with credit transfer. But a handful of states have passed articulation legislation or adopted articulation policies that have alleviated some of the challenges facing ECE students who transition to four-year programs.

For example, in 2007, New Jersey passed the Lampitt Law, which modified conventional articulation agreements by requiring any public four-year college to accept as fully transferable any A.A. or A.S. degree from a community college in the state.<sup>140</sup> Under this law, 100- and 200- level courses at the community college level that cover the same subject matter as 100- and 200-level courses at the four-year institutions are accepted as equivalent.<sup>141</sup> In 2010, Pennsylvania passed legislation requiring institutions to accept the transfer of Associate of Arts and Associate of Science degrees, including early childhood education, toward the graduation requirements of parallel bachelor's degree programs.<sup>142</sup> As a result, the Pennsylvania Office of Child Development and Early Learning and the Pennsylvania Keys partnered together with colleges and universities across the state—encompassing all of the state's community colleges and many of the four-year institutions, including all 14 of the Pennsylvania State System of Higher Education (PASSHE)

institutions—to create a myriad of program-to-program articulation agreements in early childhood education based on NAEYC competencies.<sup>143</sup> In 2013, California passed the Student Transfer Achievement Reform Act, which requires community colleges to create an associate degree transfer in every major offered by the college. California State University campuses must accept these transfer degrees and guarantee admission with junior status to any community college student who meets the requirements outlined in the law.<sup>144</sup> In 2013, the Indiana legislature enacted a law that required each educational institution in the state to work together with the Commission for Higher Education to create a single articulation pathway (known as the Transfer Single Articulation Pathway or TSAP) for each programmatic area, including early childhood education. The law required all programs to implement these single articulation pathways by May of 2015.<sup>145</sup> Colorado, Connecticut, Massachusetts, South Carolina, and Tennessee have all adopted statewide articulation agreements for all programs including early childhood teacher education.<sup>146</sup>

State experience to date highlights a number of best practices related to articulation. First, three alignment strategies make articulation easier: common course numbering, statewide common course catalogue, and common course curriculum.<sup>147</sup> Utilizing common course numbers, titles, and descriptions across community colleges allows for more standardization in a complex system where students often move back and forth between institutions.

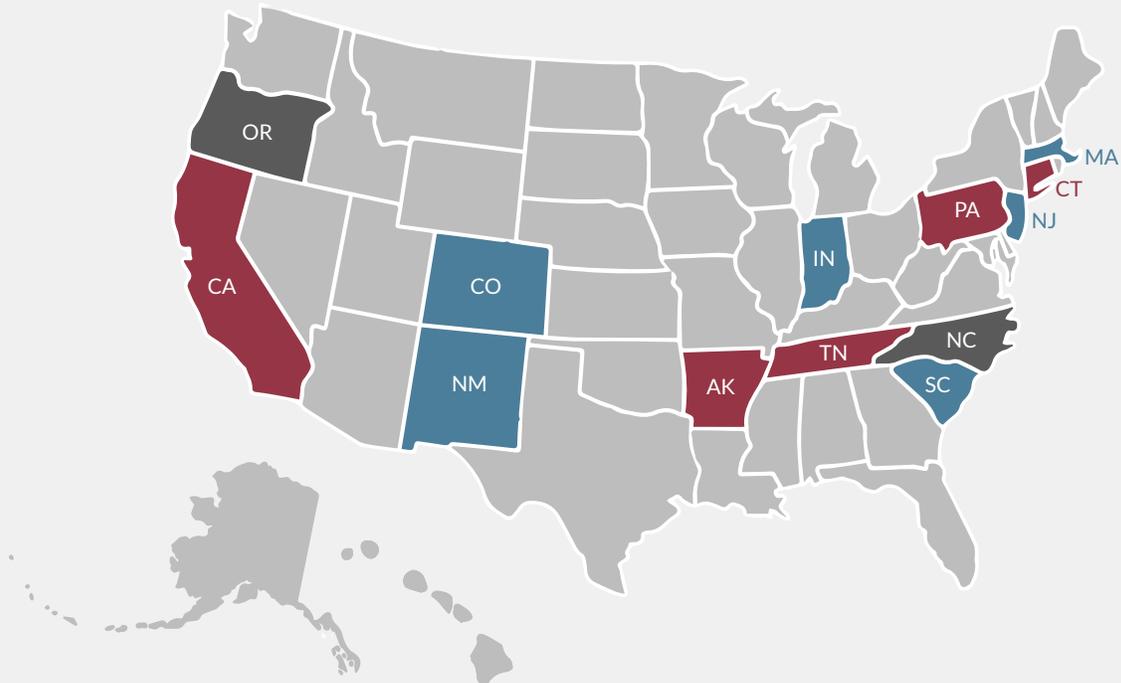
Second, successful articulation requires more than an agreement written on paper. The most effective articulation policies incentivize or require two- and four-year programs to work together to create alignment and ease student transition.<sup>148</sup> For this reason, it can be useful to provide funding for two- and four-year faculty who dedicate time to working together.<sup>149</sup> Finally, states should mandate a governing entity responsible for articulation oversight and monitoring of articulation implementation.<sup>150</sup>

A handful of states have used a competency-based approach to strengthen their EC degree articulation between two-year and four-year institutions. Competency-based education relies on two main principles: The requirements to earn a degree are presented as measurable learning outcomes and general competencies, and learning is demonstrated through assessments of what students know, understand, and can demonstrate in practice.<sup>151</sup> This approach requires institutions of higher education to focus on the skills and knowledge early childhood educators need to be successful and determine at which institution students will acquire those skills and competencies. Using a competency-based approach allows for innovation in tailoring coursework to core competencies required for professional success. A competency-based approach also minimizes course duplication and accumulation of duplicative credits and can increase the higher education system's ability to provide personalized learning based on individuals' strengths and weaknesses.

Figure 2

## States with Early Childhood Education Degree Articulation

- States with Articulation to Some State Four-Year Programs
- States with Statewide Early Childhood Articulation
- States in the Process of Developing Early Childhood Articulation



Source: Author's own analysis.

Even in the absence of broader state policy changes, collaboration between two-year colleges, four-year colleges and universities, and early childhood leaders can support improvements in early childhood articulation. In 2013, the T.E.A.C.H. Early Childhood® National Center funded teams from ten states—Alabama, Arizona, Florida, Indiana, Iowa, Michigan, North Carolina, Ohio, West Virginia, and Wisconsin—to work on improving their state’s early childhood education program articulation over two years.<sup>152</sup> Teams were provided funding to support their work, ongoing technical assistance, and access to trainings, expert speakers, and peer interactions and support.<sup>153</sup> The original goal was for the seven states without statewide policies to create statewide articulation agreements, but most of the state teams amended this goal and embraced precursor strategies including curriculum alignment, common courses, and regional articulation as precursor strategies.<sup>154</sup> Eight of the states still have teams actively working on statewide articulation.<sup>155</sup>

## Credit for Prior Learning

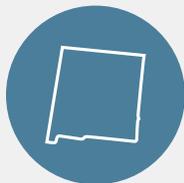
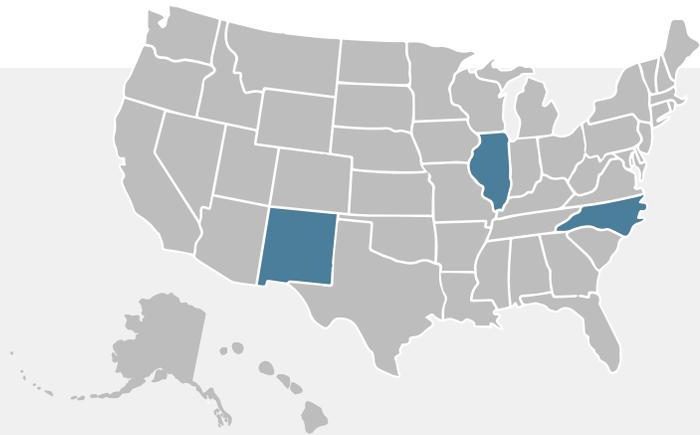
*Credit for Prior Learning initiatives recognize that early childhood professionals may have mastered skills and concepts through non-credit-bearing professional development or years of work in the field even if they have relatively little formal postsecondary education.*

Some states have experimented with awarding college credit for prior learning (CPL) as a way to reduce cost and time required for current early childhood educators to earn degrees. These initiatives enable early childhood educators to demonstrate competencies and earn credit towards a degree without having to repeat coursework. CPL initiatives recognize that early childhood professionals may have mastered skills and concepts through non-credit-bearing professional development or years of work in the field even if they have relatively little formal postsecondary education. Oregon, for example, established a means to award college credit for prior learning and experience as part of an effort to align professional development learning across its system. All early childhood educators participating in Oregon's state registry are assigned one of 12 "steps" based on their education, experience, and informal training. An ECE professional rated at step seven or above can enroll at one of the 17 Oregon community colleges and receive 9-15 credits for prior learning and experience.<sup>156</sup> Each community college is allowed to determine the number of credits to award and the subject areas to which those credits will apply. The credits are applied as electives related to ECE and not as general education electives. Wisconsin<sup>157</sup> and South Carolina<sup>158</sup> are among the other states piloting CPL initiatives.

CPL initiatives are promising solutions that recognize the skills of early childhood educators and help them earn formal credentials. However, they also have limitations. First, competency in ECE skills does not necessarily mean an individual is ready to take other credit-bearing higher education coursework. As a result, awarding credits to an ECE practitioner may not reduce barriers to degree completion for early educators who lack academic skills needed to complete additional credit-bearing courses. Second, CPL is likely only a viable strategy in a state that has seamless articulation or a clearly articulated career pathway. Further, students who complete an associate degree with CPL credits may face new barriers to continuing their education if four-year universities in the state refuse to accept those credits.

Apprenticeship models offer another option that includes credit for prior learning, provides high-quality on-the-job learning experiences, and addresses some of the compensation challenges described above.<sup>159</sup> Several community colleges are partners in such systems.

## State Profiles



### New Mexico

New Mexico has been a national leader in early childhood articulation, having first adopted the practice in 1997. In the last 20 years, New Mexico has refined its early childhood articulation process and created a system that provides many lessons for the broader field. Early on, leaders in New Mexico decided that their early childhood higher education system needed to be inclusive (birth through third grade), fully articulated, and competency-based. These foundational decisions set New Mexico apart from most other states.

New Mexico's first step in creating an inclusive, fully articulated, and competency-based system was creating a higher education task force in 1995. Higher education faculty first joined together informally to discuss the implications of New Mexico approving a birth through third grade BA-level early childhood teacher license. The group of faculty decided to keep meeting to discuss articulation between two- and four-year programs and eventually formed the state's formal Early Childhood Higher Education Taskforce. The Taskforce decided to adopt a career lattice framework beginning with an entry-level course and concluding with a master's degree. Committed to a competency-based framework, the team decided that at each level of the career lattice, the same seven competencies would be addressed. As a result, each institution in the state decided to develop a course of study that incorporated competencies into their AA or BA programs. While working to address articulation of competencies, the taskforce realized that the issue of transfer presented challenges in terms of faculty confidence that students could demonstrate a given competency level. Portfolios, initially adopted as a solution to this problem, are now used exclusively as a tool to seek credit for prior learning.

Over time, New Mexico's Higher Education Taskforce realized a universal catalog of courses was necessary to establish a statewide system of credit for prior learning and ensure classes taken at one institution could transfer seamlessly to another institution. To push the planning forward, two members of the taskforce developed New Mexico's Common Competencies for Early Childhood Professional Preparation based on the four levels of competence to match the levels in the career lattice. Next, the Higher Education Taskforce voted in 2001 to create a uniform course curriculum based on these

*Continued on next page*

competencies. Shortly afterwards, the 20 two- and four-year programs in the state adopted this common core curriculum and syllabi. This core design is updated at least every five years and all staff are invited to an annual Faculty Institute for targeted professional development.

The next challenge was figuring out a system of articulation from two-year institutions to four-year institutions. The taskforce supported passage of legislation that mandated the transfer of 64 credits from two-year to four-year institutions. The common core content also facilitated the implementation of a 64- to 65-hour transfer module from two-year to four-year institutions. Making this a reality required compromises: For example, four-year institutions had to give up some of the upper division courses to the two-year colleges to be taught at the lower divisions.

New Mexico has continued to refine its early childhood education higher education landscape. Recognizing a need for further options within the field, the state established a state-issued equivalent to the CDA. Recognizing that the field was growing, that many students were interested in working in the public school system, and that birth through age 8 was too large of an age span to cover completely, the state established three pathways – Early Childhood Teacher (with two separate pathways: birth through age 4 and age 3 through grade 3), Early Childhood Program Administrator, and Family, Infant and Toddler Studies—all of which may eventually lead to four-year degrees.



## Illinois

Illinois took a novel route to adopting competency-based articulation. It used Race to the Top Early Learning Challenge (RTT-ELC) funding to award innovation grants to partnerships of two-year and four-year institutions, and one of these partnership teams created a competency-based framework that was later adopted by the broader field.

Illinois used RTT-ELC funding to strengthen the connections between Gateways Opportunity, its professional development and registry system, and the state's colleges and universities. This included launching Educator Preparation Pathway Innovation (EPPI) grants – competitive grant funding awarded to innovative partnerships between two-year and four-year programs. Some of the projects included: creating seamless pathways between two-year and four-year institutions, providing advising to ensure seamless transfer for students, and creating flexible pathways for degree attainment that allow students to take some coursework at community colleges and other coursework at four-year universities. A total of 19 individual community colleges were associated with one or more of the individual grants.

*Continued on next page*

Staff involved with these grants reported that they had a large positive impact in enhancing articulation pathways between the partners and allowing partners to better integrate Illinois' Gateways to Opportunity credentialing system into their own programs. Stephanie Bernoteit from the Illinois Board of Higher Education identified the EPPI grants as an important lever for progress: "The applicants had to be partners. The fiscal agent had to be a four-year. We put money on the table and put impetus on the four-year. That has the possibility of re-creating hierarchical issues, but here it brought the four-years to come to the table."

One of these partnerships led to the development of a well-articulated set of 56 competencies. Staff working together from Heartland Community College, Illinois Valley Community College, Illinois Central College, and Illinois State University envisioned competencies as a way to ensure key assessments would not be a barrier to articulation. This team realigned each of Illinois' existing 357 Gateways Credential benchmarks into 56 professional competencies spanning four levels of the Gateways ECE Credentials. They then shared these competencies with the wider field, and state leaders recognized they could be leveraged to reduce credit loss and improve credential and degree attainment. The Illinois Board of Higher Education and the Illinois Community College Board partnered to launch a technical assistance project that supported faculty at two- and four-year institutions to align ECE coursework to competencies, creating a coherent course sequence that further supported transfer and completion. A higher education administrator reported that over 80 percent of the higher education institutions voluntarily changed and aligned coursework. Illinois is now piloting efforts to award Credit for Prior Learning for time in the field.

The longer-term goal is to move the state professional development system to full competency alignment. In other words, within the Gateways Registry individuals would develop professional development plans aligned to competencies. A teacher in the field with an associate degree would receive mentoring, coaching, and targeted professional development. Ultimately, they would be evaluated by their director based on competencies and would be able to take a prior learning assessment to help them complete their bachelor's degree.

Faculty and administrators involved in the competency work emphasized that RTT-ELC funding was a critical lever in accelerating this work. Stephanie Bernoteit stated: "It's possible we would have been moving in this direction anyway but it wouldn't have happened as quickly and widely without RTT-ELC." Small stipends provided to faculty were essential to the success of this program. Professor Johnna Darragh Ernst said: "One of the main variables is time. When you are sitting down and pulling apart your curriculum and building pathways for students, that takes so much time. The stipend really enabled and supported that time."

*Continued on next page*



## North Carolina

In recent years, North Carolina has used RTT-ELC funding to launch a number of initiatives to address early childhood education program quality and completion. Three initiatives addressed community college programs: the Early Childhood Education Innovation Fund (ECEIF), Growing Greatness, and a NAEYC accreditation project.

Even before launching these initiatives, North Carolina benefited from a well-aligned community college system. All 58 community colleges have adopted a common course catalog for early childhood education classes, which makes credits portable within the state.

ECEIF was designed to increase access to and quality of early childhood education programs. The project specifically focused on identifying barriers to ECE student success and evaluating strategies to alleviate those barriers. During the first round, eight community colleges received funds to pilot strategies addressing common barriers to completion, such as language barriers or remediation. These eight community colleges launched a series of program improvements including: making coursework bilingual, co-teaching entry-level coursework, hiring bilingual instructors, adopting the use of cohort models, and creating weekend cohort options. One innovation that proved to be successful was pairing developmental modules and/or English as a second language (ESL) content with curriculum courses. Community colleges found that students enrolled in these courses were more successful than students who were enrolled in curriculum courses without additional support.

The second round of ECEIF funded the Growing Greatness Project, a curriculum alignment project that brought together faculty from all 58 community colleges in the state. Goals of this one-year project included updating the program of study to support enhanced career pathways and bringing faculty together to develop articulation and collaboration strategies. Through this project, community college courses were aligned to NAEYC standards and state pre-k standards.

Through the NAEYC accreditation project, North Carolina helped programs apply for NAEYC accreditation. By the end of the grant period, 39 of the 58 community colleges in the state had received NAEYC accreditation.

More recently, the North Carolina legislature passed a bill requiring the Board of Governors of the University of North Carolina and the State Board of Community Colleges to create an articulation agreement for all public two- and four-year early childhood education programs by March 1, 2018.

## Recommendations

The promising state and institution-level practices described above offer lessons and models for other states and institutions seeking to leverage community college capacity to strengthen the early childhood workforce. But they also highlight continuing challenges in the field and areas where new policies and solutions are needed. This analysis highlights several recommendations for institutions, state-level policymakers, and the broader field.

### Recommendations for Community Colleges

**Collect more strategic and complete data:** Community colleges need to collect additional data about their ECE students so they can understand the unique needs of their student population, including how long it takes students to obtain an associate degree and whether a student transfers and completes a four-year degree. Community colleges should survey students who return to complete their education after a pause so they can identify the most common reasons students pause their education. Finally, community colleges should survey program students to understand how many have familial responsibilities and what percentage of students are in need of child care assistance.

**Create networked improvement communities:** Given the limited research that exists on early childhood higher education program quality and early childhood education teacher preparation, degree programs should adopt their own approach to continuous improvement. To that end, programs must examine their data and determine the most salient barriers preventing student success in their program. Research conducted by Tony

Bryk on networked improvement communities formed to address the lack of student success in developmental math illustrates the effectiveness of bringing community colleges together to solve pressing system-wide challenges. To that end, programs should join together with peer institutions to form networked improvement communities focused on resolving state-level issues and identifying effective strategies for increasing program quality.

**Adopt appropriate student supports:** Once community college programs better understand the unique needs and challenges of their student population, they can determine the appropriate supports necessary to move their students towards completion. Institutions that decide to adopt online learning should learn from leaders in the field. Similarly, institutions that need better remediation programs should examine successful models such as I-BEST and OPABS. The majority of programs will benefit from reexamining their advising practices and ensuring advisers are well supported to provide intentional support.

**Invest in programs for students who are English language learners:** Very few community colleges provide early childhood education programs in languages other than English. This is a major problem for the field. Programs should examine the language needs of their local early childhood workforce community and develop a plan for serving bilingual and English-learner students, including bilingual programming and programs that allow students to obtain workforce skills while also mastering English.

## Recommendations for State Policymakers

**Create incentives for community colleges to continue early childhood programs:** In a higher education landscape focused on outcomes and performance, early childhood programs are likely to be seen as a liability by some institutions. States should craft performance-based schemes that account for and incentivize programs training people for low-wage but socially necessary jobs (i.e., child care, health care).

**Create, adopt, and invest in programs to provide scholarships, incentives, and loan forgiveness to early childhood educators:** If states truly want to transform their early childhood workforce, they must seriously address the fact that early childhood educators have little financial incentive to pursue further education. Scholarships, incentives, and loan forgiveness are necessary to move the field forward. States should make sustained investments in these financial programs. States can use their Child Care and Development Block Grant (CCDBG) training or development or quality set-aside funds and ESSA Title II, Part A funds to fund these financial supports.

**Require community college systems (and four-year programs) to adopt uniform course numbering:** This is an easy first step that will help make complete articulation an easier final goal.

**Take a truly strategic approach to articulation:** Mandating articulation agreements is often only the first step. States should incentive two- and four-year program faculty to work together and provide funding to faculty who work on designing competencies and aligning curricula. States should encourage their articulation committees to develop a pathways approach that uses competencies to align courses. States can use Child Care Development Block Grant (CCDBG) funding to fund articulation work.

**Think creatively about how higher education strategies relate to other state investments in early childhood infrastructure and policies:** In New Mexico and Illinois, stakeholders working on articulation used the state's existing standards and core competencies to better align their articulation process and make a fully comprehensive career ladder. Since most states have already adopted competencies, they should use them as a foundation to strengthen their articulation process. Additionally, states that have incentivized NAEYC accreditation can use NAEYC and CAEP standards to strengthen articulation as well. States should ensure they consider how credit for prior learning and professional development provided through their workforce registries fits into the larger system they are creating through articulation. States should also consider how they can use their existing workforce registries and QRIS systems to improve higher education program quality, improve data collection about the early childhood education workforce, and strengthen professional development for the field. States should ensure that statewide QRIS systems incentivize higher education and provide scholarships. States that use observational assessments, such as the ECERS or CLASS, in their QRIS systems should partner with community colleges to make sure the metrics utilized in their state system are integrated in community college ECE programs. States could also explore opportunities to share observational data collected for QRIS with students and community colleges to inform ongoing improvement, while ensuring appropriate protections for individual privacy.

**Examine statewide ECE community college program quality:** Most states have focused on getting students through degree programs or ensuring program requirements listed on paper align with certain topics. Little to no attention has focused on program outcomes as measured in teachers' skill growth or effectiveness. States should examine community college curricula and determine if they align with the competencies of successful early childhood workers.

## Recommendations for Federal Government

**Encourage states to tackle cross-system work:** RTT-ELC was a cost-effective way to help states create infrastructure to address the challenges catalogued above. The intentionality of RTT was a key lever to help states consider and tackle cross-system work. The federal government could use existing funding streams like ESSA Title II, CCDBG, Higher Education Act, or Preschool Development Grants to award money to states that have designed plans to address cross-system articulation work.

**End ban on student unit records:** One way to better track early childhood education community college students would be through a system that tracks individual student data. Federal legislation currently prohibits adoption of such a system. If this prohibition were removed, more robust data could be collected on student completion, transfer, and retention.

**Ensure existing financial aid systems better serve ECE teachers who seek additional education:** Congress should consider providing financial aid for part-time students and extending federal loan forgiveness and tax credits for K-12 teachers to ECE teachers.

## Recommendations for the Field

**Develop a clear vision regarding role of community colleges:** Policymakers and community college leadership need to have a clear vision and realistic expectations of the role community colleges will play in cultivating the early childhood workforce in a constantly evolving landscape. Those expectations need to be grounded in current roles and capacities as well as a clear understanding of the population each community college can adequately serve. States and community college leaders need to align policy, resources, and systems to support those expectations.

**Address underlying labor market challenges in the field:** Policymakers and stakeholders have an opportunity to improve the quality and effectiveness of community college programs as a source of training early childhood educators and as an on-ramp to higher education. But these strategies are not a substitute for addressing underlying labor market challenges in the field. Without strategies to address the low compensation and difficult working conditions of early educators, the impact of higher education strategies will be limited. At the same time, it is important to invest in and cultivate community college systems to be prepared to support early childhood educators in earning skills they need while relevant stakeholders work to address labor market issues more broadly.

**Conduct studies to examine quality of ECE educator prep programs:** Currently, ECE prep program quality is barely measured, and therefore poorly examined and tracked. Understanding the relative strengths and weaknesses of existing programs would help stakeholders, policymakers, and community college leadership create realistic expectations for existing programs. States and institutions of higher education should work with philanthropy to evaluate the outcomes of existing early childhood educator preparation programs and support practice-based research that yields actionable information on what types of preparation strategies lead to improved early childhood educator practice. (A forthcoming Bellwether paper will provide more detailed recommendations for building the research base on early childhood educator preparation.)



## Conclusion

Community colleges play a myriad of roles in preparing early childhood educators and will continue to be active partners in transforming the early care and education workforce in the future. Community colleges serve a population of students who face many challenges and operate in a challenging broader education policy landscape; however, there are a number of emerging best practices that can address these challenges and increase student completion. Policymakers should understand this emerging literature and adopt a clear vision for the role that community colleges can and should play in preparing and developing early childhood workers.



## Appendix

### Interviewees

- Catron Allred, Director of Education Programs, Central New Mexico Community College
- Stephanie Bernoteit, Interim Deputy Director for Academic Affairs, Illinois Board of Higher Education
- Colleen Campbell, Associate Director, Postsecondary Education, Center for American Progress
- Christi Chadwick, Project Director for the Transforming Colorado's Early Childhood Workforce project, Early Milestones Colorado
- Sherry Cleary, Executive Director, New York City Early Childhood Professional Development Institute
- Dr. Lisa Eads, Program Coordinator of Early Childhood Education, North Carolina Community College System
- Dr. Johnna Darragh Ernst, Professor of Early Childhood Education, Heartland Community College
- Rachel Fishman, Deputy Director for Research, Higher Education Initiative, New America
- Vicki Garavuso, Program Director, Undergraduate Early Childhood Education, The City College of New York
- Jennifer Gilken, Deputy Chair Teacher Education, Borough of Manhattan Community College
- Christie Honeycutt, Associate Dean of Health and Social Services, Stanly Community College
- Mary Harrill, Senior Director, Higher Education Accreditation and Program Support, National Association for the Education of Young Children (NAEYC)
- Laura Kates, Deputy Director of Education Program, Kingsborough Community College
- Rene Manning, Director of Early Childhood Program, Rio Salado Community College
- Mary Alice McCarthy, Director, Center on Education and Skills, New America Foundation
- Judee Mulhollen, Program Director, Teacher Education/Community Growth and Development, Cuyahoga Community College
- Iris Palmer, Senior Policy Analyst, New America

- Jeanette Paulson, Director of Workforce Initiatives, Wisconsin Early Childhood Association
- Michele Pullen, Professor, Ivy Tech Community College—Sellersburg
- Dr. Brenda Ragle, Early Childhood Program Chair, Ivy Tech Community College—Columbus
- Sue Russell, Executive Director, T.E.A.C.H. Early Childhood National Center
- Sharon Sullivan, Special Projects Manager, T.E.A.C.H. Early Childhood National Center
- Alison Thielke, Front Range Community College

## Endnotes

- 1 Community College Resource Center, "Community College FAQs," <https://ccrc.tc.columbia.edu/Community-College-FAQs.html>.
- 2 Ibid.
- 3 Kelly L. Maxwell, Chih-Ing Lim, and Diane M. Early, "Early Childhood Teacher Preparation Programs in the United States" (Chapel Hill, NC: The University of North Carolina, FPG Child Development Institute, 2006), available at [http://fpg.unc.edu/sites/fpg.unc.edu/files/resources/reports-and-policy-briefs/NPC\\_National\\_Report\\_2006.pdf](http://fpg.unc.edu/sites/fpg.unc.edu/files/resources/reports-and-policy-briefs/NPC_National_Report_2006.pdf).
- 4 Thomas R. Bailey and Irina E. Averianova, "Multiple Missions of Community Colleges: Conflicting or Complementary?" (New York: Community College Research Center, Columbia University, 2000), <https://ccrc.tc.columbia.edu/media/k2/attachments/multiple-missions-conflicting-complementary-brief.pdf>.
- 5 US Department of Education, "Community College Facts at a Glance," <https://www2.ed.gov/about/offices/list/ovae/pi/cclo/ccfacts.html>.
- 6 National Association for the Education of Young Children, "Early Childhood Higher Education Directory," available at <https://degreefinder.naeyc.org>; exact number of community colleges with relevant programs obtained from follow-up email with Mary Harrill, senior director of Higher Education Accreditation and Program Support (790 community colleges have an associate degree program in early childhood education).
- 7 Marilou Hyson, Heather Biggar Tomlinson, and Carol A.S. Morris, "Quality Improvement in Early Childhood Teacher Education: Faculty Perspectives and Recommendations for the Future," *Early Childhood Research and Practice* 11, no. 1 (2009), available at [ecrp.uiuc.edu/v11n1/hyson.html](http://ecrp.uiuc.edu/v11n1/hyson.html).
- 8 Marnie Kaplan and Sara Mead, "The Best Teachers for Our Littlest Learners? Lessons from Head Start's Last Decade" (Washington, DC: Bellwether Education Partners, February 2017), [https://bellwethereducation.org/sites/default/files/Bellwether\\_HeadStartWorkforce.pdf](https://bellwethereducation.org/sites/default/files/Bellwether_HeadStartWorkforce.pdf).
- 9 The states are Minnesota, Ohio, Oregon, Washington, and Pennsylvania (for teachers in the HSSAP program). W. Steven Barnett et al., "The State of Preschool 2016," The National Institute for Early Education Research, p. 236, [http://nieer.org/wp-content/uploads/2017/09/Full\\_State\\_of\\_Preschool\\_2016\\_9.15.17\\_compressed.pdf](http://nieer.org/wp-content/uploads/2017/09/Full_State_of_Preschool_2016_9.15.17_compressed.pdf).
- 10 See Bellevue College, "Early Learning & Teacher Education," <https://www.bellevuecollege.edu/programs/degrees/proftech/elte/#ece-aast>.
- 11 In Louisiana the degree is called an Associate of Science in Teaching. The other states are: Arizona, Arkansas, California, Delaware, Florida, Hawaii, Illinois, Maryland, Missouri, Nevada, New York, South Carolina, Texas, and Wisconsin.
- 12 W. Steven Barnett et al., "The State of Preschool 2016," p. 236.
- 13 Mary Fulton, "Community Colleges Expanded Role into Awarding Bachelor's Degrees" (Denver, CO: Education Commission of the States, 2015), <https://files.eric.ed.gov/fulltext/ED556034.pdf>.
- 14 The Community College Baccalaureate Association, "Baccalaureate Conferring Institutions," <http://www.accbd.org/wp-content/uploads/2013/10/Conferring-Institutions.pdf?ct=US&stp=CO>.
- 15 These include eleven colleges in Florida: Chipola College, College of Central Florida, Florida Gateway College, Florida State College at Jacksonville, Miami Dade College, Northwest Florida State College, Polk State College, Santa Fe College, St. Johns River College, and State College of Florida, Manatee-Sarasota; three colleges in Georgia: College of Coastal Georgia, Georgia Gwinnett College, and Middle Georgia College; one college in New Mexico: Northern New Mexico College; and two colleges in Washington: Green River Community College and North Seattle College. Ibid.
- 16 Ibid.
- 17 US Department of Education, "Highly Qualified Teachers Enrolled in Programs Providing Alternative Routes to Teacher Certification or Licensure" (Washington, DC: 2015), <https://www2.ed.gov/rschstat/eval/teaching/hqt-teacher-certification/report.pdf>.
- 18 See e.g., Rio Salado College, "Post Baccalaureate Programs," <http://www.riosalado.edu/programs/education/post-baccalaureate/Pages/default.aspx>; see also Arizona Department of Education, "Educator Preparation Program: Early Childhood Education," <https://cms.azed.gov/home/GetDocumentFile?id=582cad33aadebe0e58567e69>.

- 19 All 28 Florida community colleges offer alternative certification programs. Florida College System, "Program Review: Educator Preparation Institutes" (July 2008), [http://www.fldoe.org/core/fileparse.php/7761/urlt/0083459-pr2008\\_03\\_epi.pdf](http://www.fldoe.org/core/fileparse.php/7761/urlt/0083459-pr2008_03_epi.pdf).
- 20 New Jersey City University, "New Pathways to Teaching in New Jersey," <http://www.njcu.edu/admissions/new-pathways-teaching-nj-nptnj>.
- 21 Great Basin College, "Teacher Education Programs at GBC," <http://gbcnv.edu/programs/education.html>.
- 22 Teach NM, "NM Options for Licensure," <http://teachnm.org/new-teachers/licensure-opportunities.html>.
- 23 Since 2000, at least eight community colleges in Texas have started providing alternative certification programs. Approved Educator Preparation Programs, <https://secure.sbec.state.tx.us/SBECOnline/approvedprograms.asp?s=3>.
- 24 Matthew Zeidenberg, "Community Colleges Under Stress," *Issues in Science and Technology* 24, no. 4 (2008), available at <https://ccrc.tc.columbia.edu/media/k2/attachments/community-colleges-under-stress.pdf>; Thomas Bailey, "Can Community Colleges Achieve Ambitious Goals?," in *Getting to Graduation: The Completion Agenda in Higher Education*, eds. Andrew P. Kelly and Mark Schneider; The National Center for Public Policy and Higher Education, "Affordability and Transfer: Critical to Increasing Baccalaureate Degree Completion," [http://www.highereducation.org/reports/pa\\_at/index.shtml](http://www.highereducation.org/reports/pa_at/index.shtml).
- 25 Jennifer Ma and Sandy Baum, "Trends in Community Colleges: Enrollment, Prices, Student Debt, and Completion," College Board Research, *Research Brief*, April 2016, <https://trends.collegeboard.org/sites/default/files/trends-in-community-colleges-research-brief.pdf>.
- 26 American Association of Community Colleges, "AACC Factsheet 2017," <https://www.aacc.nche.edu/wp-content/uploads/2017/09/AACCFactSheet2017.pdf>.
- 27 Ibid.
- 28 Marcy Whitebook, Caitlin McLean, and Lea J.E. Austin, "Early Childhood Workforce Index – 2016" (Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley, 2016), <http://cscce.berkeley.edu/files/2016/Early-Childhood-Workforce-Index-2016.pdf>; see also Michelle L. Maroto and Richard N. Brandon, "The Early Childhood Care and Education Workforce: Challenges and Opportunities: A Workshop Report" (Washington, DC: National Academies Press, 2012), available at <https://www.ncbi.nlm.nih.gov/books/NBK189910/>.
- 29 Elise Gould, "Child Care Workers Aren't Paid Enough to Make Ends Meet" (Washington, DC: Economic Policy Institute, 2015), <http://www.epi.org/publication/child-care-workers-arent-paid-enough-to-make-ends-meet/>.
- 30 Maroto and Brandon, "The Early Childhood Care and Education Workforce: Challenges and Opportunities"; Marcy Whitebook, Deborah Phillips, and Carolee Howes, "Worthy Work, STILL Unlivable Wages: The Early Childhood Workforce 25 Years after the National Child Care Staffing Study" (Berkeley, CA: Center for the Study of Child Care Employment, 2014), <http://cscce.berkeley.edu/files/2014/ReportFINAL.pdf>.
- 31 Whitebook and Austin, "Early Childhood Workforce Index—2016."
- 32 Melanie Kruevelis, Lindsey Reichlin Cruse, and Barbara Gault, "Single Mothers in College: Growing Enrollment, Financial Challenges, and the Benefits of Attainment" (Washington, DC: Institute for Women's Policy Research, 2017), [https://iwpr.org/wp-content/uploads/2017/09/C460\\_8.21.17\\_Single-Mothers-Briefing-Paper-FINAL-2.pdf](https://iwpr.org/wp-content/uploads/2017/09/C460_8.21.17_Single-Mothers-Briefing-Paper-FINAL-2.pdf).
- 33 There is no national data on early childhood education students and minimal data on the early childhood education workforce. About two-thirds of child care workers have children present in their homes. Maroto and Brandon, "The Early Childhood Care and Education Workforce: Challenges and Opportunities."
- 34 Kruevelis et al., "Single Mothers in College."
- 35 Forty-four percent of community colleges offered child care in 2015 as compared to fifty-three percent in 2003-2004. Bridget Terry Long, "Helping Women to Succeed in Higher Education: Supporting Student-Parents with Child Care" (Washington, DC: The Hamilton Project, 2017), [https://www.brookings.edu/wp-content/uploads/2017/10/es\\_10192017\\_higher\\_education\\_student\\_parents\\_womenlong.pdf](https://www.brookings.edu/wp-content/uploads/2017/10/es_10192017_higher_education_student_parents_womenlong.pdf).
- 36 Paul A. Attewell, David E. Lavin, Thurston Domina, and Tania Levey, "New Evidence on College Remediation," *Journal of Higher Education* 77, no. 5 (2006), 886–924; "Complete College America. Remediation: Higher Education's Bridge to Nowhere" (Indianapolis, IN: Complete College America, 2012), [https://www.insidehighered.com/sites/default/server\\_files/files/CCA%20Remediation%20ES%20FINAL.pdf](https://www.insidehighered.com/sites/default/server_files/files/CCA%20Remediation%20ES%20FINAL.pdf).

- 37 Maki Park, Margie McHugh, Jeanne Batalova, and Jie Zong, “Immigrant and Refugee Workers in the Early Childhood Field: Taking a Closer Look” (Washington, DC: Migration Policy Institute, 2015), <https://www.migrationpolicy.org/research/immigrant-and-refugee-workers-early-childhood-field-taking-closer-look>.
- 38 Ibid.
- 39 Ibid.
- 40 Ibid.
- 41 Laura Sakai, Fran Kipnis, Marcy Whitebook, and Diana Schaack, “Yes They Can: Supporting Bachelor Degree Attainment for Early Childhood Practitioners,” *Early Childhood Research and Practice* 16, no. 1 & 2 (2014), available at <http://ecrp.uiuc.edu/v16n1/sakai.html>.
- 42 The Pew Charitable Trusts, “Federal and State Funding of Higher Education,” 2015, <http://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2015/06/federal-and-state-funding-of-higher-education>.
- 43 David Tandberg, Sophia Laderman, and Andy Carlson, “A Federal-State Partnership for True College Affordability” (Boulder, CO: SHEEO, 2017), [http://www.sheeo.org/sites/default/files/publications/Federal-State\\_Partnership\\_for\\_True\\_College\\_Affordability.pdf](http://www.sheeo.org/sites/default/files/publications/Federal-State_Partnership_for_True_College_Affordability.pdf).
- 44 Long, “Helping Women to Succeed in Higher Education.”
- 45 Susannah Snider, “4 Financial Factors in Making the Part-Time College Calculation,” U.S. News & World Report, October 20, 2014, <https://www.usnews.com/education/best-colleges/paying-for-college/articles/2014/10/20/4-financial-factors-in-making-the-part-time-college-calculation>.
- 46 Whitebook and Austin, “Early Childhood Workforce Index—2016.”
- 47 Ibid.
- 48 Ibid.
- 49 Ibid.
- 50 Interview with Dr. Brenda Ragle, chair of the Early Childhood Program at Ivy Tech Community College Columbus.
- 51 Doug Lederman, “The New Improved IPEDS,” *Inside Higher Ed*, October 12, 2017, <https://www.insidehighered.com/news/2017/10/12/new-federal-higher-ed-outcome-measures-count-part-time-adult-students>.
- 52 Ibid.
- 53 Jolanta Juszkievicz, “Trends in Community College Enrollment and Completion Data” (Washington, DC: American Association of Community Colleges, 2016), [https://www.aacc.nche.edu/wp-content/uploads/2017/11/TrendsCCErollment\\_Final2016.pdf](https://www.aacc.nche.edu/wp-content/uploads/2017/11/TrendsCCErollment_Final2016.pdf); see also Doug Shapiro et al., “Completing College: A National View of Student Attainment Rates—Fall 2009 Cohort” (Herndon, VA: National Student Clearinghouse Research Center, 2015), <https://nscresearchcenter.org/wp-content/uploads/SignatureReport10.pdf>.
- 54 Ibid.
- 55 Davis Jenkins and John Fink, “Tracking Transfer: New Measures of Institutional and State Effectiveness in Helping Community College Students Attain Bachelor’s Degrees” (New York: Community College Research Center, Teachers College, Columbia University, 2016), <https://ccrc.tc.columbia.edu/media/k2/attachments/tracking-transfer-institutional-state-effectiveness.pdf>.
- 56 Ibid.
- 57 Marcy Whitebook and Lea J.E. Austin, “Early Childhood Higher Education: Taking Stock across the States” (Berkeley, CA: Center for the Study of Child Care Employment, 2015), <http://cscce.berkeley.edu/early-childhood-higher-education-taking-stock-across-the-states/>; Maxwell et al., “Early Childhood Teacher Preparation Programs in the United States.”
- 58 Diane Early and Pamela Winton, “Preparing the Workforce: Early Childhood Teacher Preparation at 2- and 4-year Institutions of Higher Education,” *Early Childhood Research Quarterly* 16 (2001): 285–306.
- 59 NAEYC, “NAEYC Standards for Early Childhood Professional Preparation,” [https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/position-statements/2009%20Professional%20Prep%20stdsRevised%204\\_12.pdf](https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/position-statements/2009%20Professional%20Prep%20stdsRevised%204_12.pdf).
- 60 NAEYC, “NAEYC Higher Education Accreditation,” <http://www.naeyc.org/highered/accreditation>.

- 61 Beth Caron et al., "Taking on the Challenge: Building a Strong Foundation for Early Learning: Early Learning Challenge Summary Report" (Herndon, VA: AEM Corp, 2017), available at <https://elc.grads360.org/services/PDCService.svc/GetPDCDocumentFile?fileId=28793>.
- 62 Interview with Dr. Lisa Eads, program coordinator of Early Childhood Education, North Carolina Community College System.
- 63 Maxwell et al., "Early Childhood Teacher Preparation Programs in the United States"; Hyson, "Quality Improvement in Early Childhood Teacher Education."
- 64 Hyson, "Quality Improvement in Early Childhood Teacher Education."
- 65 Early and Winton, "Preparing the Workforce."
- 66 Marcy Whitebook et al., "Time to Revamp: Early Childhood Education Programs in California's Institutions of Higher Education" (Berkeley, CA: Center for the Study of Child Care Employment, 2005), [http://cscce.berkeley.edu/files/2005/revamp\\_report.pdf](http://cscce.berkeley.edu/files/2005/revamp_report.pdf); Dan Bellm, ed., "Teaching the Teachers of Our Youngest Children: The State of Early Childhood Higher Education in New York" (Berkeley, CA: Center for the Study of Child Care Employment, 2015), <http://cscce.berkeley.edu/files/2015/HEI-NY-Highlights-FINAL.pdf>.
- 67 Community College Research Center, "Designing a System for Strategic Advising," Strategic Advising, 2013, <https://ccrc.tc.columbia.edu/media/k2/attachments/designing-a-system-for-strategic-advising.pdf>.
- 68 Teresa C. Sumrall et al., "Student Teaching Within Early Childhood Teacher Preparation Programs: An Examination of Key Features Across 2- and 4-Year Institutions," *Early Childhood Education Journal* 45, no. 6 (2017): 821-831.
- 69 Whitebook and Austin, "Taking Stock across the States."
- 70 Cynthia Buettner, Eun Hye Hur, Jeony Lieny, and David W. Andrews, "What are We Teaching the Teachers? Child Development Curricula in US Higher Education," *Child & Youth Care Forum* 45, no. 1 (2016): 155-175.
- 71 Ibid.
- 72 Diane Schilder, "Early Childhood Teacher Education Policies Research Review and State Trends" (New Brunswick, NJ: Center on Enhancing Early Learning Outcomes, 2016), [http://ceelo.org/wp-content/uploads/2016/04/ceelo\\_policy\\_report\\_ec\\_teach\\_education\\_policies\\_final\\_for\\_web\\_2016\\_04.pdf](http://ceelo.org/wp-content/uploads/2016/04/ceelo_policy_report_ec_teach_education_policies_final_for_web_2016_04.pdf).
- 73 Few states gather data on access to benefits in their workforce surveys; however, studies suggest very few center-based staff receive sick days or paid leave. Whitebook and Austin, "Early Childhood Workforce Index—2016," p. 79.
- 74 Sumrall et al., "Key Features."
- 75 See Ying-Chun Lin and Katherine A. Magnuson, "Classroom Quality and Children's Academic Skills in Child Care Centers: Understanding the Role of Teacher Qualifications," *Early Childhood Research Quarterly* 42 (2018): 215-227.
- 76 Marilou Hyson, Diane M. Horm, and Pamela J. Winton, "Higher Education for Early Childhood Educators and Outcomes for Young Children: Pathways Toward Greater Effectiveness," in R.C. Pianta, ed., *Handbook of Early Childhood Education* (New York: Guilford Press, 2012), pp. 553-583.
- 77 Andrew Kreighbaum, "Overburdened with Debt," Inside Higher Ed, January 10, 2017, <https://www.insidehighered.com/news/2017/01/10/federal-data-show-hundreds-vocational-programs-fail-meet-new-gainful-employment>.
- 78 Ibid.
- 79 National Council of State Legislatures, "Performance-Based Funding for Higher Education," <http://www.ncsl.org/research/education/performance-funding.aspx>.
- 80 Renata Opoczynski, "Whose Performance Counts? Equity Concerns in Performance-Based Funding Policies," available at <https://d.lib.msu.edu/islandora/object/etd%3A4802/datastream/OBJ/view>.
- 81 T.E.A.C.H. Early Childhood National Center, "Articulation Compendium," <http://teachecnationalcenter.org/wp-content/uploads/2015/10/Articulation-Compendium-Update-10-20-15.pdf>.
- 82 Four states have local stipends: Alaska, California, Florida, and Texas. Marcy Whitebook and Caitlin McLean, "In Pursuit of Pre-K Parity: A Proposed Framework for Understanding and Advancing Policy and Practice" (Berkeley, CA: Center for the Study of Child Care Employment, 2017), <http://cscce.berkeley.edu/files/2017/04/in-pursuit-of-pre-k-parity.pdf>.

- 83 LaRue Allen and Bridget B. Kelly, eds., "Transforming the Workforce for Children Birth through Age 8: A Unifying Foundation" (Washington, DC: National Academies of Sciences, Engineering, and Medicine, April 2015), <https://www.nap.edu/catalog/19401/transforming-the-workforce-for-children-birth-through-age-8-a>.
- 84 Interview with Catron Allred, director of the Early Childhood Program, Central New Mexico Community College.
- 85 Ibid.
- 86 Interview with Jennifer Gilken, professor at Bronx Manhattan Community College.
- 87 Ibid.
- 88 Mayra Cruz, "The Professional Preparation of Spanish-Speaking Early Childhood Education Community College Students and Non-Matriculated Early Educators," research paper, De Anza College Child Development and Education Department, in conjunction with the Early Education Local Planning Council of San Clara County, October 2010, available at <https://www.deanza.edu/faculty/cruzmayra/theprofessionalprepspskelladultpdl102010.pdf>.
- 89 Shayna Cook, "When Degree Programs for Pre-K Teachers Go Online: Challenges and Opportunities" (Washington, DC: New America, 2017), <https://na-production.s3.amazonaws.com/documents/When-Degree-Programs-Online.pdf>.
- 90 Debra Torrence and Chip Donohue, "EC E-learning: A National Review of Early Childhood Education Distance Learning Programs" (Washington, DC: Center for the Child Care Workforce, 2007), <https://www.aft.org/sites/default/files/ecelearning0408.pdf>.
- 91 IPEDS data, institutions with distance learning associate degrees in early childhood education.
- 92 Shanna Smith Jaggars, "Online Learning: Does It Help Low-Income and Underprepared Students?," Community College Resource Center Brief, No. 52 (New York: Community College Resource Center, Teachers College, Columbia University, 2011), <https://ccrc.tc.columbia.edu/media/k2/attachments/online-learning-help-students.pdf>.
- 93 Rachel Fishman, "Community College Online" (Washington, DC: New America, 2015), <https://na-production.s3.amazonaws.com/documents/community-college-online.pdf>.
- 94 John Wachen, Davis Jenkins, and Michelle Van Noy, "How I-BEST Works: Findings from a Field Study of Washington State's Integrated Basic Education and Skills Training Program" (New York: Community College Research Center, 2010), <https://ccrc.tc.columbia.edu/media/k2/attachments/how-i-best-works-findings.pdf>.
- 95 The National Center for Public Policy and Higher Education, "A Teaming Approach: Washington State's Integrated Basic Skills Training (I-BEST)," [http://www.highereducation.org/reports/Policy\\_Practice/IBEST.pdf](http://www.highereducation.org/reports/Policy_Practice/IBEST.pdf).
- 96 Erin O'Neill, "New Mexico Community Colleges Collaborate to Create I-BEST Programs," National Council of Teachers of English, February 10, 2015, <http://www2.ncte.org/report/new-mexico-community-colleges-collaborate-to-create-i-best-programs/>.
- 97 Matthew Zeidenberg, Sung-Woo Cho, and Davis Jenkins, "Washington State's Integrated Basic Education and Skills Training Program (I-BEST): New Evidence of Effectiveness," Community College Research Center Working Paper No. 20 (New York: Community College Research Center, 2010), <https://ccrc.tc.columbia.edu/media/k2/attachments/i-best-evidence-effectiveness.pdf>.
- 98 US Department of Education, Office of Vocational and Adult Education, "Promoting College and Career Readiness: Bridge Programs for Low-Skill Adults" (Washington, DC: US Department of Education, 2012), <https://www2.ed.gov/about/offices/list/ovae/pi/cclo/brief-1-bridge-programs.pdf>.
- 99 Bob Watrus and Heather Fercho, "Oregon Credentials, Acceleration and Support for Employment (CASE), Evaluation Report: Results, Key Issues and Implications for Policy, Practice and Systems," September 2015, [https://www.roguecc.edu/Programs/CareerPathways/pdf/CASE%20final%20evaluation%20report\\_Final.pdf](https://www.roguecc.edu/Programs/CareerPathways/pdf/CASE%20final%20evaluation%20report_Final.pdf).
- 100 Chrys Limardo, Sara Hill, Jessie Stadd, and Tim Zimmer, "Assessing Career Pathways to Education and Training for Early Childhood Professionals" (Bethesda, MD: Manhattan Strategies, 2016), [https://www.acf.hhs.gov/sites/default/files/ecl/elcpi\\_accessibility\\_10\\_28\\_ada.pdf](https://www.acf.hhs.gov/sites/default/files/ecl/elcpi_accessibility_10_28_ada.pdf).
- 101 Ibid.
- 102 According to the US Department of Education, one out of every three children enrolled in Head Start programs in 2016 was classified as a dual language learner.
- 103 US Department of Health and Human Services, Administration for Children and Families, Office of Head Start, "Head Start Performance Standards," September 2016, <https://eclkc.ohs.acf.hhs.gov/sites/default/files/pdf/hspss-appendix.pdf>.

- 104 Mayra Cruz, "The Professional Preparation of Spanish-Speaking Early Childhood Education Community College Students and Non-Matriculated Early Educators," October 2010, available at <https://www.deanza.edu/faculty/cruzmayra/theprofessionalprepspskelladultpdf102010.pdf>.
- 105 Ibid.
- 106 Interview with Catron Allred.
- 107 Interview with Jeanette Paulson, director of Workforce Initiatives, Wisconsin Early Childhood Association.
- 108 Mayra Cruz, "Child Development and English as a Second Language Educational Access & Success to Spanish/Chinese Speaker Program," De Anza College, 2008, <https://www.deanza.edu/faculty/cruzmayra/pdf/The%20Education%20and%20Access%20Program%20Report-%20final2008.pdf>.
- 109 T.E.A.C.H. Early Childhood National Center, "Addressing Equity Issues in the Early Childhood Workforce: Education, Compensation & Career Pathways," [http://teachecnationalcenter.org/wp-content/uploads/2016/10/T.E.A.C.H.-State\\_Profile\\_Compendum-FY16.pdf](http://teachecnationalcenter.org/wp-content/uploads/2016/10/T.E.A.C.H.-State_Profile_Compendum-FY16.pdf).
- 110 Alabama, Arizona, Georgia, Idaho, Louisiana, Maryland, Massachusetts, Oregon, Pennsylvania, Virginia, and Washington have adopted scholarship programs for early childhood educators.
- 111 Early Learning Challenge Technical Assistance Program, "Scholarships for Early Childhood Educators in RTT-ELC States" (Washington, DC: Early Learning Challenge Technical Assistance Program, 2016), available at <https://elc.grads360.org/services/PDCService.svc/GetPDCDocumentFile?fileid=16280>.
- 112 Alaska, Illinois, Louisiana, Maine, and Maryland are among the states that use CCDBG funding to provide scholarships to early childhood educators.
- 113 Virginia Department of Social Services Division of Child Care and Early Childhood Development, "Virginia Child Care Provider Scholarship," [http://townhall.virginia.gov/L/GetFile.cfm?File=C:%5CTownHall%5Cdocroot%5CGuidanceDocs%5C765%5CGDoc\\_DSS\\_6112\\_v1.pdf](http://townhall.virginia.gov/L/GetFile.cfm?File=C:%5CTownHall%5Cdocroot%5CGuidanceDocs%5C765%5CGDoc_DSS_6112_v1.pdf).
- 114 Interview with Dr. Brenda Ragle.
- 115 Sara Goldrick-Rab and Karole Dachelet, "Investing in Student Completion: Overcoming Financial Barriers to Retention through Small-Dollar Grants and Emergency Aid Programs" (Madison, WI: Wisconsin Hope Lab, 2015), [http://www.wihopelab.com/publications/Investing-in-Student-Completion-WI-Hope\\_Lab.pdf](http://www.wihopelab.com/publications/Investing-in-Student-Completion-WI-Hope_Lab.pdf).
- 116 Interview with Allison Thielke, professor at Front Range Community College.
- 117 Ibid.
- 118 Thomas Bailey, Shanna Smith Jaggars, and Davis Jenkins, "What We Know About Guided Pathways" (New York: Community College Research Center, 2015), <https://ccrc.tc.columbia.edu/media/k2/attachments/What-We-Know-Guided-Pathways.pdf>.
- 119 The Aspen Institute College Excellence Program and Achieving the Dream, "Feedback Report Prepared for Ivy Tech Community College of Indiana," <https://www.ivytech.edu/files/ASPEN-ATD-FeedbackReport-September2016.pdf>.
- 120 Interview with Dr. Brenda Ragle.
- 121 Community College Research Center, "Designing a System for Strategic Advising," Strategic Advising, September 2013, <https://ccrc.tc.columbia.edu/media/k2/attachments/designing-a-system-for-strategic-advising.pdf>.
- 122 Sakai et al., "Yes They Can."
- 123 Susan Scrivener et al., "A Good Start: Two-Year Effects of a Freshmen Learning Community Program at Kingsborough Community College" (New York: MDRC, 2008), <https://files.eric.ed.gov/fulltext/ED500477.pdf>.
- 124 Sakai et al., "Yes They Can."
- 125 Interview with Dr. Johnna Darragh Ernst, professor of Early Childhood Education at Heartland Community College.
- 126 Berkshire Community College, "BCC Launches New Education Department," [http://www.berkshirecc.edu/news-events/2017/new\\_education\\_dept.php](http://www.berkshirecc.edu/news-events/2017/new_education_dept.php).
- 127 Interview with Dr. Lisa Eads.
- 128 Lane Community College, "Career Pathways," <https://ccwd.hecc.oregon.gov/StudentSuccess/edocs/LaneCareerPathwaysCaseStudy.pdf>.

- 129 Community College of Rhode Island, "RI Early Childhood Education and Training Program," <https://www.ccri.edu/hmns/RIECETP.html>.
- 130 Chattanooga State Community College, "Early Childhood Education," <https://www.chattanoogastate.edu/early-childhood-education>.
- 131 Marilyn Chu, Barbara Martinez-Griego, and Sharon Cronin, "A Head Start/College Partnership: Using a Culturally and Linguistically Responsive Approach to Help Working Teachers Earn Degrees," *Young Children* 65, no. 4 (2010): 24-29.
- 132 University of Wisconsin Whitewater, "ECE4U," <http://www.uww.edu/coeps/departments/ece4u>.
- 133 Chu et al., "A Head Start/College Partnership."
- 134 Evelyn Ganzglass, "Scaling 'Stackable Credentials': Implications for Implementation and Policy" (Washington, DC: Center for Postsecondary and Economic Success, 2014), <http://www.clasp.org/resources-and-publications/files/2014-03-21-Stackable-Credentials-Paper-FINAL.pdf>.
- 135 Caron, "Building a Strong Foundation for Early Learning."
- 136 Washington Department of Early Learning, "Washington State Stackable Certificates," [http://ececareers.del.wa.gov/sites/default/files/images/stackable\\_certificates\\_8-17-16.pdf](http://ececareers.del.wa.gov/sites/default/files/images/stackable_certificates_8-17-16.pdf).
- 137 Interview with Dr. Johnna Darragh Ernst; interview with Vicki Garavuso, program director for Undergraduate Early Childhood Education at The Center for Worker Education, CUNY; interview with Dr. Lisa Eads.
- 138 Interview with Vicki Garavuso.
- 139 Thirty-one states have statewide guaranteed transfer of an associate degree, and fifteen states have enacted statewide reverse transfer legislation. Lexi Anderson, "50-State Comparison: Transfer and Articulation Policies," Education Commission of the States, <https://www.ecs.org/transfer-and-articulation-policies-db/>.
- 140 New Jersey Presidents' Council, "Comprehensive State-wide Transfer Agreement," adopted 2008, available at <http://www.nj.gov/highereducation/PDFs/XferAgreementOct08.pdf>.
- 141 Ibid.
- 142 Pennsylvania Department of Education, "Pennsylvania Statewide Program-to-Program Articulation Agreement for Degrees Leading to PK-4 Teacher Certification," revised 2011, [http://www.pacollegetransfer.com/Portals/6/PAFiles/PK4EDU\\_P2P\\_AGREEMENT\\_Aug\\_18\\_2011.pdf](http://www.pacollegetransfer.com/Portals/6/PAFiles/PK4EDU_P2P_AGREEMENT_Aug_18_2011.pdf).
- 143 PA Keys, "Early Childhood Education Program-to-Program Articulation in Pennsylvania," [https://www.pakeys.org/uploadedContent/Docs/Higher%20Ed/P2P%20Articulation%20in%20Early%20Childhood%20Education%20in%20Pennsylvania\\_Dr.%20Bernadine%20Ahonkhai\\_%202014%20Updated-1.pdf](https://www.pakeys.org/uploadedContent/Docs/Higher%20Ed/P2P%20Articulation%20in%20Early%20Childhood%20Education%20in%20Pennsylvania_Dr.%20Bernadine%20Ahonkhai_%202014%20Updated-1.pdf).
- 144 It is worth noting that the University of California system does not agree to accept the transfer of A.A. degrees. Education Commission of the States, "Transfer and Articulation," <http://ecs.force.com/mbdata/mbprofallRT?Rep=TA14A>.
- 145 Indiana Commission for Higher Education, "Transfer Single Articulation Pathways," 2015, [https://www.in.gov/che/files/TSAP\\_BW\\_Binder\\_Final.pdf](https://www.in.gov/che/files/TSAP_BW_Binder_Final.pdf).
- 146 Colorado Department of Higher Education, "Statewide Transfer Articulation Agreement in Early Childhood Teacher Education," revised 2017, [http://higher.ed.colorado.gov/Academics/Transfers/Agreements/STAA\\_ECE\\_Master\\_Agreement.pdf](http://higher.ed.colorado.gov/Academics/Transfers/Agreements/STAA_ECE_Master_Agreement.pdf); Connecticut State Department of Education, "Policy Concerning Articulation Agreement and Practicum in Pre-kindergarten," 2010, [http://www.ct.gov/oec/lib/oec/earlycare/workforce/ectc/articulation\\_policy.pdf](http://www.ct.gov/oec/lib/oec/earlycare/workforce/ectc/articulation_policy.pdf); Massachusetts Department of Higher Education, "Early Childhood Education Compact," revised 2011, <http://www.mass.edu/shared/documents/admissions/EarlyChildhoodEducationCompact2011.pdf>; South Carolina Transfer and Articulation Center, "Statewide Transfer Agreements and Policies in South Carolina," <https://www.sctrac.org/FacultyAdvisors/StatewideTransferArticulationinSC/tabid/733/Default.aspx>; Tennessee Transfer Pathway, Early Childhood Education (PreK-3), <https://www.tntransferpathway.org/majors/early-childhood-education-pre-k-3>.
- 147 T.E.A.C.H. National Center, "Articulation Compendium."
- 148 Ibid.

- 149 Stephanie A. Bernoteit, Johnna C. Darragh Ernst, and Nancy I. Latham, eds. *Voices for the Field: Collaborative Innovations in Early Childhood Educator Preparation* (Edwardsville, IL: Illinois Education Research Council and Illinois Board of Higher Education, 2016), <https://ierc.education/wp-content/uploads/2017/01/Voices-from-the-Field-WEB-version.pdf>.
- 150 Hezel Associates, Lumina Foundation, and Western Interstate Commission for Higher Education, "Best Practices in Statewide Articulation and Transfer Systems: Research Literature Overview," 2009, <http://www.wiche.edu/info/publications/ATlitOverview.pdf>.
- 151 Matthew Soldner and Kelle Parsons, "Making the Case for Competency-Based Education" (Washington, DC: American Institutes for Research, May 2016), <http://www.air.org/sites/default/files/downloads/report/Making-the-Case-for-Competency-Based-Education-May-2016.pdf>.
- 152 Of these states, three had articulation policies: Florida, Indiana, and Wisconsin. While these three states have statewide processes in place for articulation, teams found that these processes were not consistently implemented. T.E.A.C.H. National Center, "Articulation Compendium."
- 153 T.E.A.C.H. National Center, "Articulation Compendium."
- 154 Ibid.
- 155 Interview with Sue Russell and Sharon Sullivan, T.E.A.C.H. Early Childhood National Center.
- 156 Randi B. Wolfe, "Trends and Innovations in Early Childhood Education Workforce Development," in *Rising to the Challenge: Building Effective Systems for Young Children and Families* (Boston: BUILD Initiative, 2015), <http://www.buildinitiative.org/Portals/0/Uploads/Documents/E-BookChapter4TrendsInnovationsEarlyChildhoodEducationWorkforceDevelopment.pdf>.
- 157 Wisconsin Early Childhood Association, "Credit for Prior Learning," <http://wisconsinearlychildhood.org/programs/teach/CPL/>; see also Erin Gernetzke, Daithi Wolfe, David Edie, and Jeanette Paulson, "Milestones: Advancements to Pathways for Early Childhood Higher Education," Pathways Brief 4, 2010-2011, <http://wisconsinearlychildhood.org/assets/Documents/milestones-paper-final3.pdf>.
- 158 South Carolina Early Care and Education, "South Carolina Early Care and Education Technical Assistance System," 2010, <http://tap.sc-cccd.net/Docs/Final%20Revised%20TAP%20Document.pdf>.
- 159 Mary Alice McCarthy, "Rethinking Credential Requirements in Early Education: Equity-based Strategies for Professionalizing a Vulnerable Workforce" (Washington, DC: New America, June 2017), <https://na-production.s3.amazonaws.com/documents/Rethinking-Credential-Requirements-ECE.pdf>.

## Acknowledgments

Bellwether Education Partners would like to thank the Joyce Foundation for their generous support of this project. Thank you to my colleagues who supported this project, especially Sara Mead for her valuable feedback and guidance, Tanya Paperny for her keen editorial eye, and Lee Foster for early research support. I am grateful to all interviewees, noted above, for sharing their knowledge and expertise. I would also like to thank the following reviewers who offered feedback on a draft version of this publication: Dr. Abby Copeman Petig of the Center for the Study of Child Care Employment, Rachel Fishman and Clare McCann of New America, Alison Lutton of Lutton Consulting, and Jason Quiara of the Joyce Foundation. Feedback and contributions from colleagues, interviewees, and reviewers helped to shape and improve this paper, but the final content is the responsibility of the author.



## About the Author

### Marnie Kaplan

Marnie Kaplan is a senior analyst on the Policy and Thought Leadership team at Bellwether Education Partners. She can be reached at [marnie.kaplan@bellwethereducation.org](mailto:marnie.kaplan@bellwethereducation.org).



## About Bellwether Education Partners

Bellwether Education Partners is a national nonprofit focused on dramatically changing education and life outcomes for underserved children. We do this by helping education organizations accelerate their impact and by working to improve policy and practice.

Bellwether envisions a world in which race, ethnicity, and income no longer predict opportunities for students, and the American education system affords all individuals the ability to determine their own path and lead a productive and fulfilling life.

© 2018 Bellwether Education Partners



This report carries a Creative Commons license, which permits noncommercial re-use of content when proper attribution is provided. This means you are free to copy, display and distribute this work, or include content from this report in derivative works, under the following conditions:



**Attribution.** You must clearly attribute the work to Bellwether Education Partners, and provide a link back to the publication at <http://bellwethereducation.org/>.



**Noncommercial.** You may not use this work for commercial purposes without explicit prior permission from Bellwether Education Partners.



**Share Alike.** If you alter, transform, or build upon this work, you may distribute the resulting work only under a license identical to this one.

For the full legal code of this Creative Commons license, please visit [www.creativecommons.org](http://www.creativecommons.org). If you have any questions about citing or reusing Bellwether Education Partners content, please contact us.