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# Supporting Early Educator Degree Attainment

## Takeaways from New America's Working Group

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## Introduction

Access to high-quality higher education is an important component of strengthening the early childhood education (ECE) workforce. Qualification requirements for this workforce in the United States vary significantly by setting, age group served, and state.<sup>1</sup> Whether early educators are pursuing an associate degree, a bachelor's degree, or certification, higher education programs can equip them with the skills and knowledge necessary to support young children's learning and development. But for more early educators to realize the promise of higher education, significant reform is needed to improve access and program quality.

Early education programs are increasing credentialing requirements, and early educators are up to the challenge of meeting these standards if they have adequate supports for success.<sup>2</sup> But higher education has become so expensive that pursuing a degree can feel out of reach.<sup>3</sup> Millions of college students end up saddled with high debt, and early educators rarely earn enough to pay it off in a reasonable amount of time.<sup>4</sup> To complicate matters, most early educators are “nontraditional” students—meaning they are over 24 years old, have children of their own, are the first in their families to attend college, and already have full-time jobs, characteristics that have been shown to “interfere with successful completion of educational objectives” in the words of the U.S. Department of Education.<sup>5</sup> These students face different challenges than their “traditional” peers, and many institutions of higher education (IHEs) are ill-equipped to meet their needs.

Too often in discussions about early educator preparation, faculty members, deans, and higher education policy content experts are left out of the conversation. The levers of change are often in the higher education systems, and ECE stakeholders can benefit from developing stronger relationships with peers in higher education. This idea was the genesis for our working group. In February 2019, our Early & Elementary Education Policy team hosted a meeting with diverse experts across fields to delve into how IHEs equip those teaching and caring for young children. Focusing on the perspective of the institution, we identified obstacles to improving higher education access and quality.<sup>6</sup>

Last fall, with support from the Alliance for Early Success, New America convened the Supporting Early Educator Degree Attainment working group to delve into the barriers IHEs face to serving and preparing early educators and to explore opportunities for reform.<sup>7</sup> The group selected five pressing barriers, identified promising practices to address those barriers, and then examined the policy and institutional levers needed for broader reform. This paper presents the working group's findings and shines a light on 11 of the bright spots that already exist in IHEs around the country.

Since the group wrapped up in December, the COVID-19 pandemic has wreaked havoc on the world, and the ECE and higher education sectors in the United States have not been spared. Now more than ever, IHEs and policymakers need to think creatively about how to serve and support students. With many child care centers shutting their doors, early educators face less stability in their jobs. This, coupled with the additional economic and social effects of COVID-19, will surely make pursuing higher education even more difficult. As centers and schools adapt to a new reality, early educators will need skills, whether via remote or in-person learning, to serve children facing trauma. And, of course, IHEs are grappling with how to safely and effectively serve their own students. These challenging times expose the fragility of our existing systems, but also offer the opportunity to accelerate innovation and allow for flexibility where it has been lacking.

## Barriers Faced by Institutions of Higher Education

While IHEs face numerous barriers to serving early educators well, the working group was tasked with narrowing down its focus to no more than five. We chose the following:

- 1. Providing the social, academic, and financial supports that this population of students (e.g., low-income, diverse, first generation, part-time) needs to be successful.**

Early educators pursuing higher education are often juggling coursework with full-time jobs and family responsibilities, all while earning extremely low wages. Navigating higher education systems can be tricky, especially if students have been out of school for years or are the first in their families to attend college.

Without supports like accessible counseling and advising services, it can be hard for students to stay on track to meet their academic and career goals. Lack of access to on-campus or affordable child care can also make it difficult for student parents to not only attend class, but also to study and meet with advisors.<sup>8</sup> Students also need academic supports such as accessible tutoring to address knowledge gaps and difficulties with coursework, flexibility around class time and location to accommodate their work and family responsibilities, and transfer agreements across institutions.

Perhaps most critically, the cost of higher education is a major barrier to entry and completion for early educators. College is expensive and federal aid, grants, and scholarships rarely cover the full cost of attendance.<sup>9</sup> Other costs include living expenses, books, and transportation. Students often end up strapped with debt and many have difficulty repaying it. This is exacerbated when students do not complete their programs, limiting their career growth and earnings potential.<sup>10</sup> Even students who do graduate often take years longer than expected to do so, increasing the cost of the degree.<sup>11</sup>

Some social and academic supports can be provided relatively easily if IHEs are aware of what students need, such as flexible class schedules. Providing other supports requires more significant up-front costs and personnel. ECE degree programs present particular challenges; given the low earnings graduates typically make in the workforce (especially relative to the cost of earning a degree), some colleges will not even offer them.

## **2. Serving the particular needs of this linguistically diverse workforce.**

Twenty-seven percent of the ECE workforce speaks a language other than English.<sup>12</sup> This population's multilingualism is an asset, as dual language learners make up a growing proportion of the nation's young students and research shows that these children benefit from participation in programs that support the development of their home languages as well as English.<sup>13</sup> Teachers who speak the home languages of the population they serve can better communicate with children and families.

Unfortunately, IHEs often do not have the capacity to meet the needs of this diverse student population. At many IHEs, courses and texts are only offered in English, and advisors only speak English, putting these students at a disadvantage. In a 2018 survey by the T.E.A.C.H. Early Childhood National Center, a majority of scholarship recipients and their higher education faculty reported that it was "very difficult or difficult" for English language learners to find a college advisor who could speak their native language, and find in-class translation services, textbooks, readings, and courses taught in their home language.<sup>14</sup> These challenges exacerbate bifurcation in the ECE field, where those in leadership positions are more likely to be white and monolingual English speakers.<sup>15</sup>

## **3. Supporting developmental education and general education requirements.**

Before they can delve into coursework related to early learning and child development, many early educators are required to take developmental (remedial) education courses and complete general education requirements. A 2016 report from the Center for American Progress went so far as to call developmental education a "systemic black hole from which students are unlikely to emerge."<sup>16</sup> Remedial courses are expensive insofar as they do not count towards a degree. It is also course content that a student has struggled with in the past or is unfamiliar with, which can be discouraging. Students who have to take developmental education courses are less likely to complete their programs.<sup>17</sup>

Among early educators, math classes tend to be the greatest barrier.<sup>18</sup> But this problem is not unique to early educators. Almost 60 percent of students at community colleges and 30 percent of students at four-year schools are placed into some kind of developmental math.<sup>19</sup> Of those, only 33 percent finish all of their remedial courses, and fewer still pass the introductory, college-level math course.<sup>20</sup> Math requirements pose a hurdle to program completion even though college-level math is not typically part of an early educator's day-to-day job. There is rarely

alignment between a program's math requirements and the knowledge that is relevant to teaching early childhood math.

#### **4. Navigating quality and access challenges with clinical experiences.**

Opportunities to observe and practice teaching are crucial to ensuring early educators learn how to put the knowledge and skills gained in coursework into practice.<sup>21</sup> In higher education these opportunities are often referred to as clinical experiences, which can include short-term experiences and longer-term intensive placements like student teaching. Requirements vary substantially between programs, but there are two primary challenges with clinical experiences in their current form: quality and access.

While almost all early educator preparation programs require candidates to participate in some type of clinical experience, requirements tend to focus more on completing a set number of hours than on the quality of the experience.<sup>22</sup> Candidates are sometimes placed in early education classrooms where teachers do not set a positive example or provide valuable support. It can be difficult for IHEs to ensure all students are placed with skilled mentor teachers that are prepared to link students' coursework to their clinical practice. Additionally, clinical experiences might not expose students to varied early learning environments or allow them to take on real responsibilities.

In addition, with most candidates already in the workforce, it can be difficult for them to take time away from their current jobs to participate in unpaid clinical experiences. Many students complete their required hours in their workplaces as a matter of convenience, even though it may not provide examples of best practices in teaching. In a 2018 survey from T.E.A.C.H. Early Childhood National Center on barriers to higher education access and success, "the requirement that all student practicums must be done outside the student's current workplace was identified in the top barriers" for counselors, faculty, and students.<sup>23</sup> Though there is nothing inherently wrong with completing a clinical experience at one's place of work, students can benefit from exposure to new environments and responsibilities. No consensus yet exists in the early education field on the appropriate requirements for field placements.

#### **5. Supporting faculty recruitment and development.**

High-quality preparation programs depend on skilled faculty. Yet faculty members do not always have the knowledge, hands-on experience, or resources to support and develop each candidate. This is exacerbated by the lack of diversity among faculty compared to the demographics of candidates and, even more, of the children that early educators serve.<sup>24</sup>

Doctoral programs in ECE are rare. Early educator preparation programs, like academic disciplines across higher education, rely heavily on part-time or adjunct faculty both for ease of hiring and to save money.<sup>25</sup>

According to the National Academy of Medicine's *Transforming the Workforce* report, this "can lead to inconsistent teaching practices, as well as long work hours, more administrative tasks, low salaries, and few benefits for faculty, all of which can negatively affect student learning."<sup>26</sup>

However, tenure is not necessarily synonymous with quality, either. Tenured faculty or those on the tenure track may prioritize research over teaching responsibilities because of how universities make promotion decisions. Adjuncts are sometimes better at trying together theory and practice because they have the benefit of recent field experience.

There is also concern in the early education field that faculty preparedness varies significantly among and within programs.<sup>27</sup> Faculty members should have an academic and real-life understanding of teacher education and pedagogy, as well as child development from birth through age 8. But with the field constantly growing, professors can feel ill-prepared to cover certain topics, such as STEM or culturally responsive teaching, which may not have been part of their own preparation years earlier. Unfortunately, quality professional development for faculty is rare or even nonexistent, and most professors do not have access to communities of practice to build their skills.

## Promising Practices to Overcome Barriers

The working group identified ways to address the five barriers IHEs face to serving the ECE workforce.

### Student Supports

Many students pursuing associate degree programs in community colleges, including early childhood educators, struggle to graduate.<sup>29</sup> The **Accelerated Study in Associate Programs (ASAP)**, launched at the City University of New York (CUNY) in 2007 with funding from the city government budgeted specifically for the program, offers a comprehensive program for associate degree seekers at nine campuses throughout the system.<sup>30</sup> Initial results showed improved graduation rates of a magnitude rarely seen in the evidence-base for higher education reform: the program almost doubled graduation rates for students enrolled in developmental education.<sup>31</sup> Most majors are eligible to participate in ASAP, so it is not specific to ECE.<sup>32</sup>

The success of the program is attributed largely to its comprehensive offerings for students. To address financial constraints, students receive a tuition waiver for any amount their financial aid does not already cover; free textbooks; and transportation assistance through MetroCards. Students enroll immediately in developmental education programs. To encourage students to build momentum toward graduation, they are required to enroll full-time—widely linked to a greater likelihood of completing college sooner<sup>33</sup>—and are provided with greater access to tutors, advisers, and career counseling. About half of ASAP students held a job on top of full-time enrollment, on average working 25 to 27 hours per week.<sup>34</sup>

The results speak for themselves. A rigorous evaluation by MDRC found that the program nearly doubled the three-year graduation rate for ASAP students as compared with their peers.<sup>35</sup> An analysis conducted by CUNY researchers of the program's first eight cohorts showed a large graduation effect, from about 25 percent to 53 percent.<sup>36</sup> The program was especially effective for students who needed developmental education and for students from historically underrepresented backgrounds.<sup>37</sup> Given that early educators often share many of the needs of ASAP students, this model may greatly increase their chances of graduating with a degree, and of completing their programs more quickly and at a lower price.

The program is now being replicated at other community colleges, mostly with the support of philanthropic organizations. An evaluation of the ASAP Replication demonstration at three Ohio community colleges, for example, found

that the programs nearly doubled graduation rates there after three years.<sup>38</sup> The model has been launched at another New York state community college, at three schools in the San Mateo County Community College District in CA, at a community college in Nashville, TN, and at two West Virginia community colleges.<sup>39</sup>

While ASAP reforms undoubtedly require a greater up-front investment from IHEs, the increased retention and graduation rates effectively pay for themselves by lowering the total cost per degree to the institution.<sup>40</sup> Virtually no other higher education reforms have shown such substantial shifts in college completion so quickly, making ASAP a prime method for colleges to solve the completion crisis for associate-degree students.

The working group identified multiple other comprehensive programs underway to address student supports. Two designed for ECE educators that stood out were the T.E.A.C.H. (Teacher Education and Compensation Helps) Early Childhood Scholarships and the Pennsylvania Early Childhood Education (ECE) Apprenticeship.<sup>41</sup> **T.E.A.C.H. Early Childhood** programs provide scholarships to incumbent early educators to pursue debt-free higher education, covering the cost of tuition, fees, and books. Recipients work with a dedicated counselor. Employers offer paid release time and agree to provide a pay increase to those who complete their program and remain at their job. In 2019, T.E.A.C.H. supported more than 17,495 scholarship recipients across 22 states and Washington, DC. The scholarships are administered by state agencies or nonprofits and are funded largely through federal dollars that flow to the state. Past federal funding sources have included the Child Care and Development Block Grant (CCDBG) quality and infant-toddler set-aside dollars and Race to the Top–Early Learning Challenge grants.<sup>42</sup> The T.E.A.C.H. National Center is supported by philanthropic dollars and some states also use philanthropy to support the program. The T.E.A.C.H. National Center is in the middle of a longevity study to analyze how graduates progress in their careers and earnings over three years.<sup>43</sup>

In Pennsylvania, the **ECE Apprenticeship** program provides working early educators with a higher education pathway that combines online or on campus coursework with on-the-job coaching and competency assessments so they can earn an associate or bachelor's degree in ECE.<sup>44</sup> It is a Registered Apprenticeship Program validated by the U.S. Department of Labor, and therefore meets specific program quality standards and has access to federal funding.<sup>45</sup> Tuition is funded through T.E.A.C.H. Early Childhood scholarships, and apprentices can take a full course load while working full time with the help of individual on-site coaches, academic support, and study groups. Apprentices receive incremental pay raises as they meet benchmarks in the program and can earn college credit without going into debt.

This apprenticeship program began as a local partnership between District 1199c Training & Upgrading Fund, a Philadelphia-based union, and the Community College of Philadelphia. It has since expanded statewide with support from the Pennsylvania Department of Labor & Industry and the Pennsylvania Office of Child Development and Early Learning, which plays a critical role in facilitating communication across state agencies.<sup>46</sup> The program depends on four essential partners to provide support to early educators: District 1199c Training & Upgrading Fund as an intermediary organization, participating IHEs, local training agencies that provide worksite coaching and training related to the identified course outcomes, and ECE employers.<sup>47</sup> Program partners collaborate to identify and develop strategies to remove locally relevant barriers to college enrollment and degree completion, such as courses in languages other than English or access to laptops for online courses.<sup>48</sup> An impact evaluation of the program is currently underway.

Another promising practice that was not raised in the working group, but that New America has done extensive research on, is Grow Your Own (GYO) teacher programs.<sup>49</sup> GYO programs, which recruit and prepare teachers from the local community, are designed with the needs of candidates in mind. A variety of wraparound supports are offered to each GYO participant to help remove the financial, academic, familial, and linguistic barriers they may face at each step of the process in earning a degree. For example, the **Bilingual Fellows program at Highline School District** in Washington State offers tuition assistance, mentoring, paid on-the-job training, university coursework on site, and a cohort model to provide peer support. Program fellows work as paraeducators while they earn their bachelor’s degree and teacher certification. The program is funded through a statewide competitive grant program that was established through legislative appropriation and is designed to facilitate school district and university partnerships to increase diversity in the state’s educator workforce. A total of eight states offer competitive grant programs to support the creation and expansion of GYO programs, including programs for individuals who lack a college credential, either associate or bachelor’s degree.<sup>50</sup>

**Policy, Practice, and Funding Levers Used by Program**

	State Government	Federal Government	IHE (e.g., cohort models, tutoring)	Other
CUNY ASAP	X		X	X (city government funding to IHE, philanthropy)

	State Government	Federal Government	IHE (e.g., cohort models, tutoring)	Other
T.E.A.C.H. Scholarships	X	X	X	X (philanthropy, local government)
PA Apprenticeship	X	X	X	X (union)
Bilingual Fellows Program	X		X	X (school district)

### Linguistically Diverse Workforce

Among the many strengths of the ECE workforce is its linguistic diversity.<sup>51</sup> More than one in four early educators speaks a language other than English, closely mirroring the linguistic demographics<sup>52</sup> of the young children they serve. Despite students' linguistic assets, IHEs have been slow to design accessible classes and resources for teacher candidates with limited English proficiency.<sup>53</sup>

Acknowledging the need for more bilingual courses, both Miami Dade College in Miami, FL and Southwestern College in Chula Vista, CA are taking innovative approaches to supporting their multilingual students in becoming early educators.<sup>54</sup>

**Miami Dade College** offers a certificate program for pre-K teachers and another for infant and toddler teachers which have been translated into Spanish and Haitian Creole. Each program includes four content courses focused on child development alongside English as a second language (ESL) courses that are contextualized to ECE to strengthen teacher candidates' English skills. Students who complete the program are eligible for the Florida Child Care Professional Certificate or the national Child Development Associate (CDA) Credential. Students may also take advantage of the stackable pathway the college has created and transfer the 15 credits earned through the certificate program towards an associate or bachelor's degree.

This program launched in 2013 with the encouragement of the Children's Trust, a dedicated source of revenue to support children and families established by voter referendum in Miami Dade County in 2002, and the local Early Learning Coalition, a nonprofit organization promoting school readiness in Miami Dade and Monroe counties. Through the Children's Trust Career Center, practitioners who work at an early childhood center can obtain a scholarship for coursework.

Since the certificate program began, 90 students have successfully completed the program, representing 65 percent of those who enrolled. A high proportion of these students have received support through T.E.A.C.H. Early Childhood scholarships. Student surveys have shown that the ESL course is the main obstacle to completion, so faculty have continuously modified the program to make the English vocabulary and content more applicable to students' early childhood work. With a large Spanish-speaking population in Miami, students are often more concerned with developing their expertise as ECE teachers than they are with learning English, as most of the children and families they work with also speak Spanish.<sup>55</sup>

With philanthropic support from the Early Educator Collaborative Initiative, and a partnership between the Children's Trust, the University of North Florida, and Miami Dade College, the infant and toddler certificate program will be offered online in Spanish and Haitian Creole within the coming year, allowing greater access to the program throughout the state and country.

**Southwestern College**, located in the southernmost part of California just a few miles from the Mexico border, has a large population of students who speak exclusively Spanish. In 2002, community members approached faculty at the community college to inquire about pathways to earn the California Child Development Associate Teacher Permit. The Family Studies Department and English as a Second Language Department collaborated to design a Spanish-to-English Associate Teacher Certificate that balances content in Spanish with scaffolded ESL instruction.

Launched in 2003, the program uses a cohort model and consists of four core child development courses, each of which is taught alongside a corresponding ESL class. The initial courses begin in Spanish and the final classes are taught in English. Students complete the program with 12 credits and are eligible to earn the state's Child Development Associate Teacher Permit.<sup>56</sup> This program is meant to be the first rung of the career ladder for Spanish-speaking students, as it gives them the foundation to succeed in English courses. They may continue on to the college's Child Development Associate of Arts degree (the next level permit in California), where classes are offered exclusively in English. The program, which typically takes about two years to complete, has a wait list each year.<sup>57</sup> Community college tuition in California is relatively affordable, and many students enrolling in the certificate program are eligible to access state grants that waive fees for first-time, full-time students for two years.<sup>58</sup>

Both colleges have structured programs to ensure that students acquire a deeper understanding of child development while improving their English proficiency. By embracing students' linguistic abilities, these colleges produce certified early educators ready to serve the multilingual students in their communities.

## Policy, Practice, and Funding Levers Used by Program

	State Government	Federal Government	IHE (e.g., cohort models, tutoring)	Other
Miami Dade College			X	X (local, philanthropy)
Southwestern College			X	

### Developmental & General Education Requirements

Placing into remediation and passing college-level math can be challenging for students interested in a career in ECE. Many of these students, particularly those who have been out of school and in the workforce for years, find passing math a challenging barrier to achieving their academic goals.<sup>59</sup> Fortunately, there are initiatives underway to reform developmental math and support students. Two of these major reforms are the math pathways and the co-requisite model and many states, like Massachusetts, are implementing both strategies.

**Math pathways reform** aligns a student's college-level math with his or her course of study. College algebra was meant to prepare students for calculus but, over time, it became the default college-level math class for all students. Now, fewer than 20 percent of students enrolled in college algebra are pursuing programs that require calculus.<sup>60</sup> These students need math that better matches their academic and career goals. The evidence shows that when students engage with math relevant to their programs of study—for example, an elementary education math course for early educators as recommended in Massachusetts—they are more motivated and more likely to succeed.<sup>61</sup> For instance, in one randomized, controlled trial, 56 percent of City University of New York (CUNY) students passed a college-level statistics course compared with 45 percent who were randomly assigned to a developmental algebra course. The only difference was the mathematics content and how relevant it was to the students' course of study.<sup>62</sup>

Moving to **co-requisite remediation** means allowing students who tested into remediation to enroll directly into a credit-bearing math class while receiving additional academic support. Massachusetts, along with 20 other states, is currently supporting its public colleges to implement this reform. Evidence shows that co-requisite remediation is very effective in helping students pass their gateway courses and increases credit completion among students who require developmental education. In 2015, Tennessee implemented co-requisite remediation. Pass rates in introductory college-level math subsequently

increased from 12 percent under the prerequisite model to 51 percent.<sup>63</sup> While these reforms were introduced alongside other systematic changes, early findings from one study suggest that co-requisite remediation helped reduce the cost of getting a student through his or her first college-level math course by half, from \$7,720 to \$3,840.

To support these and other remedial education reforms, philanthropic foundations and the Education Commission of the States created a network of like-minded organizations called Strong Start to Finish, which focuses on promoting research-based reforms that improve first-year student success. It works with many colleges and non-profits.<sup>64</sup> The network can provide helpful resources for colleges looking to improve remediation.

These curricular reforms can make a big difference in students passing their college-level math course and earning their degree. States, particularly state higher education agencies, can help support these reforms by helping convene colleges for discussion, giving grants, and providing technical assistance around remediation reform. IHEs themselves can help their faculty and deans to change the way they are providing instruction, provide additional resources for academic support in redesigned co-requisite courses, and rethink required college-level math to better align with the course of study.

### Policy, Practice, and Funding Levers Used by Program

	State Government	Federal Government	IHE (e.g., cohort models, tutoring)	Other
Math Pathways	X		X	
Co-requisite Remediation	X		X	X (philanthropy)

### Clinical Experiences

Effective clinical experiences expose students to learning environments where they can observe strong teaching and implement new knowledge and skills learned in their coursework.<sup>65</sup> It is important for students to have access to clinical experiences across multiple age groups and early learning settings throughout their preparation program.<sup>66</sup> In 2016, **Central New Mexico Community College** set out to improve the quality of field placements by establishing the Early Childhood Mentor Network.<sup>67</sup> Through this program, practicing early educators can apply to become mentors for practicum students.

During their first year in the program, these teachers take two online mentorship courses at no cost and earn a state-level mentor certificate from the New Mexico Early Childhood Education & Care Department upon completion.

Mentors meet with college faculty each month to design high-quality clinical experiences that connect students' coursework with classroom practice. For hosting practicum students and attending meetings, mentors receive a small stipend from the state and three credits that may be applied to any of the college's courses. Since mentor teachers are required to hold at least an associate degree and Central New Mexico Community College does not offer a bachelor's degree in ECE, many mentors use this benefit for their spouses or children.<sup>68</sup>

The Early Childhood Mentor Network provides a comprehensive clinical experience for each teacher candidate while strengthening the skills of educators already practicing. With this systems-wide approach, the college aims to improve the quality of early learning and care for children across the region. The program was initially funded through a grant from the Thornburg Foundation, a local philanthropic organization. As the largest early childhood program in the state, Central New Mexico Community College was the ideal site for its investment because the program needed to create more high-quality field placements to serve all of its students. This year, the college received a contract from New Mexico's Children, Youth, and Families Department to support this work. Building on the successes of the mentor network and making use of new funding streams, the college recently launched a network for directors, acknowledging the important role that leadership plays in early education program quality.<sup>69</sup>

In the 2018 program evaluation, students paired with mentors gave positive feedback about their clinical experiences and reported feeling prepared to enter the field with stronger classroom management and instructional techniques.<sup>70</sup> Mentors reported feeling greater confidence and improved skill. Mentors were far less likely than their non-mentor peers to report plans to exit the early childhood field in the next six months. The program evaluation found that the professional network acts as a buffer to counter the many challenges early educators may encounter.

Another challenge when it comes to fulfilling clinical requirements is not quality, but access. Policies regarding where and how students fulfill these requirements varies between programs, and IHEs have significant leverage to improve accessibility. For example, IHEs can allow clinical hours to be completed over a longer period of time, such as two semesters instead of one, to better accommodate working students. Alternatively, the T.E.A.C.H. Early Childhood Scholarship program and Pennsylvania ECE Apprenticeship model discussed earlier enable learning to happen on the job by embedding practicum requirements in teachers' current worksites and ensuring that they have access to mentors. Another option to accommodate students with time constraints is to allow them to conduct classroom observations via video instead of in person.

In the wake of COVID-19, both IHEs and early education settings are grappling with how to serve students safely. Faculty members are wrestling with how students will meet clinical requirements when in-person learning is not possible. In a spring survey of IHEs by the National Association for the Education of Young Children (NAEYC), “41% of respondents [said] that none of their students were able to participate in field experiences” due to COVID-19.<sup>71</sup> However, IHEs adapted quickly and found numerous ways to ensure that candidates observe teaching and learning and practice skills learned in their coursework. The most common method was “using videos and reflections to replace field experiences.” Some students were able to meet with children and families virtually, and others “videotape[d] themselves implementing curriculum (with or without actual children).” And about one-third of survey respondents gave students more time to complete the requirements. Lessons learned from the COVID-19 response in the way of flexibility and the use of technology may be useful after the pandemic is over.

### Policy, Practice, and Funding Levers Used by Program

	State Government	Federal Government	IHE (e.g., cohort models, tutoring)	Other
Central New Mexico Community College	X		X	X (philanthropy)

### Faculty Recruitment & Development

Tenured and adjunct faculty members play an important role in preparing early educators, both in the content and experiences they deliver.

The reliance on and limited support of part-time and adjunct faculty in degree programs can contribute to the inconsistent quality of those programs. These non-tenure-track faculty members can be an asset, however, especially in ECE degree programs because they may be working in the field themselves. IHEs can and should do more to support these faculty members and recognize their important role in preparing early educators. One example of how to do this comes from **Santa Monica College** in California.<sup>72</sup> While the strategies employed are not specific to ECE faculty, the college has a significant percentage of part-time instructors. In the fall of 2018, they taught more than 50 percent of the courses offered. According to a report from the Pullias Center for Higher Education, the college instituted several approaches including an orientation specifically for adjunct faculty with the goal of building community; department-

specific mentoring; and professional development opportunities, including compensation for non-teaching work.

Opportunities for faculty to collaborate and support one another are important for their development. For example, as part of President Obama’s Invest in Us campaign, the Foundation for Child Development funded the **NYC Early Childhood Research Network**, where faculty from public and private IHEs, community colleges, four-year schools, and graduate programs throughout New York City propose research studies in response to policymaker needs.<sup>73</sup> In three years, the Research Network has not only launched 11 studies that cover a range of topics in early education but also has played a role in developing faculty, since it facilitates cross-program learning and offers professional development. For instance, the network brought in a communications firm to teach researchers how to write recommendations succinctly to reach the right people.

Another important aspect of the network is connecting people who have earned their PhD but are new to the field with more seasoned faculty. Sherry Cleary, university dean of Early Childhood Initiatives at the City University of New York, sees the Early Career Scholars program as “inviting the next generation of researchers to the table.” These scholars receive a stipend and are mentored for the year. Academia can be a competitive, hierarchical environment and is not always friendly to new faces, but the Early Career Scholars are treated as full colleagues, attending all meetings, and being introduced to city policymakers and funders. The Research Network also tries to address the lack of diversity in the field. Early education faculty tend to be predominantly white women, which does not reflect the diversity of New York City. The Research Network expects research teams to model the diversity found in the city.

**Policy, Practice, and Funding Levers Used by Program**

	State Government	Federal Government	IHE (e.g., cohort models, tutoring)	Other
Santa Monica College			X	
NYC Research Network		X	X	X (philanthropy)

## Levers to Overcome Barriers

A primary goal of our work is to suggest concrete ways to improve the quality of early educator preparation. The federal government, states, localities, IHEs, and philanthropy each play a role in shaping policy and practice. Our working group explored which levers policymakers and other stakeholders can pull to alter the system to better meet the needs of this workforce. The programs discussed in this paper each pull on a combination of different levers to achieve their goals, but there are many additional levers available that they do not utilize. The table below presents an extensive, but not necessarily exhaustive, list of levers that can be pulled to address each barrier, as identified by the working group.

	State Levers	Federal Levers	IHE Levers	School District/ Community Levers	Philanthropic Levers	Other
Student Supports	<ul style="list-style-type: none"> <li>-Use convening ability to foster collaboration for problem solving, such as through State Advisory Councils</li> <li>-Increase predictable, sustainable funding to IHEs</li> <li>-Share best practices</li> <li>-Pass bills through the legislature</li> <li>-Allocate funding for student supports, including scholarships</li> <li>-Grant teachers loan forgiveness</li> <li>-Offer need-based financial aid</li> <li>-Align state rules for federal support programs (TANF, CCDBG, SNAP, etc.) with student needs</li> </ul>	<ul style="list-style-type: none"> <li>-Increase funding for programs such as CCAMPIS, FIPSE CCDBG, etc.<sup>74</sup></li> <li>-Expand the TEACH Grants to allow students to prepare to teach in birth–age five private and public settings</li> <li>-Amend one or more existing federal funding streams to add dedicated funds for ECE apprenticeships</li> <li>-Pass the FINISH Act<sup>75</sup></li> <li>-Disseminate best practices</li> <li>-Exercise the bully pulpit (as done in Obama White House)</li> <li>-Increase spending through Pell grants for low-income students</li> </ul>	<ul style="list-style-type: none"> <li>-Dedicate resources to serving students (e.g., advisors, faculty, etc.)</li> <li>-Identify and implement evidence-based approaches to support students</li> <li>-Implement cohort-based models to foster community</li> <li>-Support students with tuition waivers, discounts, and living-cost subsidies</li> <li>-Develop clear pathways through a degree and into a job</li> <li>-Prioritize degree completion</li> <li>-Offer flexible schedules (such as weekend and evening courses)</li> <li>-Offer hybrid courses</li> <li>-Offer support services when and where students need them</li> <li>-Provide child care for faculty and students</li> <li>-Leverage WIOA funding to offset the cost of tuition and other training expenses for ECE professionals in apprenticeships</li> </ul>	<ul style="list-style-type: none"> <li>-Partner to provide student supports or connect students to external supports</li> <li>-Offer concurrent enrollment programs for high school students</li> </ul>	<ul style="list-style-type: none"> <li>-Provide funding for innovations</li> <li>-Support rigorous program evaluations</li> <li>-Offer flexibility to grantees</li> </ul>	<ul style="list-style-type: none"> <li>-Develop clear standards for student supports through programmatic accreditation</li> <li>-Leverage Child Care Resource and Referral agencies and unions</li> </ul>

	State Levers	Federal Levers	IHE Levers	School District/ Community Levers	Philanthropic Levers	Other
Linguistically Diverse Workforce	<ul style="list-style-type: none"> <li>-Use convening ability to foster collaboration for problem solving</li> <li>-Increase predictable, sustainable funding to IHEs</li> <li>-Share best practices</li> <li>-Alter policies around in-state tuition eligibility</li> <li>-Recognize the importance of multilingual educators and support program designs and recruitment strategies that can increase their numbers</li> </ul>	<ul style="list-style-type: none"> <li>-Increase spending through Pell grants for low-income students</li> </ul>	<ul style="list-style-type: none"> <li>-Offer content courses in languages other than English</li> <li>-Ensure courses value multilingualism in early childhood</li> <li>-Hire multilingual faculty, advisors, staff</li> <li>-Use curricula that reflect linguistic diversity of students</li> <li>-Ensure campus resources reflect the linguistic diversity of students</li> <li>-Offer PD for faculty serving linguistically diverse students</li> </ul>	<ul style="list-style-type: none"> <li>-Collaborate with community-based organizations that focus on serving a linguistically diverse community</li> <li>-Partner with multilingual schools for volunteer, observation &amp; practicum opportunities</li> </ul>	<ul style="list-style-type: none"> <li>-Provide funding for innovations (e.g., resources in multiple languages, hiring of diverse faculty)</li> <li>-Support rigorous program evaluations</li> <li>-Offer flexibility to grantees</li> </ul>	<ul style="list-style-type: none"> <li>-Ensure program accreditation standards address linguistic diversity and student needs</li> </ul>
Remedial & General Ed	<ul style="list-style-type: none"> <li>-Use convening ability to foster collaboration for problem solving</li> <li>-Increase predictable, sustainable funding to IHEs</li> <li>-Share best practices</li> <li>-Encourage reform through legislative authority<sup>76</sup></li> <li>-Allocate specific funding for reforms, such as grant programs</li> </ul>	<ul style="list-style-type: none"> <li>-Increase spending through Pell Grants for low-income students</li> <li>-Increase access to financial aid</li> <li>-Lift ban on veterans using their benefits toward online remedial education</li> </ul>	<ul style="list-style-type: none"> <li>-Use multiple measures for remediation determination</li> <li>-Align math requirements with specific majors</li> <li>-Use co-requisite remediation</li> <li>-Build career pathway programs that meet the federal requirements for Ability to Benefit to open up access to financial aid</li> </ul>	<ul style="list-style-type: none"> <li>-Improve high school supports to prevent need for remediation</li> <li>-Align college entrance exams with high school outcomes</li> <li>-Design and deliver integrated secondary and postsecondary programs that assist adults in obtaining a high school diploma and ECE degree</li> </ul>	<ul style="list-style-type: none"> <li>-Provide funding for innovations</li> <li>-Support rigorous program evaluations</li> <li>-Offer flexibility to grantees</li> </ul>	

	State Levers	Federal Levers	IHE Levers	School District/ Community Levers	Philanthropic Levers	Other
Clinical Experiences	<ul style="list-style-type: none"> <li>-Use convening ability to foster collaboration for problem solving</li> <li>-Share best practices</li> <li>-Reform licensure/certification requirements with legislative authority</li> <li>-Increase flexibility around student teaching requirements</li> <li>-Leverage state Perkins funding</li> </ul>	<ul style="list-style-type: none"> <li>-Improve portability, flexibility, and funding related to background checks and fingerprinting requirements</li> </ul>	<ul style="list-style-type: none"> <li>-Determine appropriate requirements for student teaching and field placements</li> <li>-Utilize videos or virtual simulations</li> </ul>	<ul style="list-style-type: none"> <li>-Partner with IHEs to identify high-quality early education programs and strong mentor teachers</li> </ul>	<ul style="list-style-type: none"> <li>-Provide funding for innovations</li> <li>-Support rigorous program evaluations</li> <li>-Offer flexibility to grantees</li> </ul>	<ul style="list-style-type: none"> <li>-Develop clear standards through program accreditation</li> </ul>
Faculty Recruitment and Development	<ul style="list-style-type: none"> <li>-Use convening ability to foster collaboration for problem solving</li> <li>-Increase predictable, sustainable funding to IHEs</li> <li>-Share best practices</li> <li>-Allocate specific funding for reforms, such as grant programs</li> </ul>	<ul style="list-style-type: none"> <li>-Pass legislation, including updating Title II of HEA, to support and set standards for ECE higher education programs and reflect the need for a high-quality ECE workforce</li> <li>-Invest in ECE programs through grant and other funding</li> </ul>	<ul style="list-style-type: none"> <li>-Alter recruitment strategies</li> <li>-Adjust promotion and tenure policies</li> <li>-Better engage and support adjuncts, including through compensation</li> <li>-Offer doctoral programs in early education</li> </ul>	<ul style="list-style-type: none"> <li>-Connect what young children need with what preparation programs cover</li> </ul>	<ul style="list-style-type: none"> <li>-Provide funding for innovations (e.g., communities of practice)</li> <li>-Support rigorous program evaluations</li> <li>-Offer flexibility to grantees</li> </ul>	<ul style="list-style-type: none"> <li>-Leverage professional organizations (e.g., NAEYC, NAECTE, ACCESS)</li> </ul>

Appropriate levers vary depending which problem stakeholders are trying to solve. Sometimes solutions lie within the power of IHEs, while others require revisions to federal, state, or even local policy. Often, policy change requires bringing together stakeholders across each of those levels of government. At the federal level, that change may involve the Department of Health & Human Services, which oversees child care and early education policy; the Department of Education, with oversight of colleges and universities; and the Department of Labor, which operates federal workforce programs. In states, the entity with

primary responsibility will vary depending on the local context, but likely includes the administration of the state's public college systems, state higher education executive officers, state legislators, and education officials in the governor's office. City workforce and higher education officials will also need to work together to bring the full potential of policy reform to bear. In some instances, simply bringing attention to a barrier can spark change, while in others, a financial incentive or an adjustment in law is necessary.

There are, however, general themes that apply across barriers. Philanthropy, for instance, can be a lever to launch potential solutions in all five issue areas. Philanthropic funding usually is flexible because it is tied to fewer strict rules and regulations than government funding is.<sup>77</sup> Philanthropies can act quickly and can pursue more experimental or high-risk endeavors. They can also allocate funding to program evaluation, both for private and publicly funded programs, which is essential for determining what works and under what conditions and for making the case for continued investment.

What makes philanthropy a valuable lever for getting new programs and initiatives off the ground, however, is also why it should not be relied on to solve problems long-term. Philanthropic organizations switch gears and adjust priorities regularly. In contrast, public funding tends to be a more stable source because government programs are resistant to change, usually adjusting incrementally. Unfortunately, federal funding is not always allocated at the levels needed for programs to function best. For instance, the Child Care and Development Block Grant only reaches 15 percent of eligible families due in part to limited funding.<sup>78</sup> Greater federal investment, whether directed to ECE preparation programs or directly to students, could help address each of the barriers discussed in this paper. The federal government can also promote quality through regulation. For example, the Head Start Act requires states to form State Advisory Councils on Early Childhood Education and Care which must develop recommendations on "statewide professional development and career advancement plans" as well as assess "the capacity and effectiveness of institutes of higher education supporting the development of early childhood educators."<sup>79</sup>

And when it comes to higher education specifically, state funding plays an essential role. States have been disinvesting in higher education for years, placing the burden on students with higher tuition and on the federal government in the way of federal student loans.<sup>80</sup> Increased state investment in higher education can improve access and quality for students broadly or be targeted to address the challenges raised in this paper. States can also play an important role outside of their budgets too; they have the ability to convene key stakeholders, including IHEs, to collaborate and share best practices.

## Considerations for States & Concluding Thoughts

As the ECE field continues to work towards professionalization, higher education needs to be accessible for prospective and current educators so that we are building up the workforce instead of keeping people out. Based on the findings of our working group, here are the top three takeaways states should be thinking about to support this work:

- 1. Bring together stakeholders—including faculty, policy experts, and practitioners—to identify solutions to barriers that students and IHEs face.** Our working group identified numerous barriers that IHEs face to serving the ECE workforce before narrowing down to the five discussed in this paper. States could benefit from identifying which barriers are most pressing for their IHEs and bring together the necessary groups to explore solutions. The relevant parties will differ based on the problem stakeholders are trying to solve and which entities in the state are able to influence it. It is particularly important that faculty members have a seat at the table.
- 2. Establish grant programs to spur innovation and collaboration around these and other barriers.** Once states have identified the barriers their IHEs face to serving the ECE workforce, they can award grants to IHEs to implement potential solutions or to third parties, such as nonprofits trying to expand, change, or implement a program across institutions. Depending on the state's processes and circumstances, various funding sources may be provided to support such grants, including general appropriations to an institution or budget line-items for a project. One area that states would be wise to invest in is faculty recruitment and development, as more research is needed to find additional promising practices, especially for efforts specific to ECE.
- 3. Dedicate more funding to higher education and adjust state rules for federal programs to better align with student needs.** Increased funding for higher education can improve program quality and lower the cost of attendance. Funding directed to early educator preparation programs can address the particular needs facing this population, such as offering course materials in languages other than English. Funding is especially important as all states face massive budget shortfalls in the wake of COVID-19. But stakeholders should also be mindful that states likely already have access to federal funds that could be better leveraged to support the ECE workforce. For instance, the federal government allows states to set guidelines around which parental activities (work, education, or training) qualify for child care assistance under the Child Care and Development Block Grant (CCDBG). States determine how

student-friendly eligibility is. For instance, Kentucky reformed its CCDBG guidelines in 2018 to allow higher education students to be eligible for child care assistance without needing to also meet a work requirement.<sup>81</sup>

The coronavirus pandemic has created unprecedented challenges for the ECE and higher education sectors and this is the time to explore innovative solutions. Institutions and families are experiencing high levels of instability. Many early childhood educators have left the field, making it critical that there are efficient and effective ways to support a pipeline to produce well-educated early childhood professionals. Now more than ever, advocates, policymakers, practitioners, and students need to work together to use the resources at hand. Flexibility will be key to ensuring that IHEs can continue to effectively prepare early educators. Many of them have already found ways to offer courses and clinical experiences that they would have deemed impossible one year ago. There may be lessons learned from how governments and IHEs respond to this crisis that we can take into the recovery period and beyond.

# Appendices

## APPENDIX I

### *Working Group Members*

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## APPENDIX II

### *Principles for Promising Practices*

To determine which promising practices to hold up, the group identified four principles that initiatives and programs should meet. We want to see strategies, practices, and innovations that are:

1. Aimed at addressing at least one of the barriers identified by the working group
2. Informed by research related to the preparation and development of early childhood educators and strategies that support nontraditional students
3. Being implemented in at least one location in the U.S. or another country
4. Focused on equity

We are especially interested in initiatives and programs that aspire to:

1. Incorporate practitioner and/or student voice in program design
2. Show the program is working for the targeted population with evaluation data (including formative or summative evidence)
3. Show results in multiple locations, sectors, or institutions
4. Use sustainable funding models

## Notes

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