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PRE-K TEACHERS AND BACHELOR'S DEGREES

Envisioning Equitable Access to
High-Quality Preparation Programs

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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.



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Contents

Introduction	2
What Pre-K Teachers Should Know and Be Able to Do	3
Current State of Pre-K Teacher Qualifications	5
Focusing on the Impact of the Bachelor's Degree	7
Ensuring Continued Diversity in the Workforce	9
Recognizing the Imperative of Affordability and Social Support Services	10
The Missing Pieces in Current Bachelor's Programs and Credential Requirements	11
Strategies for Overcoming Some of These Problems	12
Improving Program Access and Completion	13
Building Nontraditional Instructional Methods	14
Getting Creative with Scholarships and Financing	15
Revamping Coursework and Field Experiences	15
Preparing the Future Workforce	17
Conclusion	18
Appendix A: Attendees at New America's Meeting on September 26, 2017	19
Appendix B: Experts Interviewed Post-Meeting	20
Notes	21

INTRODUCTION

Early childhood educators have a unique opportunity to foster the development of cognitive, behavioral, and social skills. But the work is not easy. Effective educators need to master a complex set of skills, which requires high-quality educational and training programs rooted in child development and practicums in early childhood classrooms led by highly-qualified teachers. Today, expectations of what early childhood educators should know and be able to do—and the education needed to access that knowledge and those skills—varies widely across states and individual programs. One result of these uneven and often low expectations is that too many educators are inadequately prepared for this challenging work.

In light of the robust evidence on both the importance of quality early childhood education and the skills needed to teach young children, early childhood experts and advocates for young children have long called for increasing the education and training of early childhood workers in the United States. Over the past two decades, policymakers have gradually increased credentialing requirements for teachers in Head Start and state-funded pre-K programs. In 2014, the Institute of Medicine and the National Research Council brought together a committee of experts who essentially endorsed that trend. In *Transforming the Workforce for Children Birth Through Age 8: A Unifying Foundation*, the committee recommended

that states and other organizations build a system that requires and enables all lead educators in early childhood settings to hold a minimum of a bachelor's degree with specialized knowledge and competencies in early childhood education.

The committee called for extending this requirement to all lead teachers of children ages birth through eight working in all types of early childhood settings. However, turning that recommendation into reality may be most easily achieved among pre-K teachers—those lead educators who are teaching three- and four-year-olds in publicly funded classrooms within early learning centers and elementary schools. Already, the average educational credential and experience of pre-K teachers are higher than those of teachers employed in infant and toddler settings, or of those working in home-based settings.

Still, many current and prospective pre-K teachers face significant barriers to obtaining bachelor's degrees; current members of the workforce, in particular, may find it exceedingly difficult to find the time and money to attend college courses and complete traditional preparation programs, given the low wages that come with most jobs in early childhood. In addition, many questions loom about the quality of existing bachelor's programs. Less frequently discussed but also critical is the need to ensure that the next generation of high school and

college students, a population which is increasingly diverse, sees pre-K teaching as an attractive career choice and has strong preparation avenues to pursue this choice.

In order to unpack the complexities of this recommendation and its implications for teachers of three- and four-year-olds, New America and Bellwether Education Partners engaged the nation's leading experts on early childhood teacher preparation in a discussion of what preparation for current and future early educators should look like and the potential of new, more accessible and higher-quality models for degree programs. New America

and Bellwether convened a day-long meeting in Washington, DC on September 26, 2017 and conducted follow-up interviews throughout the fall with selected attendees and other experts in the field.

This report summarizes the ideas that came out of the meeting and follow-up interviews and highlights strategies currently available to increase access and quality as well as recommendations for new strategy development. Finally, it pinpoints six issues that need to be addressed to better support the goal of ensuring all pre-K teachers have the core knowledge and competencies needed to effectively teach three- and four-year-olds.

WHAT PRE-K TEACHERS SHOULD KNOW AND BE ABLE TO DO

Attendees at the meeting insisted that effective pre-K teachers are professionals who engage in complex interactions with children that are informed by the science of child development and how children learn. They enable children to grow academically, behaviorally, and socially so that they are ready for kindergarten. Ensuring pre-K teachers develop the skills needed to support student learning is essential.

Degrees may be important but are not sufficient. The focus must be on competence.

— Valora Washington,
Council for Professional Recognition

Transforming the Workforce lays out a sophisticated set of competencies early educators should know and be able to do to be effective in the classroom, organized into five categories:¹

1. Core knowledge of the science of child development and early learning
2. Practices to help children learn and develop based on this science
3. Knowledge and skills for working with diverse populations of children
4. Development and use of partnerships with families and support services to bolster child learning and development
5. Ability and motivation to continually improve the quality and effectiveness of one's practices

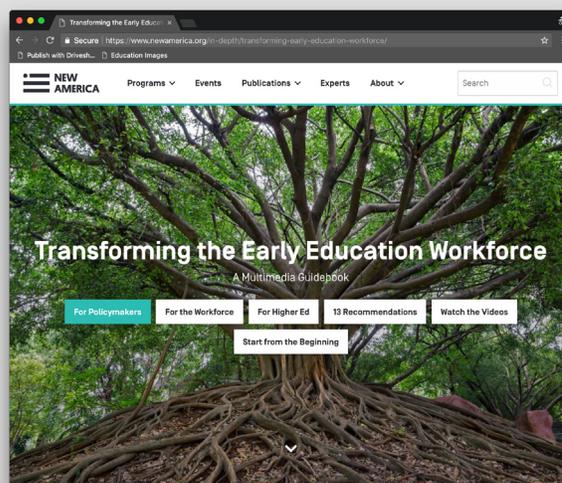
What this summary does not convey is the level of depth and understanding a teacher needs in order to effectively put these principles into practice. For example, “just having knowledge about various

content areas and the major stages or milestones experienced by children is inadequate,” the authors say. Effective teachers, they add, must know “how to represent and convey specific content and how to design learning experiences to support children’s progression along the learning trajectories in the subject.”²

National associations and most states have defined competencies for early childhood educators. And these competencies, with some variations in emphasis and degree of detail in certain areas, largely mirror those identified by the *Transforming the Workforce* committee. It is less clear, however, how states, providers, and higher education programs that prepare early childhood educators are actually using these competencies to ensure that they master essential knowledge and skills. Many of these lists of competencies remain largely aspirational documents. They state what pre-K teachers should know and be able to do, but their existence does not mean that current pre-K teachers are held accountable to or possess these competencies, or that preparation programs are accountable for ensuring their graduates master them.

Related Resource

For a list of the specific competencies that pre-K teachers and other early educators need, see pages 328–329 of *Transforming the Workforce for Children from Birth Through Age 8: A Unifying Foundation*. For a multimedia summary of the educational practices that are required of pre-K teachers, summaries of the science behind them, and other key takeaways from the National Academies’ report, see *Transforming the Early Education Workforce: A Multimedia Guidebook* released by New America in December 2017: <https://www.newamerica.org/in-depth/transforming-early-education-workforce/>.



CURRENT STATE OF PRE-K TEACHER QUALIFICATIONS

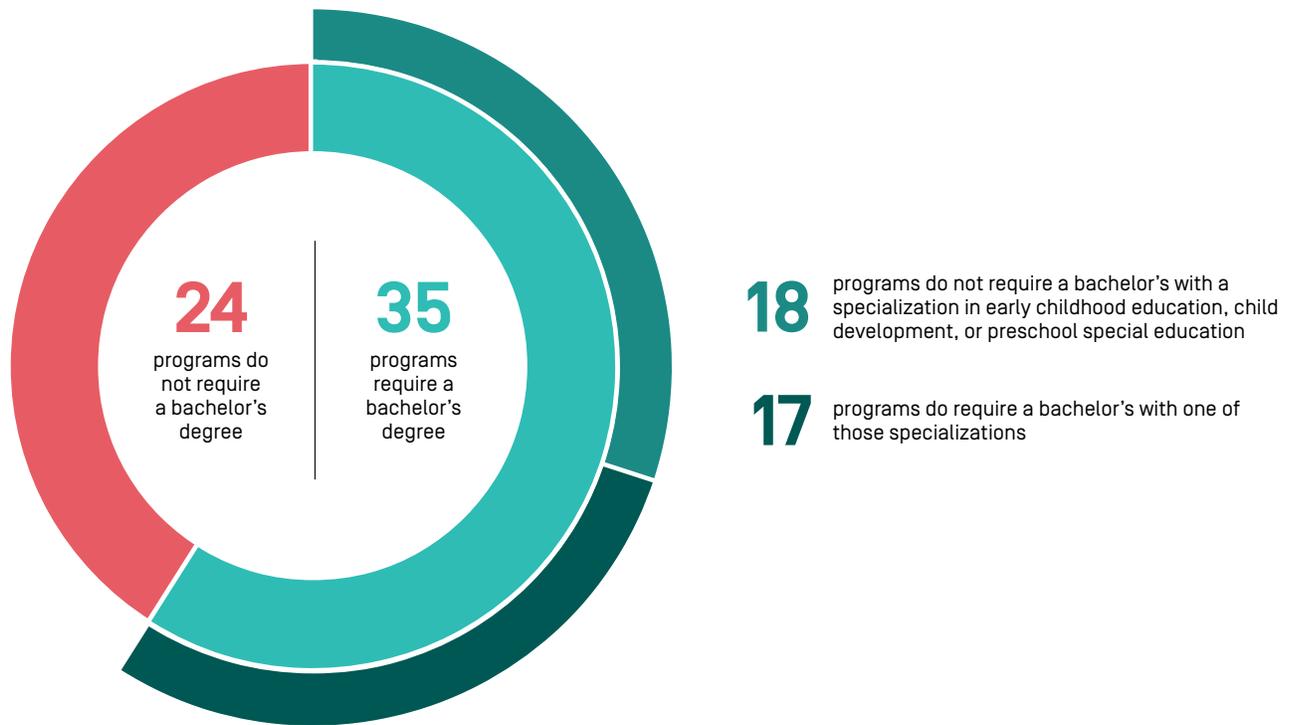
How to ensure that teachers acquire these competencies is a critical question. At the moment, state leaders tend to rely on a teacher's credentials as evidence that she holds these competencies. Policymakers in many states have selected bachelor's degrees or, in some cases, bachelor's degrees with specialization in early childhood, as the best available proxy. Some states also require pre-K teachers to obtain a teacher's license. According to the National Institute for Early Education Research (NIEER), 35 state-funded pre-K programs, or 58 percent of all state-funded pre-K programs, require that lead teachers have a bachelor's degree and 17 programs require degree specializations in a field related to early childhood education or child development. Twelve additional programs specify specializations but permit foci that fall outside of early childhood such as elementary education, special education, or an obscure category listed as "other."³

The federal Head Start program requires half of all lead teachers working with three- and four-year-olds to have bachelor's degrees with specialization in early childhood (roughly 75 percent of Head Start teachers meet these requirements). There is currently no national analysis of the extent to which state pre-K programs require teachers to obtain state teacher licensure in addition to a bachelor's degree, although a number of large state pre-K programs do so. In some cases, licensure requirements vary depending

on whether pre-K teachers work in public schools or other settings. The National Center for the Study of Child Care Employment estimates that 31 percent of teachers in early childhood settings and 56 percent in school-based settings hold some form of state certification (including certifications offered in some states that may not require a bachelor's degree).⁴

In short, wide variation exists in educational and training requirements of pre-K teachers. The chance of a young child receiving a highly-credentialed teacher depends upon what state she lives in and what type of program she attends. According to NIEER, Pre-K teachers in Michigan and Wisconsin are required to have a bachelor's degree, while those in Indiana and Ohio are not. A four-year-old beginning public pre-K in Alabama is guaranteed to have a lead teacher who holds a bachelor's degree with a specialization in early childhood education, child development, or preschool special education. In Hawaii, that same four-year-old may have a teacher with a bachelor's degree in art history.⁵ In states that do not require a bachelor's degree, pre-K teachers are often required to have a Child Development Associate (CDA) credential, an associate's degree, or some other specialized training in early childhood education. For the majority of three- and four-year-olds who attend preschool in child-care centers outside of the state public pre-K program, educational requirements for teachers leading their classrooms are even more variable.

Figure 1 | Bachelor's Requirements for Lead Pre-K Teachers in State-Funded Programs



Explanation of Data:

State-funded pre-K: This figure focuses on requirements in the 59 pre-K programs that were funded by states in 2016, the most recent year for which data is available. It does not include Head Start, locally funded pre-K programs, or pre-K programs that are funded solely through private institutions or tuition payments.

Bachelor's: In this figure and throughout this paper, references to a bachelor's degree refer to either a bachelor of arts or a bachelor of science degree.

Bachelor's degree specialization: Of the 35 state-funded programs that require a lead pre-K teacher to hold a bachelor's degree, 17 require teachers to hold a degree in one of three specializations that clearly include a focus on children of pre-K age: early childhood education, child development, or preschool special education. Of the remaining programs, six require no degree specialization and 12 provide options that include some early childhood specializations in addition to options such as elementary education, special education, or "other."

Source: W. Steven Barnett, Allison H. Friedman-Krauss, G. G. Weisenfeld, Michelle Horowitz, Richard Kasmin, and James H. Squires, *The State of Preschool 2016: State Preschool Yearbook* (New Brunswick, NJ: National Institute for Early Education Research, 2017), 236-237.

FOCUSING ON THE IMPACT OF THE BACHELOR'S DEGREE

This variation in educational requirements is due, in part, to lingering disagreement over whether lead pre-K teachers should be required to hold a bachelor's degree. A large body of research, dating back to the 1980s, suggests that higher levels of teacher education are correlated with improved teaching practice and child outcomes in early care and education settings. Studies also find evidence of a positive relationship between specialized early childhood training and improved results for children.⁶

Research on the bachelor's degree specifically is mixed, however. A 2007 analysis of data from across multiple state pre-K programs found no clear predictive relationship between whether teachers in 11 state-funded pre-K programs held bachelor's degrees and the quality of their classrooms or how much their students learned.⁷ That same year, a meta-analysis of studies on the relationship between pre-K teachers' credentials and children's learning outcomes found a modest relationship between pre-K teachers' attainment of a bachelor's degree and student learning outcomes.⁸ More recent studies provide some evidence of a positive relationship between bachelor's degrees with specialization in early childhood and classroom quality. There is also evidence that teachers with specialized training

in early childhood (at the bachelor's or associate's level) produce better child learning outcomes than those with no such training.⁹ Overall, then, the research suggests a positive relationship between postsecondary training, pre-K teaching quality, and child outcomes. But it also hints at the wide variation in the quality of teaching at each level of credential and, with the exception of teachers lacking any specialized training (who do seem less skilled in general), variation among teachers with each type of credential is greater than variation between credentials.

This suggests that elevating teacher credential requirements can improve average teaching quality and child outcomes, but that credentials alone do not guarantee strong teaching or student learning. This is not surprising. Even in K–12 public schools, where all teachers are required to hold a bachelor's degree and state licensure, research finds little evidence of a clear relationship between the type of certification a teacher holds and how much her students learn, and variation in outcomes among teachers within the same credential or pathway is greater than the differences across credentials or pathways.¹⁰ In early childhood, research remains mixed on whether existing bachelor's programs, even those focused on early childhood education, truly equip teachers with the knowledge and

competencies they need.¹¹ In her analysis of preparation and licensing programs for pre-K through third grade teachers, Laura Bornfreund of New America found that existing preparation programs vary widely in the quality of course content related to depth of instruction, child development, alignment with K–3, and in their attention to family engagement, instructor quality, and age and grade spans covered.¹² Yet institutions of higher education are notoriously slow to change and, unless prompted by a significant increase in paying students, they may have little incentive to do so. This variation in program quality may partially explain the mixed findings about the impact of degrees in the research.

Given this variation, some worry that establishing degree requirements that might push out some members of the current workforce, reduce teacher diversity, and exacerbate a shortage of qualified teachers that already exists is hardly worthwhile. In short, they believe these risks exceed the potential benefits of better-prepared teachers. These are valid concerns. It is important to note, however, that there are other reasons to elevate credentials of pre-K teachers.

Some proponents of the bachelor's believe that it will professionalize the workforce, leading to higher pay, improved working conditions, and better employment prospects. This could in turn attract skilled individuals to the profession and increase teacher retention, factors that existing research does not measure.

Higher education participants in the meeting noted that well-designed degree programs would help students gain not only expertise in early childhood but also deeper skills in critical

thinking, communicating, problem solving, and social and cultural understanding and engagement—skills they argue are beyond the purview of most associate's-level or certification programs. Bachelor's degrees have the potential to elevate the status of pre-K teachers, more closely aligning teachers with their K–12 counterparts. Low and inconsistent standards for early educators sends the message that instruction in pre-K classrooms holds less value and requires less skill than teaching in the early elementary grades, contributing to insufficient investment in early care and education compared to K–12.¹³

These are complex issues, and the aim of the New America and Bellwether meeting was not to rehash this debate. Instead, the goal was to acknowledge concerns, consider reforms to bachelor's degree programs that could address them, and lay out some new directions for deeper study and experimentation. Most participants agreed that it is not yet clear how to create preparation programs and teacher licensure systems that ensure pre-K teachers master essential competencies, so more work around increasing the quality of degree programs must be done.

Additional questions arise about what type of bachelor's is best. Is a degree with a specialization in early childhood the best way to ensure that pre-K teachers acquire the necessary competencies? Would any type of bachelor's degree do? Alternatively, should students acquire degrees through a program that also prepares them for a teaching license, which requires student teaching experience and a passing grade on a state test? Participants in the meeting did not have clear answers to these questions. This is an area that needs deeper study.

ENSURING CONTINUED DIVERSITY IN THE WORKFORCE

The early childhood workforce is significantly more diverse than the K–12 teacher workforce and this diversity is one of its strengths, particularly as America’s children are increasingly diverse. Today, 44 percent of children aged zero to five in the U.S. are identified as non-white.¹⁴ The early childhood workforce closely mirrors those demographics, with nearly 40 percent of early childhood educators identifying as non-white. In comparison, only 18 percent of the K–12 teaching workforce identifies as non-white. The number of children who speak a language other than English at home is also increasing. Research indicates that students tend to do better in school when they are taught by someone that looks like them, someone from the same racial, ethnic, or linguistic background.¹⁵ Stakeholders and experts agree that it would be a disservice to create educational requirements that are out of reach for the current workforce.

There is a risk that bachelor’s degree requirements, poorly implemented, could lead to a less racially and linguistically diverse pre-K teaching

workforce. Forty-three percent of whites in their late twenties had received a bachelor’s degree or higher in 2016, for example, whereas only 23 percent of blacks and 19 percent of Hispanics had received one.¹⁶ This disparity in college completion rates reflects ongoing disparities in how well our education system serves low-income and minority students. This means that raising educational credentials for pre-K teachers while maintaining and encouraging racial and ethnic diversity will require concerted efforts to support current early childhood workers. Mary Alice McCarthy, director of the Center on Education and Skills at New America recently wrote that without strategies to support current early childhood workers, “a degree requirement is likely to exacerbate racial and class-based inequalities in the education workforce while also reducing diversity among early educators.”¹⁷ At the same time, we need to pay attention to what it takes to recruit and support future educators, including giving black, Hispanic, and Asian young people a reason to consider pursuing careers in early childhood.

RECOGNIZING THE IMPERATIVE OF AFFORDABILITY AND SOCIAL SUPPORT SERVICES

Today's typical early childhood worker is a first-generation, minority, low-income female dependent on a monthly wage close to or below the poverty line to support her family. As documented in the report *Early Childhood Workforce Index 2016*, most early childhood professionals earn a wage that falls below the poverty line for a family of four, at an average of \$13.74 per hour.¹⁸ According to Georgetown's Center on Education and the Workforce, a bachelor's degree in early education generates the lowest lifetime earnings of 137 college majors reviewed.¹⁹ At the same time, most bachelor's degree programs require full-time coursework: at a public four-year institution this averages just under \$10,000 annually.²⁰ The price of higher education is only one cost. A student must

also factor in the time it takes to complete a degree, familial responsibilities, level of English proficiency, and experience exploring workforce options and navigating higher education systems. Historically, programs tend to do a particularly poor job of supporting non-traditional students.

Making progress on these three fronts (raising the bar for credentials, maintaining diversity, and enabling affordability and access) will require a robust set of social, educational, and financial support services and multiple pathways to bachelor's degree attainment with opportunities to earn endorsements, credentials, and degrees along the way. But for many current and prospective pre-K teachers, these elements are missing.

THE MISSING PIECES IN CURRENT BACHELOR'S PROGRAMS AND CREDENTIAL REQUIREMENTS

In an ideal world, teacher preparation programs would focus on the full complement of competencies that pre-K teachers need—including a grounding in child development and the ability to deliver developmentally informed instruction—and would be accessible to current and future members of the workforce. Some programs do strive for and are starting to achieve this level of quality and access (such as the examples on the following pages), but they are not readily available for everyone. Furthermore, more clarity is needed over the role of licensure in advancing teachers' competencies.

Evaluations of existing programs have noted significant inconsistencies in course quality, degree of instruction in child development and developmentally-appropriate practices, experience of instructors, and grade spans covered.²¹ Experts hypothesize that one of the reasons the evidence is mixed on the effect of attaining a bachelor's degree is the vast variation among and low quality of some degree programs. A requirement to obtain a bachelor's degree must come in conjunction with institutional and statewide efforts to evaluate and improve program offerings and consider changes to policies that create barriers to better preparation for early childhood providers. Currently, for example,

the National Association for the Education of Young Children (NAEYC) runs an accreditation program to judge early childhood professional higher education programs using standards the organization developed based on what teachers should know and be able to do. Without ensuring higher education programs incorporate competencies into coursework and field experiences (such as student teaching), degree attainment will do little to improve the quality of pre-K programs. Incorporating the competencies into licensing standards may offer an additional assurance that teachers have met the standards.

Some meeting participants viewed state licensure or certification as a potential strategy to address variation in early childhood degree programs, because preparation programs that recommend graduates for state teacher licensure must obtain state approval, which could provide a form of quality control. Others, however, noted ways in which teacher certification requirements can be an additional challenge. As noted above, research in K–12 education finds little evidence of a relationship between completing a traditional teacher certification program and improved teaching practice.²² Moreover, there is evidence

that state certification requirements do not ensure preparation programs provide the depth of coverage in key skills and competencies early educators need to be successful.²³ Further, some experts identified ways that licensure can create additional barriers for early childhood educators: most states require candidates in traditional certification programs to complete at least a semester of full-time student teaching, a requirement that can be a major barrier to currently working educators when their classrooms do not count.

In addition, state certification and program-approval requirements can be input-based and prescriptive, creating obstacles to innovative approaches as well as long-established and high-quality models, such as Montessori training, that look different from traditional teacher preparation programs. While meeting participants could not agree on the role certification should play in efforts to raise pre-K teacher credentials, there was consensus that current debates about pre-K teacher preparation often overlook the role of state licensure requirements or conflate licensure and bachelor's degree attainment, and that more analysis of and attention to the role of certification and licensure requirements is needed.

STRATEGIES FOR OVERCOMING SOME OF THESE PROBLEMS

There is one thing that nearly all early childhood experts agree upon: teaching pre-K requires a high level of skill and expertise, and there is a long way to go to ensure that every child has access to a highly-qualified teacher. Several participants at the meeting described the need to develop a pathway for early childhood educators that provides a clear sequence of education and training aligned with the knowledge and competencies teachers should know and that includes comprehensive social, educational, and financial services.²⁴ The pathway should have multiple on- and off-ramps, each offering meaningful

milestones including credentials, certificates, degrees, and/or wage increases.

Promising programs and strategies to increase access do exist, and to a lesser extent, so do strategies to improve the quality of the bachelor's programs. Experts at the meeting shared many strategies already in existence that offer opportunities to early educators to further hone skills, in addition to innovative ideas that may not be in practice yet.

Improving program access and completion

Strategies for overcoming barriers to access include financial assistance and program offerings that allow students to continue working full time as well as incentives to encourage them to complete what can be academically challenging and time-consuming programs.

Recognizing the role of community colleges

Participants noted that any efforts to this end must take into account not only four-year institutions, but also two-year colleges. In a recently released report, *It Takes a Community: Leveraging Community College Capacity to Transform the Early Childhood Workforce*, Marnie Kaplan of Bellwether Education Partners explains that community colleges play a critical role in developing the early childhood workforce and house the majority of early childhood preparation programs in the U.S. today.²⁵ Some data show that slightly more than half of all teachers completed some level of coursework at a community college.²⁶ In addition, data indicate that 44 percent of low-income students and 38 percent of first-generation students attend community college as their first postsecondary institution.²⁷

Providing advising services

Current and prospective pre-K teachers will need advice and guidance. Stakeholders at the meeting suggested that degree and credentialing programs should provide embedded support services that include financial, personal, educational, and career counseling. This could take the form of academic advising to help prospective students identify practicable on-ramps and opportunities, navigate enrollment, select courses, and verify transferability, as well as to consider access to technology, transportation, child care, and financing options. In the absence of this kind of support, degree accessibility will continue to be inequitable and serve to further stratify the workforce. Some scholarship and community college programs have created robust advising and

support services: examples include the TEACH scholarships and the Front Range Community College in Colorado, where each student is assigned an early childhood-specific advisor.²⁸

Offering flexible scheduling

Maintaining full-time employment while pursuing higher education is critical for most early childhood educators, many of whom are low-income women responsible for supporting young families. Many community colleges offer early morning, evening, and weekend classes or block scheduling where all classes are offered on a single day each week. In order to reduce travel time and costs, these colleges may also offer classes in various locations.

We should look at alternative routes and stackable credentials, but...we...must apply the same standards for rigor, quality, data, etc., that we apply for higher education.

— Allison Lutton, Lutton Consulting

Creating stackable credentials and articulation agreements

Stackable credentialing is a tool that can help early childhood professionals earn multiple credentials or degrees along a pathway, serving to either ignite the desire for a bachelor's degree or permit an exit with an earned certificate or degree. Stackable credentials articulate toward higher-level certificates or degrees so that students receive credit for, and are not required to repeat, what they have already learned from previous coursework.

Problems arise, however, when courses are not easily transferable between institutions, leading to coursework duplication and increases in the cost of and time to degree completion. Well-designed articulation agreements can help address this

problem: formal agreements between two or more educational institutions, institutional systems, or individual institutions that attempt to limit the risk of lost credits. Institutions, most commonly two-year and four-year schools, agree on how completed courses at one institution will satisfy course requirements at another, mitigating the loss of course credits when a student transfers.

Unfortunately, many existing agreements are limited in scope and come with caveats and conditions. Across agreements, there is significant variation. Program-to-program agreements can limit the risk of specific courses not transferring while course-to-course agreements allow colleges to pick and choose individual courses they will accept for transfer. Agreements also vary depending on whether they are included in state or board policies or between individual institutions. Too often, credits simply do not transfer smoothly.²⁹ Understandably, the loss of hard-earned credits can deter students from pursuing further education. The increased costs and time required to complete a degree program when course credits are lost may, in part, explain why a 2011 study found that only 23 percent of those who start at a two-year institution with the intention of earning a four-year degree get one within six years.³⁰

Building nontraditional instructional methods

Non-traditional instructional methods can help reduce the time it takes degree seekers to complete a course or increase access to courses. This can be particularly important for student populations that are juggling full-time employment and family responsibilities in addition to coursework.

Considering competency-based models

In a competency-based learning model, advancement is based upon content mastery rather than seat time. The model offers early childhood educators an opportunity to demonstrate mastery of skills or competencies developed in the classroom and

through professional development opportunities and to receive equivalent course credits for them. Some participants at our event even wondered if states should explore the possibility of using a competency-based approach to waive the educational requirement entirely for current lead pre-K teachers who demonstrate that they are highly skilled.

Some states, including Oregon, Wisconsin, and South Carolina, have created policies that award college credits for prior learning. Several community colleges in Wisconsin, for example, have created a three-credit course to acknowledge early childhood professionals' prior learning.³¹ In Oregon, community colleges can award up to 15 credits for a combination of a student's education, professional experience, and informal training.

Other states are exploring the use of competency-based targeted professional development to enable teachers to earn micro-credentials or "digital badges" that demonstrate mastery of a specific skill or competency. Through the accrual of badges, teachers can provide evidence of the depth of knowledge needed to effectively support student learning. Micro-credentials are not currently industry-recognized certificates that can be articulated into a higher education program, but some experts suggested that may be something to consider in the future. In the meantime, gaining bite-sized credentials may instill confidence in an early childhood educator's ability to complete additional training and higher education coursework.

Awarding college credit for prior learning has its challenges, however. Knowledge and skills gained on the job do not necessarily translate into preparedness for higher education coursework. Candidates may still require significant remediation before enrolling in credit-bearing courses. The strategy also requires higher education institutions to determine specific knowledge and competencies that align with each course. Further, institutions would need to determine whether some of the harder-to-quantify skills that are associated with successful bachelor's degree completers, such as

skills in communication and collaboration, should be taken into consideration as competencies.

Taking advantage of online education models

Online programs can increase access to and flexibility within higher education. Professionals with busy work and home lives can take courses that are self-paced and can be completed on evenings and weekends. The flexibility can mitigate other barriers to access including a lack of transportation or child care, or limited availability of institutions of higher education in rural areas.³² But, in a report recently released by New America, *When Degree Programs for Pre-K Teachers Go Online: Challenges and Opportunities*, Shayna Cook discusses significant drawbacks to online programs including high course costs, the need for computer and high-speed internet access, and the need for higher levels of discipline and motivation. She explains that completion rates are low for non-traditional students, who make up the majority of the current early childhood education workforce.³³ Yet Cook also calls out promising examples of online courses supporting degree attainment. One is the EarlyEdU Alliance, which has taken online learning to a new level by offering a suite of competency-based courses that higher education institutions have the flexibility to teach online or in person. The courses use an online coaching companion, which offers video sharing technology and annotated video clips to give students frequent feedback on teaching practices.

Getting creative with scholarships and financing

Enrolling in higher education programs of any kind requires that students find a way to pay tuition, and a variety of financial aid programs have sprung up over the past 50 years to help. Those programs—whether federally backed student loans or Pell Grants—can help support pre-K teachers who are seeking higher credentials.³⁴ But in some areas of the country, there are also scholarship programs in place to supplement or almost fully cover the costs of a degree, provide salary supplements, or offer loan forgiveness. In 23 states, early childhood

professionals have access to Teacher Education and Compensation Helps (T.E.A.C.H.) Early Childhood Scholarships, which offer close to 90 percent of the cost of attaining a bachelor's degree, including tuition, books, travel costs, and paid relief time. Coupled with the scholarship, the program provides ongoing guidance and mentorship and guaranteed wage increases.³⁵ Additional state scholarship and incentive programs exist, but few fully cover tuition and even less frequently cover the additional costs associated with pursuing a postsecondary degree.

More ideas for financing and scholarships, including an accounting of the cost of these initiatives and how they might be funded, as well as how to improve the compensation of early childhood teachers, are expected to be described in a report about to be released from the National Academy of Medicine. The forthcoming paper is designed to answer financing questions that emerged from the *Transforming the Workforce* report.

Revamping coursework and field experiences

Efforts to increase access and serve non-traditional students will be in vain, however, if bachelor's degree programs are not of high quality. As described above, degree programs vary dramatically across many measures of quality, including in the depth to which they cover the knowledge and competencies early educators must know and the systems they have set up to ensure that students gain skills on the job and in other field experiences. Revamping coursework and practicums means incorporating more research-based approaches to coursework and taking advantage of the fact that many pre-K teachers are already on the job.

Job-embedded approaches

Many current or prospective early educators are not able to forgo full-time work in order to pursue a higher education. Job-embedded models offer an important opportunity to continue working while pursuing a degree, and at the same time receive extensive practical and classroom instruction and mentorship.

Apprenticeship

Several participants explained that the apprenticeship “learn while you earn” model could be a good fit for the existing early childhood workforce. As explained in a recent New America paper, *Rethinking Credential Requirements in Early Education: Equity-based Strategies for Professionalizing a Vulnerable Workforce*, an apprentice has an opportunity to earn college-level credits and gain specialized training while working and earning in the current workplace. Further, apprentices generally incur limited out-of-pocket expenses. The apprenticeship model offers structured on-the-job training led by a mentor and focuses on the skills and knowledge associated with high-quality teaching. Instruction on the technical and academic competencies that apply to the job are included with allotted time off to attend classes. Wage increases are also provided as participants meet benchmarks for skill attainment and, upon completion, they receive a nationally-recognized credential.³⁶ In Philadelphia, a labor–management partnership called the District 1199c Training and Upgrading Fund has developed a Registered Apprenticeship in early childhood that can provide lessons for how to run a program. In the program, known as the Philadelphia ECE Career Pathways Partnership, participants receive a certificate of completion from the U.S. Department of Labor, an associate’s degree from Community College of Philadelphia, and lead teacher certification for local early childhood education centers.³⁷ The program organizers have negotiated an agreement with Drexel University that enables graduates to transfer directly into its bachelor’s degree program.

Teacher residency

Teacher residencies are a specific type of preparation pathway, where a teacher candidate receives the vast majority of his or her training in a classroom under the guidance of an effective mentor teacher. At the same time, the candidate completes courses that are tightly linked to his or her own classroom experience. Most residency programs target bachelor’s degree holders interested in making a career change or furthering their education, offering

master’s level coursework, but some are embedded in bachelor’s degree programs. Research suggests that teachers who complete a residency program may be more effective in the classroom and less likely to leave their position than teachers prepared through more traditional pathways.³⁸

While residencies have gained increasing attention in recent years as a strategy to improve preparation and retention of K–12 teachers, they have received less attention in the early childhood field. Several residency models, however, provide well-regarded training for early childhood teachers, primarily in school-based settings. Urban Teachers, a residency model that prepares and places teachers in Washington, DC, Baltimore, and Dallas, offers a four-year program. Candidates complete a one-year-residency in a co-teaching role and lead classrooms in their second year, while completing master’s degree coursework. Candidates also receive personalized coaching, which continues for a third year. Urban Teachers recommends candidates for licensure only when they have demonstrated mastery of core competencies, and candidates must commit to teach in a high-needs urban school for at least four years (including the residency year).

States have also taken steps to support residency models for early childhood educators: as a part of its Race to the Top–Early Learning Challenge Grant, Maryland offered non-public teachers and career changers with bachelor’s degrees an opportunity to earn certification in early childhood education while working full time in a classroom, being mentored by a teacher of note, and attending classes on weekends. Although most of the existing residency models focus on individuals who have already completed bachelor’s degrees, some traditional preparation programs are embedding residency-like components in bachelor’s degree programs, and some residency models are exploring ways to work with undergraduate students. Residency models have promise as a way to both improve preparation quality and help increase the number of pre-K teachers with both degrees and specialized training in early childhood.

Using observation tools

Some participants at the meeting said they wanted to see faculty employ more research-based strategies for improving teaching. One approach would be to use vetted observation tools to methodically observe teachers' interactions with children, pinpoint areas for improvement, and provide guidance on what to do differently. (The videos that are used with EarlyEdU's coaching

companion take this approach, for example.) Another way to improve quality, modeled by the University of Oklahoma at Tulsa, is to design student teaching and other field experiences to ensure prospective teachers are matched with current teachers who have been observed and selected by faculty members for meeting a high bar. These kinds of program improvement efforts can be initiated through state policy or at the system or institutional level.

PREPARING THE FUTURE WORKFORCE

Current or prospective early childhood professionals can begin coursework in early education as early as high school through dual enrollment programs or vocational or early college high schools in some cities and states. Dual enrollment, which generally means high school students taking college level courses, allows students to gain course credits from a community college that are easily transferable after graduation. In vocational, technical, or early college high schools, students can graduate with a CDA. Not only can coursework completed for a CDA frequently be transferred to an associate's degree program, but the credential itself usually qualifies awardees for a position in an early childhood program. In 2016, Washington, DC launched the First Step Child Development Associate (CDA)

credential program that provides high school students with an opportunity to earn the CDA while simultaneously completing their high school graduation requirements. Participants have access to high-quality practicums, paid summer employment, individualized college and career counseling, and financial aid through specialized scholarships.

Transferring credits gained in high school can reduce costs associated with higher education program completion. One study found that students who participated in dual enrollment courses were 10 percent more likely to complete a bachelor's degree, although minority and low-income students tend to be underrepresented in the courses.³⁹

CONCLUSION

Participants at the meeting were not tasked with debating the pros and cons of requiring lead pre-K teachers to earn bachelor's degrees. Instead, they were asked to provide insights into what would need to change in the current system to ensure that bachelor's degree programs make a significant impact on teaching quality, help retain diversity in the workforce (current and future), and become accessible to non-traditional students with financial stresses as well as familial and job obligations. The strategies discussed above are a good starting place that can be strengthened with additional investments and research. However, discussions with participants revealed that even these approaches may not be enough for a wholesale transformation of the workforce. The meeting and subsequent interviews helped to spotlight six areas in need of additional research and experimentation:

1. **More strategies to improve the quality of bachelor's degree and teacher preparation programs for pre-K teachers.** Our meeting showed that some state policymakers, non-profit organizations, and higher education institutions throughout the country are trying promising models for improving *access* to degree programs, but fewer examples emerged to show that programs will lead teachers to acquire the skills and knowledge they need to make a positive impact on children's learning and development.
2. **More sophisticated approaches for defining the "early childhood specialization" of a bachelor's degree program.** Those approaches should align with early childhood educator competencies and yet should allow for flexibility in how one gains those competencies.
3. **A deeper understanding of the implications of teacher licensure.** As pre-K teachers are recognized as, in fact, teachers, state policies for granting teaching licenses will need to catch up. On the one hand, requirements for teaching licenses can serve as one of the few levers for improving quality in teacher preparation programs, but, on the other, they can introduce further barriers for the current workforce because, as currently conceived, they usually require student teaching or other field experiences that would require workers to leave their current jobs.
4. **Reflection on how to motivate higher education institutions to revamp their programs.** As shown by some of the new models emerging from higher education institutions described in this report, making changes to improve program quality and access takes dedication, resources, and an openness to new strategies. Creative thinking on how to create incentives for these institutions to change is needed.

5. **Strategies for recruiting and retaining the next generation of pre-K teachers.** Today's debates are primarily focused on the current workforce and are not looking ahead to envision where the next crop of teachers will come from. Middle and high school students today will need to see pre-K teaching as a viable career and will need an array of high-quality preparation programs to consider enrolling in during early adulthood.

6. **A continued push for improving compensation and workplace quality for pre-K teachers.** Low wages for this kind of work will continue to stymie efforts to improve pre-K teaching, no matter whether those

efforts are focused on bachelor's degrees or some other type of training. Bachelor's degree requirements must happen in tandem with approaches to address financing the cost of tuition *and* the wages that teachers take home after they have received their degrees.

The next few years will be critical for establishing fairness and high standards while also building a higher-education infrastructure that can support the many needs of the current and future workforce. In addition to tracking the impact of the approaches described in this report, tackling these six issues would improve the odds that early childhood investments make a lasting and positive impact on generations of young children.

Appendix A: Attendees at New America's meeting on September 26, 2017

- Deborah Adams, Connecticut Office of Early Childhood
- Terra Bonds Clark, Bainum Family Foundation
- Laura Bornfreund, New America
- Chavaughn Brown, AppleTree Institute for Education
- Christi Chadwick, Early Milestones Colorado
- Lori Connors-Tadros, Center on Enhancing Early Learning Outcomes (CEELO)
- Shayna Cook, New America
- Libby Ethridge, University of Oklahoma at Tulsa
- Cheryl Feldman, District 1199C Training & Upgrading Fund
- Rachel Fishman, New America
- Kathy Glazer, Virginia Early Childhood Foundation
- Stacie G. Goffin, Goffin Strategy Group
- Lisa Guernsey, New America
- Mary Harrill, National Association for the Education of Young Children
- Sally Holloway, Whatcom Community College
- Gail E. Joseph, University of Washington
- Katherine Kempe, National Association for the Education of Young Children
- Margareth Legaspi, District of Columbia Office of the State Superintendent of Education

- Abbie Lieberman, New America
- Alison Lutton, Lutton Consulting
- Catherine Main, University of Illinois at Chicago
- Jana Martella, Center on Enhancing Early Learning Outcomes
- Jack McCarthy, AppleTree Institute for Education
- Sara Mead, Bellwether Education Partners
- Ashley LiBetti Mitchel, Bellwether Education Partners
- Marica Cox Mitchell, National Association for the Education of Young Children
- Susan Neimand, Miami Dade College
- Natasha Parilla, Apple Tree Institute
- Hannah Putman, National Council on Teacher Quality
- Sabia Prescott, New America
- Jason Quiara, the Joyce Foundation
- Natalie Renew, Public Health Management Corporation
- Kelly Riling, Apple Tree Institute
- Michael Rowe, District of Columbia Office of the State Superintendent of Education
- Sue Russell, T.E.A.C.H. Early Childhood National Center
- Mandy Sorge, National Governors Association
- Susan Sarver, University of Nebraska–Lincoln
- Patricia Snyder, University of Florida
- Helene Stebbins, Alliance for Early Success
- Stephanie Thai, Teach for America
- Melissa Tooley, New America
- Emily Workman, New America

Appendix B: Experts Interviewed Post-Meeting

- Chrisanne Gayl, Trust for Learning
- Rolf Grafwallner, Council of Chief State School Officers
- Bridget K. Hamre, University of Virginia
- Cody Kornack, National Head Start Association
- Valora Washington, Council for Professional Recognition
- Marcy Whitebook, Center for the Study of Child Care Employment
- Lea J. E. Austin, Center for the Study of Child Care Employment

Notes

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