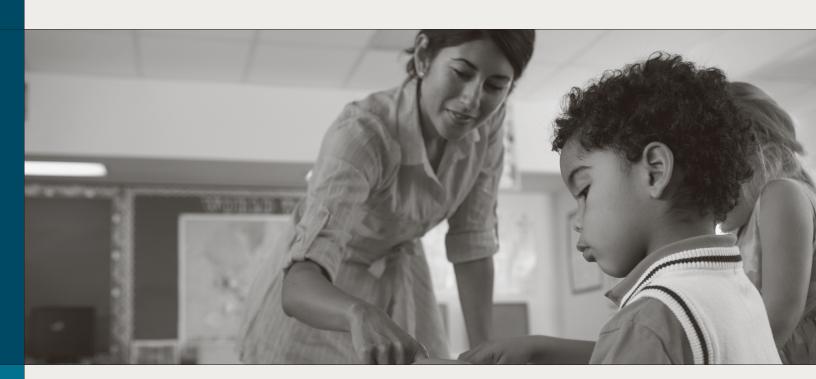
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Revamping Licensing and Preparation for Teachers in Pre-K, Kindergarten, and the Early Grades

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EDUCATION POLICY PROGRAM

Early Education Initiative

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Executive Summary

The quality of the instruction that children receive in prekindergarten through the third grade can make a lasting impact on how well they perform throughout their years in school. With excellent teaching throughout this period of their lives, children are more likely to build on what they learned in programs they attended before formal schooling, quashing arguments that gains made in those programs are short-lived. More importantly, strong teachers in these years are critical to instilling children with a love of learning and excitement for school that builds on itself at each grade level.

Unfortunately, studies on elementary schools show us that teaching quality is inconsistent, especially for children in high-poverty schools.¹ Principals often have only a rudimentary understanding of what early elementary teachers should know about child development, let alone whether they are using appropriate practices in the classroom.² Stories abound of teachers being placed in kindergarten or the first grade who were never trained in how to work with children of that age.

Kindergartners and first-graders — five- and six-year-olds — are at a very different stage of cognitive and social development compared to children in the fourth or fifth grades. They require instruction that is less abstract and more concrete and includes hands-on activities; they are not wired to sit and listen to lectures for long periods. Their teachers need to be equipped with knowledge and skills that show a deep understanding of early childhood, including a focus on social-emotional growth and family engagement and instruction in the most effective ways to teach early science, early literacy, and the building blocks of mathematics.

In short, what is needed of teachers in pre-kindergarten through the third grade differs from the skills required of their late-elementary school counterparts. Without teachers who can help them build a foundation for school success, young students will never perform at grade-level academically, and a large percentage will eventually drop out of school.

How can we ensure that children of these ages have teachers who can reach them at their level? One crucial step is to fix how those teachers are prepared in the first place. This will take a two-pronged approach: First, the quality of teacher preparation programs must be improved so that they adequately prepare teachers to work with children at these ages. Second, classrooms in the early grades must be filled by teachers who come from these high-quality preparation programs, not by teachers who are unprepared to engage young children.

In this paper, the New America Foundation examines the state of preparation programs for public school teachers who work with children in pre-kindergarten, kindergarten, first, second, and third grades. Our analysis shows that preparation, licensure, and hiring systems are not currently designed to produce and place teachers in these classrooms who are equipped to ensure that children get a strong foundation of knowledge and skills that will help them succeed in school and in life.

Many teachers in the early grades come from K-5 or K-6 degree programs that are distinct from early childhood teacher preparation programs and that emphasize instruction for children in the later years of elementary school.³ The courses taught in educator preparation programs show a lack of focused attention on recent research on emergent literacy in young children.⁴ Only about 60 percent of bachelor's degree programs in early childhood education have received accreditation that shows they meet professional standards.⁵ And despite two decades of studies linking effective teaching to an understanding of how children develop both, socially and cognitively, this research is invisible in course offerings in up to 20 percent of colleges or education schools.⁶

We embarked on our research by conducting interviews with state experts and researchers, as well as faculty members and administrators from higher education institutions, and by reviewing the teaching credential requirements and higher education offerings within a sampling of states: Arizona, Florida, Georgia, New Jersey, Oklahoma, and Pennsylvania (see sidebar on page iii for why we selected these states).

Our analysis shows many examples of where the current system for training and licensing teachers is out of sync with what research and practice indicates is best for young children.

In teacher preparation programs, we found:

- 1. Courses with little attention on developmental science
- 2. Admission requirements with minimal expectations
- 3. Limited opportunities for high-quality practical experiences
- 4. States' weak approval processes for education schools

Taking a closer look at early childhood preparation and related state policies and practices, we found:

- 1. Courses with more breadth than depth
- 2. Courses with little attention on how to work with families
- 3. Absence of training in aligning instruction in keeping with PreK-3rd strategies
- 4. Uneven credentials among early childhood faculty and spotty program quality
- 5. Licensure structures and hiring practices that spur prospective teachers to obtain broad degrees and

- forego more specialized training that would prepare them for particular settings
- 6. States' weak and confusing professional standards for teachers
- 7. Policies that do little to foster and support alternative certification models that are connected to schools, offer more practical experience, and attract more career-changers
- 8. Obstacles for students transferring from a community college to a university early childhood preparation program

There are, however, some bright spots. We found promising practices worth a closer look:

- An immersion-style preparation program at the Arizona State University where content, pedagogy, and practical experience are closely linked
- 2. A state New Jersey that requires prospective

- teachers to add a liberal arts major to their early childhood education major to enhance their background knowledge in a specific content area
- 3. Another state Pennsylvania that has eliminated the overly broad elementary education license, in its place creating an early childhood license and a middle childhood license with an overlap only in the fourth grade
- 4. Education schools like Florida State University — that expect more from their applicants, where admission decisions are based on SAT scores, a higher GPA in college work (2.75 instead of 2.5 like most schools), writing samples, and previous experience working with children
- 5. Strong articulation agreements that ease the transfer process for community college students seeking an early childhood teaching license

Some Notes on the Scope of this Report

In this report, the Early Education Initiative at the New America Foundation provides a review of the state of preparation among teachers who receive a bachelor's degree to teach young children in pre-kindergarten, kindergarten, and the early grades of elementary school. In an effort to identify unaddressed issues that are common to elementary schools, we did not examine teacher preparation programs that confer degrees or certificates on teachers of children in infancy and toddlerhood. (One exception is discussed in a sidebar on a bachelor's degree program in Oklahoma, page 16.) For the same reason, we did not delve into how to improve teachers' preparation for pre-kindergarten programs that do not require teachers to have bachelor's degrees. Several recent papers have already provided helpful analyses on the complexity of teacher training specific to the pre-kindergarten years.⁷

To gain details on how teacher preparation programs are designed and how they align with research on what children need in pre-kindergarten through the third-grade, we chose to explore the policies and preparation programs in a sampling of states:

- Arizona
- Florida
- Georgia
- New Jersey
- Oklahoma
- · Pennsylvania

We chose Arizona because the state will begin requiring all pre-kindergarten teachers in state-funded programs and all kindergarten teachers to have an early childhood education license or endorsement in 2012. We looked at Florida, Georgia, and Oklahoma because they have highly accessible, publicly funded pre-k programs and therefore, they have a greater likelihood of being connected to or part of an elementary school. Pennsylvania was selected because it has recently altered its teacher licensing system to ensure that teachers in the early grades have a pre-k-4th grade license. New Jersey was chosen because the state, under the court-ordered Abbott preschool program, requires all pre-k teachers to have a bachelor's degree in early childhood.

Still challenges remain with which policymakers must grapple. For example, principals continue to move fourth or fifth grade teachers to early grade classrooms and hire teachers for early grades who do not have training in developmentally appropriate practices or in how to watch for early signs that children need additional support their social and cognitive development. Prospective teachers continue to select degree programs with broad K-5 or K-6 preparation over early childhood programs that focus on pre-k, kindergarten, and the early grades; they do not expect to find good paying jobs in pre-k or kindergarten and worry that they will be narrowing their options with an early childhood degree. Talented individuals who want to change careers and teach in an early childhood classroom have limited alternative routes to licensure. Early childhood preparation programs often lack faculty with practical experience in the field and who are up-to-date on the latest research about how children learn and on the current issues facing schools.

The time is ripe to make positive changes to teacher preparation programs that will strengthen early childhood training. Education schools are under criticism, accrediting bodies are taking a long look at how they can improve, and there's been a new emphasis on improving community colleges. Early childhood – from at least pre-k up through the third grade – should be part of these conversations. Stakeholders and policymakers should take steps to improve the teacher preparation system so that young children are provided with teachers who can provide them a strong foundation for school success.

To make these improvements, the Early Education Initiative at the New America Foundation recommends the following:

Teacher preparation programs should:

- Raise the bar on admission requirements in general, ensuring that elevated requirements also apply to early childhood preparation.
- 2. Provide more field experiences in pre-k, kindergarten, and the early grades within both elementary and early childhood preparation programs and ensure that those experiences are connected to coursework.
- 3. Hire faculty who have extensive teaching experience in a pre-k, kindergarten, first, second, or third grade classroom.

States should:

4. Require approved early childhood teacher preparation programs to provide multiple field experiences that are woven into courses on content and methods, classroom management, and child develop-

- ment, and that include interaction with both individual and groups of students.
- Consider aligning standards for early childhood teacher preparation programs with standards designed by national early childhood education organizations.
- Require approved early childhood programs to provide student teaching opportunities throughout the program in multiple settings at multiple levels of the early grades.
- 7. Separate licenses to avoid overlap in the early grades.
- 8. Make early childhood licensure more attractive to prospective teachers by instituting salaries and benefits in publicly funded pre-k programs that are on par with salaries and benefits for kindergarten and early-grades teachers.
- Require articulation agreements between community college early childhood associate degree programs and university bachelor's degree programs.

School districts and states should:

10. Eliminate personnel policies and practices that limit principals' options in assigning specific teachers to classrooms. Teachers' readiness for the particular teaching assignment should take priority over seniority and other factors.

School districts should:

- Provide professional development for principals that includes training on early childhood education and highlights both the importance of family engagement and how young children learn content.
- 12. Communicate with local education schools about staffing needs — including challenges facing the school district and subject-area shortages — and work together to determine the district teachers who are best suited to serve as supervisors of student teachers.

The federal government should:

- 13. Encourage high-quality alternative certification programs to include early childhood education and study their impact on teacher effectiveness and student learning.
- 14. Provide funding to assist education schools to transition their traditional preparation programs into clinically based preparation programs.
- 15. Along with philanthropic organizations, fund additional research on the impact, over time, of teachers who have early childhood preparation and teach in the early grades.

Preparation, licensure, and hiring systems are not currently designed to ensure that children in the early grades are taught by teachers with appropriate training. Part of the problem stems from differences of opinion about what constitutes early childhood, with some educators seeing early childhood as the stage of life before a child enters kindergarten, ending by the start of kindergarten or start of first grade.

Most experts on child development see early childhood as extending up through third grade or eight years of age, with middle childhood — the label used to describe children in upper elementary grades — extending through eighth grade. Regardless of how the age groups are labeled, ample research supports the premise that kindergarteners, first, second, and third graders are still in the process of developing many foundational skills through their physical, social, emotional, and cognitive development.

For example, a child at age five can easily become absorbed with picking up stones in the driveway and exploring how they feel in his hands, whereas a nine-year-old may be more inclined to evaluate the functionality, design, and ecological qualities of those stones in contrast, for example, to poured concrete or dirt. It takes special skills to know the differences between these developmental stages as well as how to build upon children's interests and prior knowledge in a way that encourages further learning. Many childhood experts label such a pedagogical orientation as "developmentally appropriate practice."8 Research has shown that it is the candidates in early childhood teacher preparation programs, rather than those in elementary teacher preparation programs, who express attitudes and engage in behaviors that are more closely aligned with and guided by children's developmental and learning potentials.9

These teaching qualities are especially important in the promotion of early academics, including mathematics and literacy. For example, a child who has learned to read in a supportive and literacy-rich environment will be able to easily shift from "learning to read" to "reading to learn," confident to take on the more challenging curriculum and course content that appears in fourth and fifth grade.

Over the years, states have started to offer new licenses that align better with what science says about children's growth and development; many of those span from pre-k through third grade and are known as P-3 or PreK-3rd cre-

dentials. For the most part, however, the current practice of teacher licensure (also called teacher certification) is widely variable, and in most states appears indifferent to the importance of understanding child development. Nor does it recognize the developmental differences between early and middle childhood. Instead, teacher licenses have been designed to match the divisions within the public education system, legacies of the day when children's first school experience started in kindergarten or first grade. States often split licenses as "birth-to-five" on the one hand and "K-5" or "K-6" on the other.

Since 1981, the National Association for the Education of Young Children, the largest national organization for early childhood professionals, has set standards for the programs that offer training toward any early childhood license. It accredits early childhood programs for the National Council for the Accreditation of Teacher Education, one of the national organizations that accredits education schools around the country. Based on child development and early childhood education research, NAEYC has identified what prospective teachers should know and be able to do. NAEYC and NCATE use these standards to determine whether institutions of higher education are equipping teacher candidates with what they need to enter an early childhood classroom.

NAEYC asserts that early childhood professionals need to be able to engage children in challenging subject matter and to build children's confidence as young learners of a wide range of topics. Instead of viewing instruction as the presentation of isolated facts, teachers must know and understand the big ideas, methods of investigation, and how best to organize the major academic disciplines. It is essential that candidates know not only what is important for children to learn but also how to teach it. In particular, teachers need to understand how specific concepts link with earlier and later understanding within and across subject areas. They also should understand and know how to

NAEYC's Standards for Teacher Prep Programs

Teacher preparation programs in early childhood should emphasize:

1. Promoting child development and learning

- Knowing and understanding young children's needs and characteristics
- Knowing and understanding the multiple influences on development and learning
- Using developmental knowledge to create healthy, respectful, supportive, and challenging learning environments

2. Building family and community relationships

- Knowing about and understanding diverse family and community characteristics
- Supporting and engaging families and communities through respectful reciprocal relationships
- Involving families and communities in their children's development and learning

3. Observing, documenting, and assessing

- Understanding the goals, benefits, and uses of assessment
- Knowing about and using observation, documentation, and other appropriate assessment tools and approaches
- Understanding and practicing responsible assessment to promote positive outcomes for each child
- · Knowing about assessment partnerships with families and with professional colleagues*

4. Using developmentally effective approaches to connect with children and families

- Understanding positive relationships and supportive interactions as the foundation of their work with children
- Knowing and understanding effective strategies and tools for early education
- Using a broad repertoire of developmentally appropriate teaching/learning approaches
- Reflecting on their own practice to promote positive outcomes for each child

5. Using content knowledge to build meaningful curriculum

- Understanding content knowledge and resources in academic disciplines
- Knowing and using the central concepts, inquiry tools, and structures of content areas or academic disciplines
- Using their own knowledge, appropriate early learning standards, and other resources to design, implement, and evaluate meaningful, challenging curricula for each child

6. Becoming a professional

- Identifying themselves with the early childhood profession
- Knowing and upholding ethical and other professional standards
- Engaging in continuous collaborative learning to inform practice
- Integrating knowledgeable, reflective, and critical perspectives on early education
- Engaging in informed advocacy for children and the profession

Source: NAEYC Standards for Early Childhood Professional Preparation Programs, Position Statement Approved by the NAEYC Governing Board July 2009

* The NAEYC describes these assessment partnerships as opportunities for families and teachers to communicate with each other about the goals and outcomes of assessments.

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use observation and assessment tools for early identification of children with developmental delays or disabilities.

A child who has learned to read in a supportive and literacy-rich environment will be able to easily shift from "learning to read" to "reading to learn," confident to take on the more challenging curriculum.

Of the approximately 600 bachelor's degree programs nationwide with an early childhood specialty, fewer than two-thirds have received NAEYC/NCATE accreditation.¹⁰ Baccalaureate programs that are not housed in NCATE participating institutions currently have no avenue to pursue NAEYC recognition. Schools without accreditation may have simply decided to forgo the cost of the accreditation process, but in the sample of teacher preparation programs we reviewed there were few explicit references to using such standards as a model.

Problems in Teacher Preparation Programs

Determining how many teacher preparation programs measure up to the standards set by NAEYC is not an easy task. Nor is there a single source for information on the types of courses offered in early childhood teacher preparation programs compared to those in K-5 or K-6 teacher-degree programs. But through a review of existing studies, interviews, and analysis of a sampling of teacher preparation programs in six states, we have provided a snapshot of the current state of teacher preparation and its limitations.

In our analysis, we found problems with general teacher preparation and related state policies. Addressing these problems in the ways that prospective teachers are prepared would consequently elevate the quality of early child-hood preparation programs:

Courses with Little Attention on Developmental Science

In fall 2010, the National Council for Accreditation of Teacher Education released a series of reports and recommendations from an expert panel on educator preparation programs and child and adolescent development and learning." The series concluded that education schools are not doing a good enough job of teaching teachers about child and adolescent development. One of its studies highlighted the connection between student achievement and teachers' using knowledge of developmental science in their teaching to increase student engagement and improve learning outcomes.¹²

The report stressed that this is true across the board, beginning when children are very young all the way up through high school. A similar report in 2008 came to the same conclusion.¹³

We now have more than 20 years worth of scientific evidence on how children develop and on the role that class-room instruction — as well as external forces — plays in their development. Lamentably this research has not trickled yet into all traditional education programs. In a survey of NCATE's accredited institutions, 20 percent of education schools do not offer a course specific to child/adolescent development. While development courses are more likely to be found in early childhood programs than at other levels, concerns remain about the types of texts used and the types of practical examples included within them.

For example, the textbook that NCATE's survey respondents reported as the most frequently used in early child-hood and elementary programs covers the stages of development from infancy to adolescence and cognitive and social-emotional growth. But it does not explain how this information should inform instruction or the learning environment.

There are obstacles to improving child development coursework and practical experiences: 65 percent of the respondents to NCATE's survey cited constraints of time. One quarter of the respondents noted a lack of agreement among teacher educators about how to apply knowledge of child and adolescent development to teacher preparation.

Another obstacle survey respondents reported is that child and adolescent development courses are often taken in the freshman or sophomore year as introductory classes. Courses on how to apply that knowledge come only later in the prospective teachers' degree program — if they are offered at all.

Admission Requirements with Minimal Expectations

At many universities, programs such as nursing, business, and pre-med are among those that are selective in admissions and have certain standards that students must maintain once they are accepted. These programs confer a level of professionalism upon their graduates; teacher preparation should do the same.

In recent years, there has been a great deal of attention on the admission process for education schools and the lack of selectivity. Research shows a strong correlation between teachers' verbal ability and student achievement as well as between the selectivity of the college and student achievement. But few education schools require much more than a minimum GPA, certain prerequisites, and an application. The majority of students who apply gain entry.

Easy admission requirements raise questions about the knowledge and abilities of those who teach young children.

Toward the end of 2010, new recommendations came from a Blue Ribbon Panel on Clinical Preparation and Partnerships for Improved Student Learning, which was convened by NCATE. 16 One of its recommendations cited the need to increase rigor and diversity for admission to teacher preparation programs. The panel called for the exploration of selection criteria that institutions currently use and an assessment of the impact of those criteria on validating the quality and diversity of candidates. It also asked for a study of how other criteria might be validated and used in selecting candidates.

As we scanned program requirements for early childhood and elementary teacher preparation, we repeatedly found weak requirements for entry as well as for retention. Easy admission requirements raise questions about the knowledge and abilities of those who teach young children. Certainly, GPA and test scores cannot provide a complete picture of an individual or the kind of teacher he or she would make. In fact, some researchers have found that certain teacher attributes such as enthusiasm, clarity, and task-oriented behavior matter more than intelligence and academic ability.¹⁷ What is clear is that some individuals

are better suited to teaching than others and weak entrance requirements fail to make any meaningful distinctions between candidates.

Measures of academic ability coupled with interviews and writing samples may lead to better selection. Alternative preparation programs such as Teach for America are very purposeful about the type of questions they ask in interviews and the dispositions they look for in candidates. There is, however, no definitive answer, and as the NCATE panel suggests, more research is needed on the selection of future teachers.

We found requirements for admission into education schools and early childhood programs to be a mixed bag.

In most cases, once students were accepted into the school of education, they were also accepted into programs on teaching in early childhood classrooms. Additionally, GPA requirements were low and other expectations were few. At the University of South Florida, for example, acceptance to the school of education and the early childhood program is essentially a given as long as students complete generalized courses, pass the Praxis¹⁸ or a similar state-created basic skills test, and have a 2.5 GPA.¹⁹ There is no mention of selective admission, interviews, writing samples, or other meaningful requirements.

Elsewhere, requirements for entry were similar: 2.5 GPA, a general knowledge test, and an application form. Northern Arizona University did list one additional requirement: a recommendation form completed by someone who has observed the prospective teacher working with children.²⁰ And a few other schools required interviews or recommendations, like NAU. But overwhelmingly, teacher preparation programs set a low bar for admittance.

Limited Opportunities for High-Quality Practical Experiences

Experience in the classroom is at the heart of teacher preparation. Prospective teachers consistently report it as being the most valuable part of their training. But because there is no clear standard for student teaching and field experiences, they vary greatly — whether they are part of early childhood or K-5 or K-6 elementary teacher preparation programs. They are often separated from the courses on content and pedagogy. Traditionally, the practical experience comes after most courses are complete, and well after

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child development courses are complete, since these often take place in the first semester of students' preparation.

New recommendations from NCATE's Blue Ribbon Panel aim to turn teacher education on its head, specifically calling for clinical practice (which includes practical experiences such as tutoring individual students, working with small groups of students, and student teaching) to become the core of teacher preparation. This diverges from the norm where the overall program emphasis is on academic coursework. The panel's rationale was that like medical students' residency experiences, prospective teachers need multiple and diverse classroom experiences coupled with rich content and pedagogical coursework.

The panel suggests 10 "design principles" to guide the creation of clinically based preparation programs (see sidebar below), which will not be easy to implement. There are multiple barriers to implementation, including in many cases the key stakeholders themselves. The institutes of higher education that house education schools have been criticized for relying on them as "cash cows," where tuition

from education majors helps to subsidize other departments. Shifting to embrace the panel's recommendations would likely come with extra costs, putting a crimp in the university's budgeting. Perhaps more challenging, though, would be hiring enough faculty members with the extensive practical experience that would be needed to shift to a more clinically based preparation program.

Many of the preparation programs we scanned appear to be providing multiple field experiences for prospective teachers, but overall these experiences leave much to be desired. There is little information available on how placements are selected. Often the experience amounts to little more than a weekly observation and reflection. For the most part, students do not have any real teaching experience until their final semester after they have completed all of their coursework, meaning the link between content and practice remains weak.

While the majority of states require student teaching, they do not specify what those experiences should look like. As a result, there are likely to be disparities across

More In-Classroom Experience: The Recommendations of NCATE's Blue Ribbon Panel

In 2010, a panel of experts convened by the National Council for the Accreditation of Teacher Education recommended that teacher preparation programs be redesigned according to the following principles:

- P-12 student learning is the focal point for design and implementation
- Content and pedagogy are woven around clinical experiences throughout preparation in coursework, laboratory-based experiences, and in school-embedded practice
- Data are used to judge every element of their preparation program
- Candidates are prepared to be content experts, to know how to teach it, and to be innovators, collaborators, and problem solvers
- Candidates are provided extensive feedback
- Mentors and supervising teachers are rigorously selected and should be effective practitioners
- Specific sites are designated and funded to provide classroom-based experiences
- Technology is used to share best practices and facilitate on-going professional development
- Research is conducted on teacher effectiveness, best practices, and preparation program performance to support continuous improvement
- Partnerships among schools districts, teachers unions, state policymakers, and preparation programs are in place

Source: National Council for Accreditation of Teacher Education, "Transforming Teacher Education Through Clinical Practice: A National Strategy to Prepare Effective Teachers" (Washington, DC: Report of the Blue Ribbon Panel on Clinical Preparation and Partnerships for Improved Student Learning, 2010).

preparation programs concerning the number and quality of clinical experiences.

Some universities made no mention of how field placements or on-site mentors are selected. Others made no mention of placements in high-need settings or with diverse groups of children. At Ottawa University (based in Kansas, with a campus in Arizona), the only mention of practical experience is in the "Foundations of Early Childhood" course, but the course description provides no context. The description simply states that observations in early childhood education are required.²²

Another problem is that teacher preparation programs do not appear to require or even suggest that students observe or learn from teachers who have a track record of effectiveness. At the University of Georgia, prospective teachers complete a series of different experiences in the classroom, including hour-long visits to a pre-k or kindergarten classroom, or a classroom where they have less experience. But the students select the classroom they visit, and it is unclear whether they have any indicators for the level of quality they are observing.

The same can be said of the New Jersey City University College of Education, which requires students to complete four field experiences. But the first two are only 15 hours and students can set up their own visits.²³ Again, there is no guarantee of the effectiveness of the teacher they will observe.

In general, across the preparation programs scanned, there are missed opportunities to embed practical opportunities in content and pedagogical study.

States' Weak Approval Processes for Education Schools

Another problem area is states' approval of teacher preparation programs. Under the Higher Education Act, the federal government requires every state to identify low-performing preparation programs. More than half of the states, however, have never named a single low-performing program.²⁴

With more than 1,400 education schools, each housing multiple teacher preparation programs, the fact that so few are labeled low-performing calls the level of quality into question. Between 2001 and 2009, only three states

– New York, Ohio, and Kansas– identified at least 20 teacher preparation programs as low-performing.²⁵ This practice is bad for prospective teachers and worse for the students they will teach. The problem actually goes deeper than simply failing to close or force programs to improve. In many states, approved status is not very difficult to obtain in the first place. In the past, some have simply rated programs on the number of students accepted into programs. Other states based ratings on the number of students who passed licensure exams.²⁶ Neither are the best measures. ■

Problems in Preparation and Licensure Specific to Early Childhood

In our review, we also found evidence of problems specific to early childhood preparation programs and related state policies.

Courses with More Breadth than Depth

To be effective teachers of children in pre-k through third grade, teacher candidates need to take courses that provide them a deep knowledge of this particular age group. But studies show that depth to be lacking.

Teacher candidates need to take courses that provide them a deep knowledge of this particular age group. But studies show that depth to be lacking.

In 2006, the FPG Child Development Institute at the University of North Carolina at Chapel Hill published a report that provided a nationwide view of the state of preparation programs for early childhood teachers. The report, *Early Childhood Teacher Preparation Programs in the United States*, showed that programs varied substantially in what courses they required. In the early education programs of 1,179 institutions, only a few courses — education and care of preschool aged children and emergent literacy and literacy strategies — were required by more than 75 percent of early childhood programs. Fewer than two-thirds required a course in numeracy and math for young children; social and emotional development; and classroom management. Less than 15 percent of programs offered a course in working with bilingual children.²⁷

In a 2010 study conducted by Penn State University, researchers surveyed professors from early childhood teacher preparation programs at Research One (R1) universities. Researchers asked questions about topics significant to the early childhood field, such as whether the topic was offered as a standalone course or if it was embedded within a course. Of the 42 programs surveyed, fewer than half reported offering standalone courses on family, school, and community partnerships.²⁸

The Penn State study found that the majority of programs did have standalone methods courses for math, science, and literacy. But the study did not ask whether the courses were specifically targeted for the early grades or if they were designed to prepare candidates getting broader K-5 or K-6 licenses.²⁹ In our review, we found that content and methods courses often leaned toward the upper elementary grades.

In course descriptions from our six sample states, we also found breadth but not depth.

For example, Florida Gulf Coast University requires six content-related courses, with three that focus on the topic of literacy. However, none appear to specifically focus on early childhood. One, "Literacy Content and Processes," states that the focus is for intermediate elementary and middle school children.³⁰ And the "social sciences and humanities" course states that it covers "integrated teaching strategies, methods, and concepts that are appropriate for use with students in grades pre-k through grade 12" – an incredibly wide range for a one semester course.³¹

Because of the large numbers of students who enroll as education majors, many universities are forced to offer multiple sections, often taught by multiple professors, of a given course. Reading courses are no exception, and the result can be widely varying reading lists and curricula. In some places, we found minimal agreement on which texts are most appropriate when it comes to teaching reading. Quality of instructional materials is also an issue. In 2006, the National Council on Teacher Quality conducted a study on education schools and their instruction of prospective K-5 teachers in how to teach reading. The organization found only four acceptable core texts of the more than 225 they reviewed being used by education professors.³²

In some cases, questions of course quality are complicated by the fact that similar courses may be offered by entirely different university departments. At the University of Georgia, for example, there are two degree programs that train teachers for pre-k and early elementary school classrooms. One is housed in the college of education and the other in the college of family and consumer sciences. Both lead to Georgia's pre-k through fifth grade (P-5) teacher license, but the one in the college of family and consumer sciences focuses on pre-k up through second grade. Its reading course highlights the importance of making family and school connections. It provides background on early literacy development from birth to kindergarten. And it focuses on emergent readers and literacy assessment in preschool. Topics include oral language, phonemic awareness, and early writing, among others. The program also includes "Reading Assessment in the Elementary School."

Questions of course quality are complicated by the fact that similar courses may be offered by entirely different university departments.

The reading course taught in the college of education takes a different tack. It focuses on instruction and covers the topics of phonemic awareness, phonics, vocabulary, fluency, comprehension, motivation, and instructional planning and organization. It does not include any focus on helping children who are starting to learn to read and write. Graduates of this program who teach pre-k, kindergarten or the early grades appear to be missing key components of language and literacy development in young children.

Courses with Little Attention on How to Work with Families

Family engagement is another topic that would be expected to be central to preparation of teachers of young children.³³ The ability to involve families in school activities is not necessarily instinctive, and yet teachers are integral to a positive school experience for not just their students, but also their students' families. Early interactions with teachers set the course for how involved families will be as their children progress through the grades.

While early childhood teacher preparation programs tend to emphasize family engagement and offer more than one development course, broader elementary teacher preparation programs — like K-5 programs — do so less fre-

quently. Prospective teachers with a K-5 degree who are placed in a kindergarten or first grade classroom are less likely to have been prepared to engage with families.

Prospective teachers with a K-5 degree who are placed in a kindergarten or first grade classroom are less likely to have been prepared to engage with families.

In Georgia, for example, early childhood teacher preparation programs must incorporate family and community relationships into their courses, but to what extent is less clear. The state's license for teachers of the early grades spans both the early and part of middle childhood — prekindergarten through fifth grade (P-5) — and therefore requires a heavy load of topics to be included in a teacher's preparation. The breadth inevitably means that important concepts are diluted. This most notably appears to be the case for family engagement.

Absence of Training in Aligning Instruction in Keeping with PreK-3rd Strategies

Over the past decade, as educators have focused on closing the achievement gap and improving student test scores, a growing number of district leaders and policymakers are recognizing the value in creating a more seamless education system in pre-k through third grade that carries students along a continuum of learning from one year to the next. This continuum, often called "PreK-3rd", requires districts to enact a comprehensive set of reforms, including high-quality pre-k for three- and four-year-olds, full-day kindergarten and the use of data by collaborative teams of teachers to track children's progress both within and across the pre-k-to-third grades.³⁴ A growing body of research is showing the value in creating such a system.³⁵

To help prospective teachers understand their role in these burgeoning systems, preparation programs will need to provide an introduction to how PreK-3rd strategies work as well as practical experience where possible. This includes training on how to glean useful information from data on children's progress over time, how to collaborate with teachers within and across grades, and how to work with content standards and curricula designed to scaffold and build on children's accumulating skills over time.

From our analysis of course offerings in teacher preparation programs, this sort of training is very rare. While we found a few early childhood programs that do provide prospective teachers with information about assessments or standards, none of the programs under our review included specific references to the continuum of learning from pre-k through third grade, preparation programs tailored for K-5 and K-6 licenses will, by their very structure, always be sparse in this area since they are not designed to consider pre-k instruction at all.

Uneven Credentials Among Early Childhood Faculty and Spotty Program Quality

The quality of an early childhood teacher preparation program is surely a function of the quality of its faculty and leadership. While a solid program alone will not always ensure effective teachers, it does set an important foundation upon which supportive school districts and principals can build with ongoing opportunities for professional growth and development.

Multiple reports in the past decade have expressed concerns about the composition of faculty in and the program design of early childhood preparation programs. One problem is the lack of full-time faculty in early childhood preparation programs.³⁶ The 2006 FPG study found that in four-year programs more than 40 percent of faculty are part-time.³⁷ The survey of R1 universities³⁸ found that while education schools have 3.5 full-time faculty members, on average, dedicated to early childhood education programs, at least one institution reported having zero. Both reports found programs lacking in diversity, with 38 percent of R1 programs reportedly having no faculty members of color or minority ethnicity. Most faculty members in early childhood teacher preparation programs were white non-Hispanic.

The authors of a 2009 research paper entitled *Quality Improvement in Early Childhood Teacher Education: Faculty Perspectives and Recommendations for the Future* discovered immense variation across teacher preparation programs, especially when it comes to skills like understanding theory and research in the field, best practices for enhancing student competencies, and faculty practical experience and expertise. Leaders and faculty members were asked about their institutions' priorities for enhancing students' competencies, and many cited gaps similar to what we found in our sampling of course descriptions. The priorities, respondents said, included working with families, addressing chil-

dren's challenging behavior, using appropriate assessments, and implementing quality curriculum effectively. Missing from the top responses was ensuring that prospective teachers gain experience in how to interact with children in synchrony with their stage of development.

To address the gaps in early childhood preparation programs, the most frequent response was "the need for more faculty members with early childhood expertise." ³⁹

How well are these programs preparing future educators to work in today's diverse classrooms? Research on this topic points to deficiencies. For example, in a survey of 689 New Jersey preschool teachers, over half stated they needed additional training to work with English language learners or children with special needs.⁴⁰ Additionally, a 2006 report, *Preparing Early Childhood Teachers to Successfully Educate All Children*, calls attention to the need for early childhood faculty members to develop "the depth of knowledge regarding the developmental and education needs of children who are poor, second language/dialect speakers, of color, and others, that prospective teachers must have."⁴¹

States could tighten their requirements. Consider Florida. Like many states, Florida's certification office approves preparation programs based on several criteria. One criterion is related to faculty who supervise clinical experiences Florida expects supervising faculty to have specialized training, a valid teaching certificate, or three years of successful teaching somewhere within the education span from pre-k through 12th grade.⁴² But it does not appear that faculty members who supervise students in an early childhood placement need to be certified for or to have taught in pre-k, kindergarten, or the early grades themselves.

The same is true for New Jersey. Faculty members who supervise student teachers with placements in K-third grade classrooms are not required to have once taught in K-third grade classrooms.⁴³ Under these guidelines, a former middle school science teacher could supervise prospective teachers who are completing a clinical experience in a kindergarten classroom.

Licensure Structures and Hiring Practices that Spur Prospective Teachers to Obtain Broad Degrees and Forego More Specialized Training that Would Prepare them for Particular Settings State policymakers establish the structure for teacher licenses, which are grouped in myriad combinations of grade levels: for example, a state may offer a pre-K-3rd grade license and a K-5 or K-6 license; a license for 4th to 8th grade or 5th to 9th; and a K-12 license for teaching a specific subject area in high school. The K-5 or K-6 licenses are sometimes called "omnibus" licenses because they cover such a wide range of grades.

The structure of licenses influences the way education schools prepare prospective teachers to work. More often than not, the groupings also match the grade level divisions in public school buildings, which means that they also drive hiring decisions.

The chart on page 10 illustrates the current licensure landscape for early childhood and elementary requirements in the U.S. There is clearly a lack of consensus.

A few trends are clear. Licensure overlap is common. Prospective elementary school teachers can choose to qualify for, say, a birth-to-third grade license or a K-8 license. Some states couple special education with early childhood licenses. Some grant a license to teach children from birth through third grade, while others begin at pre-kindergarten. More than one state defines the span by age instead of grade level.

In some states, the earliest span ends at or before kindergarten. In fact, in only 14 states are kindergarten teachers required to obtain a license with a focus on the early grades. In other words, in the vast majority of states, kindergarten teachers are not required to have any specific training in early childhood.

When it comes to teaching in the early grades, only four states — Arkansas, Georgia, Ohio, and Pennsylvania — are set up in such a way that prospective teachers must acquire an early childhood license to teach in kindergarten through the third grade.

Overlapping licenses lead to overlapping teacher preparation programs within most states. In New Jersey, for instance, education schools offer a pre-k through third grade (P-3) early childhood degree or a K-5 elementary degree. But many also offer a dual track, where students can obtain both a P-3 and K-5 license at the same time. This can lead programs to focus on the shared grades in the middle, with one or both ends of the grade level span slighted. At Rider

State Licensure: A National Perspective

Comparing Licenses for Teaching in an Elementary School

State	Licenses Available	State	Licenses Available
AL	B-K; K-5; P-3	MT	K-8
AK	P-3; K-6; K-8	NE	B-3; K-6; K-8
AZ	B-3; K-8	NV	B-K; B-2; K-8
AR	P-4; 4-8	NH	P-3; K-6; K-8
CA	P-12 (in self-contained classroom)	NJ	P-3; K-5
CO	P-3; K-6	NM	B-3; K-8
СТ	B-K; N-3; K-6	NY	B-2; 1-6
DC	P-3; 1-6; 4-8	NC	B-K; K-6
DE	B-2; K-6	ND	B-3; K-6; 1-6; K-8; 1-8
FL	B- Age 4; Age 3 – 3rd; K-6	ОН	P-3; 4-9
GA	B- Age 5; P-5; 4-8	OK	B- Age 3; P-3; 1-8
HI	P-3; K-6	OR	K-8 (in self-contained classrooms)
ID	B-3*; K-8	PA	P-4; 4-8
IL	B-3; K-9**	RI	P-2; 1-6
IN	B-K; K-3; 4-6	SC	P-3; 2-6
IA	B-3; P-K; K-6	SD	B- Age 4; B-3; K-8
KS	B-K*; B-3*; K-6	TN	B-K*; P-3; K-6; 4-8
KY	B-K*; K-5	TX	P-4; P-6; 4-8
LA	P-3; 1-5; 4-8	UT	1-8***
ME	B- Age 5; K-3, K-8	VT	B-3; B- Age 6* K-3; K-6
MD	P-3; 1-6; 4-8	VA	P-3; P-6
MA	P-2; 1-6	WA	P-3; K-8
MI	B-3; K-5	WV	B-P; P-K; K-4
MN	B-3; K-6	WI	B- Age 8; B – Age 11; Age 6 – Age 12
MS	N-1; P-K; K-3; 4-8; K-6	WY	B- Age 5*; Ages 3-5; Age 3- 3rd; K-6; 7-8
MO	B-3; 1-6		(in self-contained classroom)

University, the dual licensure program requires students to take the elementary track and add on three early childhood courses. While the descriptions for these courses do reference developmentally appropriate practices and NAEYC standards, there is no mention of field experiences in early childhood settings, pre-k through third grade. The single student teaching experience mentioned also does not guarantee a placement in the early grades.

Georgia offers another example of the problems that can

come with overlap. The state's birth – kindergarten (B-K) license was created about five years ago to strengthen the early childhood profession. However, prospective teachers who are considering teaching pre-kindergarten or kindergarten can also attain Georgia's P-5 license, which allows them to teach from pre-k through fifth grade. The P-5 license makes teachers more marketable to elementary school principals seeking versatile candidates who can be re-located to multiple grade levels. It also would be more likely to lead to the higher salary and benefits that come

with a public school job. With a B-K license, the odds are long that teachers could find jobs with a professional salary unless they were hired by a principal specifically looking for a pre-k or kindergarten teacher who valued their B-K experience over versatility. Teachers in infant and toddler centers, as well as many in preschools, are paid far less than public school teachers.⁴⁴

In any state, and even without the problem of unequal pay, prospective teachers are going to select the license that makes them the most desirable to future employers. If one individual applies for a position with a K-5 license, and another applies with a P-3 license, the latter teacher is not qualified to teach in fourth and fifth grade, potentially rendering her or him the weaker candidate. In fact, according to a principal we spoke to, one school district in Minnesota does not generally tenure teachers who are not licensed to teach every elementary grade.⁴⁵

The people who hire and place these teachers – the elementary school principals — can unwittingly exacerbate the problems of overlapping licenses as well. They may not have a clear understanding of how early childhood and elementary teacher preparation programs vary. They themselves may be former secondary school teachers with little experience as elementary school teachers, let alone teaching experience in the early grades, kindergarten, or pre-k. Anecdotes abound of principals moving weak teachers to an early elementary grade from an upper elementary grade because they want stronger teachers in grades that are the focus of state tests and school accountability.

Several organizations and studies have recommended eliminating the K- 5 or K-6 omnibus elementary license altogether to avoid having prospective 5th grade teachers prepared the same way as kindergarten teachers and vice versa. ⁴⁶ A logical change would be to replace those omnibus licenses with at least two different licenses — one with a span ending at third grade and another starting at 3rd or 4th grade and extending up through the middle grades.

States' Weak and Confusing Professional Standards for Teachers

States have the power to set standards for teachers, and one tool at their disposal is the use of exams to measure knowledge. Currently, about two-thirds of states, along with the District of Columbia, use scores on the Praxis Series tests to determine whether teachers qualify for their licenses.⁴⁷ A

smattering of states also require teachers to take Praxis I, the Pre-Professional Skills Test, in reading, math, and writing as an admission requirement for entry into teacher preparation programs.

Yet it is difficult to say how good the Praxis exams are as predictors of effective teaching. One reason is that each state determines its own minimum cut score — and those minimums can be so low that they are meaningless.⁴⁸ In many states, even if a prospective teacher ends up with a score that is below average, it is still considered passing.

States also send relatively few — or worse, confusing — signals about what kind of preparation programs lead to well-prepared teachers. State rules for approved preparation programs often say little about standards for faculty hires, clinical experiences of prospective teachers, or how much attention should be devoted to certain topics. This has led to vast variation across preparation programs, even within a single state.

Again, consider Florida, which as we've described above, is like many other states that have overlapping licenses in the early grades. According to the state's official document on teacher standards — *Competencies and Skills Required for Teacher Certification in Florida*, ⁴⁹ — teachers seeking a pre-k-third license are expected to identify the sequence of development for typical children as well as to identify atypical development. But teachers seeking a K-6 license are not. Instead, K-6 teacher candidates appear to be expected to exhibit a deeper knowledge and understanding of content areas including math, science, and social studies than pre-k-third candidates.

Ideally, states should set standards that encompass the best of both worlds, requiring teachers in pre-k, kindergarten and the early grades to gain both a strong grasp of math and science content plus developmental knowledge and pedagogical skills.

Policies that Do Little to Foster and Support Alternative Certification Models that are Connected to Schools, Offer More Practical Experience, and Attract More Career-Changers

Alternative certification programs, which are designed to enable professional adults to switch careers and become teachers, also bend to accommodate the structure of a state's licensure system.

The result is fewer options for professionals who want to obtain a P-3 license or similar early childhood license as opposed to an omnibus K-5 or K-6 license. When such programs are available, they should be designed to match the developmental and academic needs of the children in those classrooms. This is not always the case.

For example, Teach for America, a nationally recognized alternative preparation program, offers early childhood education training but its early childhood model focuses solely on the preparation of pre-k and Head Start teachers. Teachers who are placed in the early grades receive the regular TFA training experience, which involves a five-week summer institute that includes student teaching in summer school programs along with other opportunities for feedback and practice, and continued professional development.⁵⁰

Among teacher residency models — a type of alternative program that immerses prospective teachers in a class-room with a mentor teacher — the same deficiencies exist. For instance, the Urban Teacher Residency United, a non-profit organization in Chicago, is affiliated with seven programs that can place prospective teachers in the early grades. The programs prepare adults for either K-6 or K-8 classrooms and do not appear to include a special focus on the early grades. Additionally, there is little to no mention of topics of which teachers who work with children in kindergarten through third grade must have a firm grasp.

At the Boettcher Teacher Program in Denver, Colorado, all elementary and secondary teaching fellows take courses on curriculum and instruction, external influences on student learning, and educational psychology. Concepts like child development, appropriate practices, and classroom management are presented in a K-12 context, which does not allow prospective teachers interested in the early grades to delve into how children learn during these years. For the elementary-specific curriculum, topics like assisting emergent readers or teaching content using hands-on activities were missing from course descriptions altogether.⁵¹

Obstacles for Students Transferring from a Community College to a University Early Childhood Preparation Program

Some early childhood teachers begin their education in community colleges. This is often the case among those who start their careers working with children under the age of five in settings that do not require bachelor's degrees. These community college students typically attain an Associate of Arts (AA), an Associate of Science (AS), or an Associate in Applied Science (AAS) in early childhood education or child development. The AA and AS degrees are typically designed to transfer to four-year universities. An AAS typically includes more coursework in the major and prepares students for immediate career entry.

However, courses from a community college do not always transfer to a university, and some students end up repeating coursework. To avoid this situation, some states require contracts — known as articulation agreements — between community colleges and universities for general education credits to transfer. A lack of coordination between course catalogs — such as if a course has a different title or prefix than that of a similar course at the university level — can also hinder the transfer of credits.

Too often, the courses and field experiences students complete at the community college level become electives at the university level, forcing them to repeat classes they have already taken.

In addition, a stigma remains associated with community college coursework; some educators may not see it as rigorous as coursework at the university level. In fact, some harbor the impression that community colleges teach only "babysitting."⁵² Education schools say they need to guarantee that their students meet the qualifications to obtain a teaching license. Many programs say the only way to do that is to make sure that students take all of their professional coursework at the university.

In the midst of these concerns lies an irony: the quality of early childhood faculty at community colleges may trump the quality of faculty at four-year institutions. Faculty members who teach in community colleges often have more experience working within early childhood settings and may be better equipped to train prospective teachers.

Still, university-level programs sometimes find they need to conduct interviews with students to inquire about the knowledge they gained from their community colleges to determine what should transfer even if the course titles and descriptions are similar.⁵³ Too often, the courses and field experiences students complete at the community college level become electives at the university level, forcing them to repeat classes they have already taken. This adds to both the cost and time prospective teachers invest in their education.

Promising Practices

Amidst the plethora of problems, our review of state policies and programs turned up several ways to address them. By no means are they easy solutions. Each state has its own rules and regulations and will need to develop its own approach. But models exist. Here are promising practices that can provide policymakers with a place to start as they wrestle with early childhood teacher preparation in their own states.

Multiple and Frequent Field Experiences

For prospective teachers, experience in the classroom working with children is often the most valuable component of the preparation program. Here are a few promising examples from the field:

iTeachAZ

Arizona State University's Mary Lou Fulton Teachers' College merges coursework and clinical experiences. The "immersion-style" program is called "iTeachAZ." Teacher candidates participate in about 1400 hours of classroom experiences.

The program has existed on a modest level since 1999. Through a five-year, \$33.8 million U.S. Department of Education grant, the college was able to expand its reach to more school districts and to include additional educational degree programs. The iTeachAZ design follows the Professional Development School model of teacher preparation, in which students enter the program as a cohort, take classes together, and complete their fieldwork at a school together.

Teachers' College works with school districts in metropolitan Phoenix and Tucson, as well as in Arizona's rural and Native American communities, to help districts "grow their own" teachers and train them in the district.

Prospective teachers follow the public school-year calendar and participate in all school activities. They also participate in diverse teacher experiences, such as school and district-level professional development, parent-teacher conferences,

and on-site mentoring. Each cohort of students is overseen by a full-time coordinator who observes students in classroom rotations and teaches a portion of the coursework.

By the time students complete their preparation they have one full year of teaching already under their belt. In fall 2011, the iTeachAZ model will be fully incorporated into ASU's early childhood teacher preparation program. Like the current early childhood education program design, prospective teachers will have practical experiences in multiple settings, birth to pre-k and K-3.⁵⁴

Opening School Experience

One of the appealing components of Georgia State University's preparation program is the required "Opening School Experience." In the fall before they become full-time student teachers, the university students attend both preplanning meetings and the first week of school with the teacher with whom they will intern in the spring. During this time, students see what happens during the first week of school and how to prepare effectively for it — something most prospective teachers never have the chance to observe from the teachers' perspective. If first-year teachers can get through this period smoothly, it sets them on the right path for a less bumpy first year.⁵⁵

Urban School Setting

At William Paterson University in New Jersey, early child-hood education students participate in multiple field experiences, in both public and private settings, in pre-k through third grade over the course of their program. One of the required experiences is in an urban setting. Janice Strasser, an early childhood professor at William Paterson University, explained that for some students this is a life-changing experience. "Many young women in our program have never been in an urban area before. They go into urban schools, feeling nervous at first, and end up loving the experience," she said. "Then they choose to work as teachers in these schools." ⁵⁶

Rigorous Coursework

There is consensus around the notion that there is room for improvement when it comes to rigor in teacher preparation programs.⁵⁷

Dual Major

Two of the states we looked at have taken steps to address this issue. In New Jersey, P-3 education and K-5 education

majors must complete a liberal arts or sciences major, with a minimum of 60 credit hours. Prospective teachers are therefore engaged in a curriculum designed to provide general knowledge and to build intellectual capacities to reason and evaluate.

New Jersey also requires that prospective teachers complete coursework in child development and learning that includes attention to children who are English language learners and who have special needs; understanding family and community, including the study of the impact of children's home life, health and cultural experiences; and curriculum and assessment.

Improving the Mathematics Knowledge of Teachers

Georgia requires multiple math courses to ensure that prospective teachers understand math foundations. The state requirements specifically state that early childhood teacher preparation programs should prepare professionals who:

Know, understand, and use the major concepts, procedures, and reasoning processes of mathematics that define number systems and number sense, geometry, measurement, statistics and probability, and algebra in order to foster student understanding and use of patterns, quantities, and spatial relationships that can represent phenomena, solve problems, and manage data.⁵⁸

This state requirement has prompted preparation programs to ensure that prospective teachers know and understand major math concepts.

Depth in Coursework

Some programs, such as the one at Rowan University in New Jersey, require both a significant amount of content and methods coursework coupled with courses on curriculum integration, assessment, and developmentally appropriate practices. Prospective teachers at Rowan take two courses called "Growth and Learning." One focuses on children from birth through age five and provides opportunities for candidates to apply theories of typical and atypical child development in early childhood settings. Candidates also learn what it means to teach young children in developmentally appropriate ways and to understand children in the context of family, culture, and society. The subsequent course focuses on the same topics as they relate to school-aged children.

Students at Rowan take several content and methods courses. One of them — "Language Development and Emergent Literacy" — educates students in what it calls the five phases of literacy: awareness and exploration; experimental reading and writing; early reading and writing; transitional reading and writing; and independent reading and writing. Students are also taught how to integrate literacy instruction across all curricula in the forms of reading, writing, speaking, listening, and viewing. Finally, students learn to identify, assess, adapt, and implement a variety of strategies that take into account children with special needs. ⁵⁹

Some programs require both a significant amount of content and methods coursework coupled with courses on curriculum integration, assessment, and developmentally appropriate practices.

Another subject at Rowan that is particularly important for all teachers to know and understand is covered in "Observation, Assessment, and Evaluation of Diverse Learners," where students are taught about standardized measurement and other types of assessments that are appropriate for young children, including children with special needs. Linked with this course is a field experience that provides opportunities in both regular and special education settings.

Strengthening the Way Science is Taught to Young Children

The early childhood teacher preparation program at the University of Central Florida requires a course called "Teaching Science and Technology to Young Children." It instructs prospective teachers on how to implement a "discovery science/design technology program for young children in an integrated, interactive curriculum." Science is an area that is not often covered in pre-k, kindergarten and the early grades. But young children are often most excited about science in these early years, showing an eagerness to explore nature and test the physical properties of everything from ice to ping pong balls. Teachers should be equipped to foster that discovery process. It is exciting to see a university embrace this notion in its training of early childhood teachers.

14 NEW AMERICA FOUNDATION

Reducing Licensing Overlap

Pennsylvania

Pennsylvania recently eliminated its broad elementary education license and replaced it with a pre-kindergarten through fourth grade (P-4) license and a fourth through eighth grade (4-8) license. Pre-kindergarten teachers working for a community service provider under contract with a local district are required to have an early child-hood license. In "Linking Ready Kids to Ready Schools," a 2009 report prepared for the W.K. Kellogg Foundation and the Education Commission of the States, authors describe this licensure overhaul as a way to improve the effectiveness of teachers by aligning teachers' preparation with the developmental stage of the students they will teach. 62

Arizona

Arizona has also made a small, but significant move to require early childhood preparation of teachers in pre-kindergarten and kindergarten classrooms. Those teachers will soon be required to attain the state's birth through third grade license. (Under current law, a teacher with a K-8 license could teach in kindergarten without specific training in how to engage children of that age.) The change will go into effect in fall 2012. ⁶³ Additionally, Arizona uses NAEYC standards as a guide for its own preparation program approval process.

Partnerships Between Community Colleges and Universities

Pennsylvania's Statewide Initiative

In Pennsylvania, two forces led to a statewide effort to create strong articulation agreements between early childhood preparation programs in community colleges and those at universities. First, the Office of Child Development and Learning (OCDEL) and the Pennsylvania State System of Higher Education (PSSHE) joined forces to begin exploring how programs might articulate seamlessly. OCDEL provided grants to several clusters of two-year and four-year institutions around the state that were interested. There was already an effort underway prompted by some community college programs that wanted to improve their quality. North Hampton Community College, for example, worked with NAEYC to align its two-year programs with the same teacher preparation standards required of four-year NCATE accredited programs.

The second force was legislation passed by the State's General Assembly. While the regional articulation efforts initiated by OCDEL were moving forward, the Pennsylvania General Assembly passed Act 114 of 2006, which required state higher education institutions and community colleges to develop articulation agreements for general education courses. Three years later, the General Assembly took this a step further with Act 50, requiring community colleges and universities to make both the AA or AS degrees transferable to universities that offered a corresponding bachelor's degree.

The end goal, according to Julie Kane, Higher Education Associate for the Pennsylvania Department of Education, is for students to know exactly which universities will accept their AA or AS degrees without having to retake any courses. She recalled the words of a community college professor who laid out this vision: "I want to be able to write on my website that if you come to Montgomery Community College and earn an AA early childhood degree, then you can transfer to any of these specific universities and have your entire degree transfer." 64

Institutions of higher education must receive approval from the Pennsylvania Department of Education of their articulation agreements no later than fall of 2012. The timeline for articulation aligns with the timeline for changes to Pennsylvania's licensure structure.

Local Initiative

In 2006, the George Kaiser Family Foundation worked with the University of Oklahoma (OU) to start an early childhood bachelor's degree program at its branch campus in Tulsa. The Kaiser Family Foundation had already been funding scholarships for students seeking an early childhood associate's degree at Tulsa Community College. The new partnership with the University of Oklahoma built on the community college program, opening the door to transfer students who wanted to complete a bachelor's degree in early childhood education. The Tulsa bachelor's program offers evening and weekend classes to meet the needs of working adults, the majority of students who enroll. OU-Tulsa works closely with the community college to recruit and advise students. When students complete an associate's degree, all of their coursework transfers to the birth through third grade program at OU-Tulsa. Students are able to participate in a loan forgiveness program through the Kaiser Foundation,

which offers low-interest loans for tuition and fees. For each year that graduates work in pre-k, kindergarten, and the early grades in Tulsa, the loan is reduced by 25 percent. The majority of the students who enroll are adult learners currently working in the field. As part of the program, they engage in a variety of field experiences, both at their current work location and at other sites.⁶⁵

Increasing Selectivity

Many of the preparation programs in our scan required both a minimum GPA and some type of general knowledge test. But the test required was most often the state's general knowledge portion of its teacher certification exam or a portion of the Praxis. It is difficult to know where the bar is on some of these tests. In Florida, for example, teachers do not receive a numerical score; results are reported simply as pass or fail. Few use SAT scores for entrance. Few use other measures. And the majority set the minimum GPA at 2.5.

But we found some universities that have taken steps to raise the bar. Here are two examples:

Georgia State University

Admission into Georgia State University's college of education requires several steps. First, students must have a 2.75 GPA — higher than many other schools — in their undergraduate coursework. They also need to pass the

basic skills portion of the Georgia Assessments for the Certification of Educators. Students must also submit a writing sample and participate in an interview. Even upon meeting these requirements, the college does not automatically grant admission.⁶⁶

Florida State University

Florida State University limits the number of students accepted into the elementary and early childhood programs within its college of education. Due to a high demand for admission, the Florida Board of Regents granted FSU's request for "limited enrollment status." This means the program only admits a certain number of the "best-qualified" students. Programs base enrollment decisions on scores on the general knowledge portion of the Florida Teacher Certification Exam and SAT/ACT scores; current GPA; an essay; and a record of work with children. While the minimum acceptable GPA is still only 2.5, just meeting the minimum does not guarantee applicants entry into the program.⁶⁷

Alternative Preparation Programs that Offer Training for Early Childhood Classrooms

The New Teacher Project (TNTP), a national alternative preparation and licensure program, has a presence in 16 states. The organization's training model for early child-hood teachers is not only for pre-k teachers; it is designed for teachers in grades up through third grade, depend-

Oklahoma's IT3 License: Preparing Teachers to Work with Infants and Toddlers

While this report focuses on licensed teachers in pre-k, kindergarten, and the early grades, there are movements in some places to create licenses that require bachelor's degrees for teachers working with infants and toddlers. Here is one example from Oklahoma.

The Oklahoma Department of Education issued its first "Infant-Toddler-Three-year-old" (IT3) license in November 2010.7° The demand for the new license stemmed from the growing state-funded early childhood pilot program for infants through three-year-olds. The pilot program requires that all lead teachers of three-year-olds have a bachelor's degree and a license in early childhood. As with the state's four year-old program, lead teachers with bachelor's degrees must be paid comparatively to public school teachers with similar experience.71

The state's "pre-k-third grade" license has always allowed prospective teachers to work with infants and toddlers. State leaders created the infant-toddler-three-year-old license to provide an option that specifically focused on working with children in their earliest years.⁷² The IT3 preparation programs are not housed in the state's education schools; instead, they are housed in departments such as Family and Consumer Science. Through these programs, prospective teachers obtain a bachelor's degree in either child development or family relations with an emphasis on infants through three-year-olds.

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ing on the state. The early childhood preparation also focuses more on the "whole child," including attention to a child's social-emotional development and health, than the elementary-school preparation, which is designed for teachers of the K-5 or 1-6 grades, depending on the state. Early childhood teacher preparation aligns with the NAEYC standards and emphasizes how the development of a child's academic skills relates to the social and emotional aspects of that child's development.⁶⁸

Improving Principals' Understanding of Early Childhood Education

Many principals have never taught in the earlier grades. Many were licensed in secondary education. Early child-hood education is not their area of expertise. And unless more educational leadership programs emphasize the importance of child development and how children learn particularly in the early years, principals may continue to move teachers to the lower grades who are not well-prepared to teach there.

The National Association of Elementary School Principals (NAESP) has taken a lead in providing resources for principals about early childhood education. In 2005, it published a guide, "Leading Early Childhood Learning Communities: What Principals Should Know and Be Able to Do," that describes what high quality early education should look like. For example, it recommends that principals watch for teaching that "reflects the knowledge that young children are active learners, drawing on direct physical and social experience as well as culturally transmitted knowledge to construct their understanding of the world around them."69 In 2010, the NAESP Foundation, the organization's philanthropic arm, convened a task force to develop recommendations for policies to foster better learning environments from pre-k through the third grade. Those recommendations, which will apply not only to principals but also to federal, state, and local policymakers, should build new awareness in the education community about the unique role that principals play as employers and instructional leaders for teachers of young children.

Challenges Remain

While progress has surely been made to improve the quality of early childhood education teacher preparation, there is still much work to do in several critical areas. We highlight three important issues below.

Pay Parity

The risk of having to take a low-paying job is deterring many talented prospective teachers from getting an early childhood license as opposed to a broader elementary-school license. Teachers with a birth – third grade license, available in several states, will be paid significantly less if they choose to teach children younger than five. States like Oklahoma have reduced the pay parity issue by ensuring that teachers in the state's pre-k program for four-year-olds are compensated equally with public school teachers. Sadly, Oklahoma is not the norm.

Obstacles Caused By "Last Hired, First Fired" Policies

Inequities are also reflected in hiring decisions. Teachers not licensed through fifth grade in many places, are often seen as less marketable than elementary licensed teachers. Flexibility is essential to principals, especially in tough economic times when they may need to cut teachers. In most districts, last hired, first fired policies prevail. Under those policies, a fifth grade teacher with seniority would be retained while a new, promising teacher in an early grade would be let go. To fill the hole created by that firing, a principal may find he has no choice but to move the fifth grade teacher down. Because pre-k and kindergarten classrooms are still novel in many school districts, early childhood teachers are likely to have less seniority and therefore be at a disadvantage when budgets require the elimination of positions.

Improving the Quality of Faculty and PreK-3rd Grade Instruction

Education schools need to do a better job recognizing early childhood education as a developmental period in children's lives that requires teachers with specialized preparation. Colleges should hire additional full-time tenured early childhood faculty who have practical experience teaching young children, especially those who supervise clinical experiences. They also need to beef up their rosters of adjunct faculty who are also current practitioners. All faculty should be engaged in ongoing professional development themselves so they know and understand the latest developmental science and early childhood research and its implications on instructional practices.

As part of their efforts to imbue teachers with knowledge of evidence-based approaches to closing the achievement

gap, colleges should recruit faculty members with experience in employing PreK-3rd strategies. This experience could take the form of using aligned standards, curricula, and assessments or working in teacher teams to track students' progress across grade levels.

Recommendations

Based on our analysis and review of research, the Early Education Initiative at the New America Foundation offers the following recommendations to improve the quality of early childhood teacher preparation:

Teacher preparation programs should:

 Raise the bar on admission requirements in general, ensuring that elevated requirements also apply to early childhood preparation.

A significant portion of the education schools we reviewed set minimal requirements for admission to both the school and its early childhood preparation program. Yet researchers have found strong correlation between prospective teachers' verbal aptitude and student outcomes. Test scores and academic achievement alone cannot guarantee a teacher's effectiveness, but they do offer some insight into a prospective teacher's abilities. Education schools should consider including measures such as SAT scores, writing sample, interviews, previous experiences working with children, and personal recommendations.

2. Provide more field experiences in pre-k, kindergarten, and the early grades — within both elementary and early childhood preparation programs — and ensure that those experiences are connected to coursework.

Field experience and student teaching are often said to be the most valuable components of the preparation program. Disappointingly, the quality, number, and connectedness of those experiences to content and pedagogy vary greatly. Linking content, theory, and strategies to practical experiences with students will provide a smoother transition into the first year of professional teaching.

3. Hire faculty who have had extensive teaching experience in a pre-k, kindergarten, first, second, or third grade classroom.

Faculty members who have experience teaching young children are better equipped to advise and prepare prospec-

tive teachers who intend to work in the early grades. Efforts should be made to recruit faculty who have experience with the alignment of standards, curricula, and assessments across the pre-k-third grade continuum, so that teachers learn how to build on what children have learned in the previous grades.

States should:

4. Require approved early childhood teacher preparation programs to provide multiple field experiences that are woven into courses on content and methods, classroom management, and child development and that include interaction with both individual and groups of students.

States can improve the quality of teacher preparation and ensure that prospective teachers have ample opportunities to practice what they've learned by requiring specific types of classroom experiences.

5. Consider aligning standards for early childhood teacher preparation programs with standards designed by national early childhood education organizations.

In recognizing early childhood education as a specialized teaching profession, states should adopt standards in line with those already developed by professional groups. For example, the National Association for the Education of Young Children, the Council for Exceptional Children, and the National Board for Professional Teaching Standards have designed complementary standards for use in evaluating preparation programs.

6. Require approved early childhood programs to provide student teaching opportunities throughout the program in multiple settings at multiple levels of the early grades.

If prospective teachers are to be licensed to teach students pre-kindergarten through third grade, then they should experience each of those settings under the guidance of highly effective teachers. Additionally, they should have opportunities to work with diverse groups of children including English language learners, children with special needs, and children from families living in poverty. Additionally, they should have multiple opportunities to attend staff meetings, teacher planning sessions, parent-teacher conferences, and other situations they would likely encounter as professionals.

7. Separate licenses to avoid overlap in the early grades.

Right now teachers, understandably, choose to attain the broadest license possible, which inevitably leads them to a K-5 or K-6 license. In most states, these K-5 and K-6 licenses cause preparation programs to emphasize instructional strategies most compatible with teaching children in the later elementary grades. Even when states offer a P-3 license, if it overlaps with the K-5 and K-6 licenses, there is little incentive for teachers to select it. A better structure would separate licenses according to developmental spans. One license would cover pre-kindergarten through the third grade and the second would cover the later grades of elementary school, and perhaps middle school. This new structure would in turn lead to a restructuring of teacher preparation programs so that they provide prospective early elementary teachers with courses and practical experiences that marry depth of content with an emphasis on early childhood development. This is the design established by the state of Pennsylvania.

This is not a prohibition against obtaining two licenses if teachers complete coursework for a double major and meet other requirements for both licenses.

8. Make early childhood licensure more attractive to prospective teachers by instituting salaries and benefits in publicly funded pre-k programs that are on par with salaries and benefits for kindergarten and early-grades teachers.

Until the pay inequality is addressed, prospective teachers will shy away from early childhood education degrees and instead go for broader elementary degrees. In only a few states, publicly funded pre-kindergarten programs require licensed teachers and provide compensation equivalent to K-12 teachers. In 2014, 50 percent of Head Start teachers will be required to hold a bachelor's degree, but their level of pay will not equal that of a public school teacher. It will be difficult to attract a talented pool of teachers who seek licenses for teaching in pre-k, kindergarten, and the early grades if the pay for pre-k teaching continues to be significantly lower than that of kindergarten and the early grades.

9. Require articulation agreements between community college early childhood associate degree programs and university bachelor's degree programs.

Many early childhood professionals begin their education at community colleges. Those who move to a university's early childhood program often face challenges in transferring applicable early childhood courses. They often are accepted as electives, leaving students to repeat core requirements. States play an important role in bringing community colleges and universities together to develop articulation agreements that allow entire early childhood programs — or at the very least course-to-course agreements — to transfer for full university credit.

States and school districts should:

10. Eliminate personnel policies and practices that limit principals' options in assigning specific teachers to classrooms. Teachers' readiness for the particular teaching assignment should take priority over seniority and other factors.

A teacher who does not have the same preparation should not replace a teacher who has an early childhood license and is teaching in one of the early grades. Yet, there are instances when this happens. When facing downsizing decisions, a principal may be required to move a fifth grade teacher to a kindergarten or first grade position because that teacher has seniority and must be placed somewhere instead of laid off. This practice does not take into account the preparedness of the teacher nor does it consider how effective she or he may be.

School districts should:

II. Provide professional development for principals that includes training on early childhood education and highlights both the importance of family engagement and how young children learn content.

Few principals come from the early childhood realm. Professional development on early childhood principles would help inform their hiring and curricula decisions that affect the early grades.

12. Communicate with local education schools about staffing needs — including challenges facing the school district and subject-area shortages — and work together to determine the district teachers who are best suited to serve as supervisors of student teachers.

If education schools are aware of the needs of the districts they feed, they may be able to better recruit and prepare future teachers to meet those needs. Additionally, these

types of partnerships can lead to opportunities for professional development, university course offerings on school sites, and research projects to improve the effectiveness of teachers or quality of programs.

The federal government should:

13. Encourage high-quality alternative certification programs to include early childhood education and should study their impact on teacher effectiveness and student learning.

There is no reason for early childhood education to be left out when it comes to alternative certification. But most alternative certification programs are geared to elementary education as opposed to pre-k, kindergarten, and the early grades. More alternative licensing options could increase the pool of individuals interested in early childhood education. An early childhood-specific option would have a different curriculum than elementary and better prepare alternatively certified teachers in the early grades to meet the needs of young children.

14. Provide funding to assist education schools to transition their traditional preparation programs into clinically based preparation programs.

An NCATE blue ribbon panel recommended this step as a way to significantly improve the quality of teacher preparation, but it may be too costly for universities to take on by themselves. The federal government could play a powerful role in making this possible by providing financial incentives, in part through the Teacher Quality Partnership Grants in Title II of the Higher Education Act as suggested by NCATE.

15. Along with philanthropic organizations, fund additional research on the impact, over time, of teachers who have early childhood preparation and teach in the early grades.

More research is needed on the correlation between student learning and the type of preparation teachers obtain. \Box

Conclusion

Teacher preparation in general must be improved if policy-makers are to ensure that effective, knowledgeable teachers lead all of our nation's classrooms. From decisions about which students to admit to programs to the types of practical experiences provided to them, change is needed across the board.

There are also more specific challenges that must be addressed in the preparation of teachers who work with young children. Depending on the state, one teacher may be prepared in content and strategies primarily aimed at the upper elementary grades with limited emphasis on how younger children learn, how to actively engage them, how to recognize atypical development, and how to involve their families. A second teacher may have taken courses that focus on developmentally appropriate practice, family engagement, and meeting the needs of diverse children with less depth in knowledge of subject areas and strategies for teaching them. Despite their divergent preparation, both of these teachers could land a position in kindergarten, first, second, or third grade.

The preparation of early grade teachers must couple the best aspects of traditional elementary and early childhood preparation programs and infuse the course topics mentioned above with frequent experiences working with children. Disappointingly, based on our review, this is not the norm. Young children need teachers who know how to engage them in learning and interact with their families and who have a strong base of content knowledge and keen understanding of what academic and social skills they will need to succeed throughout their school years.

Stakeholders and policymakers must therefore take steps to ensure that all young children experience teachers who can provide them with this strong foundation. This begins by revamping the structure of state teacher licensure, rethinking the design of preparation programs, reforming hiring practices, and restructuring tenure policies to guarantee that teachers assigned to pre-k, kindergarten, and early grades are well-equipped to help young children learn and thrive.

Interviews Conducted

Diane Bales, associate professor and human development specialist, University Of Georgia

Valerie Barron, site advisor, instructor quality, The New Teacher Project

Catherine Brown, vice president, federal policy, Teach For America

Barbara Chester, president, National Association for Elementary School Principals

Amy Corriveau, deputy associate superintendent, Early Childhood Education, Arizona Department of Education

Nancy Freeman, associate professor of early childhood education, Child Development Research Center, University of South Carolina; and president, National Association of Early Childhood Teacher Educators

Mary Garguile, professor, Olympic College; and president, ACCESS

Rebecca Gorton, director, Early Childhood Education, North Hampton Community College

Stuart Greenberg, executive director, Just Read Florida, Florida Department of Education

Mary Hanrahan, professor, Early Childhood Education, North Virginia Community College

Carolyn Hartwigsen, principal of Westwood Elementary School, Bloomington Public Schools, Minnesota

Diane Horm, George Kaiser Family Foundation endowed professor in early childhood, University of Oklahoma

Sandy Jacobs, vice president, National Council on Teacher Quality

Ithel Jones, professor, early childhood education, Florida State University

Julie B. Rutledge-Kane, higher education associate, Bureau of Postsecondary Education, Pennsylvania Department of Education

Kristie Kauerz, senior intervention manager, PreK-3rd Education, Harvard Graduate School of Education

Michael Knight, professor, early childhood education, Keane University

Mari E. Koerner, professor and dean of the Mary Lou Fulton Teachers College, Arizona State University

Alison Lutton, senior director, Higher Education Accreditation and Program Support, National Association for the Education of Young Children

Mary Mazarky, assistant commissioner of Pre-K, Georgia Department of Early Care and Learning

Ramona Paul, assistant state superintendent of education, Oklahoma Department of Education

Nancy Perry, professor, early childhood education, Mary Lou Fulton Teachers College, Arizona State University

Bentley Ponder, research and evaluation specialist, Georgia Department of Early Care and Learning

Trude Puckett, AAT coordinator and early childhood instructor, Pulaski Technical College

Iliana Reyes, associate professor, Faculty of Language, Reading & Culture, Early Childhood Education; and director, the Interdisciplinary Program on Second Language Acquisition and Teaching, University of Arizona

Allison Sampish, kindergarten and fifth-grade teacher, Colorado

Ruth Robinson Saxton, coordinator of the birth-to-five program, Early Childhood Education, Georgia State University

Janis Strasser, professor, William Patterson University

John Welsh, principal, Naval Avenue Early Learning Center

Veronica D. White, program specialist, Bureau of Educator Certification, Florida Department of Education

Ellen Wolock, director, Office of Preschool Education, New Jersey Department of Education

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