New America Education
Policy Brief

BEYOND SUBPRIME LEARNING

Accelerating Progress in Early Education

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About New America

New America is a nonprofit, nonpartisan public policy institute that invests in new thinkers and new ideas to address the next generation of challenges facing the United States.

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BEYOND SUBPRIME LEARNING

CONTENTS

INTRODUCTION

Early education is in the spotlight like never before. President Barack Obama has repeatedly called for increased investments in child care, pre-K, home visiting, and other programs. Thirty-five states entered the federal Race To The Top–Early Learning Challenge grants competition, which has so far invested about $1 billion in 20 states' infrastructure. A long-overdue reauthorization bill for the Child Care and Development Block Grant overwhelmingly passed the Senate this year, with potential in the House. Philanthropies are investing in family-based initiatives and focused on improving services from prenatal to the K–3 grades. Many state leaders recognize the importance of making investments starting from birth and their support for early childhood is strong and bipartisan.

Yet real progress is elusive. Have states expanded high-quality early education to more children? In a few states, yes, but state-funded pre-K enrollment nationwide actually dropped recently.[1] Have educators made progress toward closing achievement gaps between young students from different socioeconomic backgrounds? No. In fact, gaps have widened. Have leaders established smooth transitions from and strong connections between the 0–3 years, pre-K, kindergarten, and each grade thereafter? Hardly. Are public investments helping low-income families with young children succeed? Not yet. Can Congress be counted on for stable federal funding? Far from it.

Earlier this year, in *Subprime Learning: Early Education in America since the Great Recession*, we surveyed the current state of early education in the U.S. by examining progress over the last five years. We found that while the public, political, and research consensus is stronger than ever, the field remains in dire need of streamlined operations, financial sustainability, and more focus on teaching and learning.

Conclusions from *Subprime Learning: Early Education in America Since the Great Recession*

The years from 2009–2013 focused on building infrastructure and improving coordination between different early childhood programs. But our analysis found little evidence of nationwide improvements in teacher development or children's access to high-quality settings. One bright spot was the federal government's funding of proven home visiting programs to help mothers nurture the development of their infants and toddlers. Yet that funding serves only a sliver of American families in need. Meanwhile, the percentage of four-year-olds in publicly funded pre-K programs increased only slightly (from 40 percent to 42 percent); three-year-olds were barely mentioned; and access to a school-day's worth of kindergarten remained spotty. Aside from emergency funding from Congress to states during the Great Recession, federal funding across the birth-through-eight landscape was essentially flat. There was little to no evidence of sustained effort to improve the caliber and training of the country's workforce from birth through third grade, to address the needs of dual-language learners, or to improve compensation for early educators. Meanwhile, child poverty rates shot up and gaps in achievement between the rich and poor widened.

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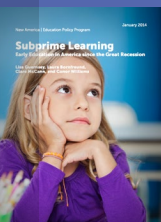
OUR VISION:
THE LEARNING STAIRCASE

We want America's children to become life-long learners who are able to think critically and inventively, regulate their emotions and impulses, and make smart decisions by drawing upon a rich knowledge base about how the world works. Realizing this goal begins with ensuring a seamless continuum of high-quality, easily accessible early education for all families.[2] Each year of their lives, children and their families should have the benefit of ascending a sturdy, well-lit staircase of development and learning rather than navigating disconnected and uneven platforms where they can easily fall through the cracks. Here is what our vision looks like in practice, from the years of infancy and toddlerhood through pre-K and each of the K–3 grades:

- Families would have opportunities to participate in home visiting and high-quality child care (available at times that support working parents), and have access to pre-K for three- and four-year-olds available in hours-per-day equal to first grade; kindergarten available in hours-per-day equal to first grade; and strong and appropriate instruction and learning opportunities in the first through third grades.

- Opportunities would be open and available to all families but targeted outreach and public funding would be prioritized to assist low-income families.

- Teachers and caregivers would have a deep understanding of the science of adult-child interactions to promote learning; would be fairly compensated; and would be well-prepared to use technology and to support dual-language learners.

- Children would be immersed in language-rich, exploratory, and intellectually stimulating environments that help them develop content knowledge and social-cognitive skills that align with their age and developmental stage.

- Children and their parents would experience a smooth transition from infant-and-toddler programs into pre-K into kindergarten and into each elementary grade thereafter.

- States would have clearly aligned, sequenced, and developmentally appropriate standards that set high expectations and cover the common subject areas as well as in the "approaches to learning" and social-emotional domains, from birth through third grade.

- Pre-K, kindergarten, first, second, and third grade would have clearly sequenced, developmentally appropriate and well-rounded curricula and assessments.

- Principals and directors of pre-K programs commonly feeding the elementary school would know each other and work together to develop a transition plan that makes sense for families.

- Principals would lead their schools in ways that recognize the importance of pre-K and the early grades, supporting joint planning and professional development.

- PreK–3rd teachers would use data to determine where children are and collaborate on how to better meet the needs of both struggling and excelling children.

- Families would be engaged and welcomed into each classroom along the way and would establish positive home learning experiences early in their child's education.

Redefining Early Education: Birth Through Third Grade

Many advocates, policymakers, educators, community leaders, and researchers now recognize that a strong start requires more than just a year of pre-K, especially for children with multiple risk factors. Research shows that promoting children's success starts with helping parents recognize the importance of loving interactions and "conversations" with their babies. It includes the provision of affordable, high-quality child care and continues with the immersion of children in nurturing, language-rich learning environments before and after entry into school, including pre-K and the K–3 grades. Developmental science shows that by age nine, when children have entered middle childhood, they are able to accomplish complex intellectual tasks provided they have had opportunities to build a good foundation in those first eight years.

Terminology

We use **early education** to encompass the learning that happens in the birth-through-third-grade years, sometimes known as P–3. As much as possible we will note specific age ranges or grade levels (birth-through-five or K–3, for example) when policies pertain to those specific age spans. Also throughout this report, when we use pre-K as a stand-alone word, it is an abbreviation for pre-kindergarten settings.

New America's definition of a **pre-kindergarten** setting is one that employs trained teachers to lead educational experiences in a classroom or learning center for children who are a year or two away from kindergarten. This includes Head Start for three- and four-year-olds and many other programs known as preschool.

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EIGHT ACTIONS FOR ACCELERATING PROGRESS

Policies should be aimed at improving the quality of interactions between adults and children, a critical component of learning. This goal will be far easier to attain by streamlining the myriad federal, state, and local efforts to improve learning environments for young children and by tapping into sources for predictable, sustainable and increased public funding. Leaders are expending a lot of energy maneuvering around different funding streams, eligibility guidelines, standards, and governance structures.[3] Many educators and educational settings remain disconnected from one another and in competition for meager resources. Meanwhile, opportunity and achievement gaps are widening (see conclusions from *Subprime Learning*, p. 2).

To address these problems, we make eight overarching recommendations. In the pages that follow, we suggest specific policies for each recommendation and pinpoint which actors—federal, state, local, community, and educational officials—should be responsible.

1. **Bridge the Continuum**: Streamline Systems Across the Birth-through-Third-Grade Years

2. **Upgrade Educators**: Professionalize and Improve the Early Education Workforce

3. **Emphasize Families**: Develop Dual-Generation Strategies for Children's Success

4. **Intentionally Support Dual-Language Learners**: Embrace Children's Languages as Assets

5. **Rethink Standards and Assessment**: Coordinate Teaching and Learning for Young Children

6. **Strengthen and Improve Accountability Systems**: Promote Children's Learning and Development

7. **Collect and Use Data Responsibly**: Inform Educators and Policymakers

8. **Bring Research Closer to Policy and Practice**: Use Implementation Science and Openness

We use iconography in this report to indicate which actors would be primarily responsible for a given policy intervention:

Federal Government Actors	State Government Actors	Local School District Actors	School, Classroom, or Community-Based Program Actors	Teacher and Leader Preparation Program Actors

1 BRIDGE THE CONTINUUM:
STREAMLINE SYSTEMS ACROSS THE BIRTH-THROUGH-THIRD GRADE YEARS

To set the foundation for lifelong learning, children need access to aligned, high-quality early education from birth through third grade. Policymakers should make sure not to create additional silos and instead stimulate robust connections and more emphasis on learning and engagement across the continuum.

Reauthorize and coordinate the Elementary & Secondary Education Act (ESEA), the Child Care Development Block Grant (CCDBG), the Higher Education Act (HEA), the Individuals with Disabilities Education Act (IDEA), and the Head Start Act. All of these important education and early care laws are overdue to be revamped. CCDBG, for example, was last reauthorized more than 18 years ago. While there have been multiple attempts to reauthorize ESEA since the enactment of No Child Left Behind, none have been successful. Conversations around HEA are underway and dialogue around Head Start is getting started. It would be a missed opportunity if Congress cannot coordinate new thinking about these laws. Title I of ESEA and Title II of HEA both govern the development of teachers, but there is little thoughtful coordination between them. The same is true for Head Start and Title I; both of these programs aim to serve disadvantaged children.

In all systems related to early education—including teacher preparation and evaluation, standards, assessment, etc.—include multiple domains of learning across the birth-through-third grade spectrum. Domains of learning should include at least: language development (English language arts and dual-language learners' home language), math, science, social studies, social-emotional development, approaches to learning, and creative expression. While multiple domains are common in birth-to-five programs, they are less emphasized in the K–3 grades where language arts and, to a lesser extent, math are frequently the only areas of focus. That should change so that a comprehensive approach extends at least through third grade, if not beyond.

Use existing frameworks to plan, implement, and evaluate birth-through-third-grade approaches. In recent years, researchers and organizations have identified and developed valuable resources, frameworks, and evaluation tools to assist states and school districts in planning, implementing, and evaluating their approaches. In 2012, the Alliance for Early Success released its Birth through Age Eight State Policy Framework to help states develop policies that improve children's health, learning, and economic outcomes. Researchers Kristie Kauerz and Julia Coffman have developed a framework for school districts and communities (and are developing a framework for states) to assist in planning, implementing, and evaluating their PreK–3rd grade approaches. Other important resources: the National Governors Association's Center for Best Practices' A Governor's Guide to Early Literacy: Getting All Students Reading by Third Grade; Harvard University's Lead for Literacy memos, which explain that isolated, compartmentalized policy reforms are insufficient to the task in the PreK–3rd grade years; several case studies published by various groups in 2013; and two webinar series hosted by the PreK–3rd Grade National Work Group.[4]

Increase state investments in pre-K for three- and four-year-olds and compensate pre-K teachers at levels comparable to K–12 teachers. Currently, the federal government funds only about 12 percent of K–12 education; states and school districts share the rest of the costs almost evenly.[5] Pre-K should be no different. Pre-K programs should be considered integral to public education and funded as grade levels in a state's PreK–12 education system, as is the case in Oklahoma. Doing so would

improve quality and ensure that teachers are compensated in parity with K–12 teachers. However, given the monumental task that such a change would comprise for some states, the federal government should help as much as possible. A good approach would be a phase-in state matching program similar to the one proposed by President Obama and by several members of the House and Senate.

Ensure children have access to equitable hours of pre-K and kindergarten. Today, many children lack access to full-day pre-K and kindergarten programs. Yet by the first grade, Americans universally have access to a full school day totaling, on average, 6.6 hours.[6] To ensure teachers have enough time in the day to provide high-quality interactions with children, to meet standards such as the Common Core, and to incorporate pre-K and kindergarten as a part of the first-through-12th-grade system, state and federal lawmakers should require that pre-K and kindergarten are open for the same number of hours as first grade.

Launch Head Start 2.0 by experimenting with Head Start grants to states that meet criteria for quality and access. Funding for Head Start programs is currently channeled from the U.S. Department of Health and Human Services directly to thousands of local providers, bypassing state agencies. This system causes headaches and costs in monitoring and communicating regulations and creates needless distinctions between Head Start and state-funded pre-K programs, special education and elementary schools. In the past, the idea of state block grants has alarmed advocates because of potential for states to dismantle Head Start, but those concerns could be addressed with grants awarded to states that meet high standards and assure continued access. State-level funding for Head Start could eliminate redundancy in state and federal pre-K regulations and, in winning states, help to reduce the more than two thousand standards that Head Start grantees must currently meet to satisfy federal monitors.

Recognize Head Start's role as a public pre-K provider while also extending its whole-child emphasis into the K–3 grades. Over the years, Head Start's program for three- to five-year-olds has become increasingly focused on preparing children for kindergarten. Agencies could reduce duplication and create efficiencies by bringing that program closer to other pre-K programs at the federal and state levels. One option is to bring management of Head Start's programs for three-to-five-year olds into the Department of Education's Office of Early Learning, promoting better alignment with special education and Title I programs that serve nearly the same populations as Head Start. Another option is to strengthen the authority of the interagency board between the Department of Ed and Department of Health and Human Services (HHS). In either approach, the Department

of Ed should embrace the multiple-domain, whole-child approach of the Head Start Outcomes Framework and bring it up through the K-3 grades at least. Joint work between the departments is already underway for the Race to the Top-Early Learning Challenge and the Preschool Development Grants, which are funded through the Department of Education but administered in partnership with HHS.

Encourage more pairing of siloed early learning providers. There is excitement in the field for the federal government's new grant program for Early Head Start-Child Care Partnerships. This is a good sign that providers of early learning and childcare are eager to match up and find ways to run more efficiently. Other pairings should be encouraged too. In keeping with our recommendation above, which seeks to bring Head Start's program for three- to five-year-olds closer to special education and Title I services at the U.S. Department of Education, home-visiting programs and high-quality child care centers for infants and toddlers should partner and share responsibilities.

Think broadly and creatively about funding sources. Doing early education right—ensuring that children have opportunities for engaged learning and interactions with well-trained teachers—will require a large investment in human capital. It is wrong to call for broad increases in quality and access without acknowledging the costs. In addition to the typical strings that lawmakers pull—appropriations and entitlement funding—members of Congress as well as state legislators should consider re-appropriating foregone revenue from the tax code, forming public-private partnerships to promote early learning, exploring and rigorously evaluating social-impact bond initiatives, and rebalancing state and federal commitments to early childhood education.

Strive for a new model of primary school. We should move away from the current model for elementary schools. The K–5 model starts too late and is usually disconnected from early care providers. Instead, primary school should start at age three by offering age-appropriate and research-based learning experiences for children, and should continue those activities up through third grade. For example, leaders in Lansing, Michigan, recently reformed the school district's structure by creating PreK–3rd schools to create a "domino" effect of student success that continued up through the later grades.[7] Other models, such as Oyler School in Cincinnati, Ohio, are linking schools to high-quality child care for infants and toddlers and offering "wraparound" care for all ages during non-school hours.[8] Schools should explore models that take advantage of child care partnerships and promote sharing between primary schools and community-based organizations that serve families.

2 UPGRADE EDUCATORS:
PROFESSIONALIZE AND IMPROVE THE EARLY EDUCATION WORKFORCE

Research has shown that teachers and school leaders are the most important in-school factors contributing to students' academic success. In a similar vein, the center director, teachers, assistant teachers, and other adults who interact with children are key to maximizing children's learning and development in these programs. Early educators lay the essential foundations for future learning and development. But the current state of systems to recruit, prepare, evaluate, and support these educators is mediocre at best. Policymakers should invest in human capital to professionalize the field, creating educators who recognize a shared purpose and responsibility for helping children succeed.[9]

Enact policies for teacher preparation, professional learning, program rating systems, and teacher evaluation systems that work in concert and put a premium on the quality of interactions between adults and children and the learning that results. Too often, policies emphasize credentials and seniority without examining how well teachers teach. Yet children's advancements academically and socially are most significantly associated with having teachers who interact with them at a high level.[10] Preparation programs and professional learning opportunities across the birth-through-third-grade workforce should be required to emphasize strategies that improve teachers' abilities to help children develop language, social-emotional, and critical thinking skills, while also providing instructional support for the learning of foundational concepts in math, science, literacy, under the Common Core State Standards where applicable. Policies should encourage the use of valid and reliable observation tools that measure the quality of interactions between teachers and children.

Augment training requirements and offerings for lead and assistant teachers and birth-to-5 program directors, including home-based child care providers. Child care professionals should be trained and treated as teachers, not babysitters. These teachers should, at the very least, be required to participate in training in child development, including a focus on high-quality teacher-child interactions. All adults working with young children should understand how to capitalize on situations that enable back-and-forth conversations and positive, enriching interactions. All lead and assistant teachers should be required to participate in annual continuing education. Birth-to-5 program directors should be equipped with the knowledge and skills to support staff in fostering high-quality adult-child interactions and learning opportunities.

Expand and evaluate the use of job-embedded professional development at all levels and incorporate the use of video and digital communication tools for effective coaching. Video is a promising tool for showing examples of good teaching and promoting discussion among educators of less-effective methods. Pilot projects have shown that when used with coaching, video can be an effective way to review and reflect with teachers on particular scenarios or challenges that arise in their classrooms.[11] Video and digital communication tools could also reduce coaching costs. Policies should enable and evaluate expanded use of video- and remote-coaching techniques.

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Watching Teachers Work

Using Observation Tools to Promote Effective Teaching in the Early Years and Early Grades

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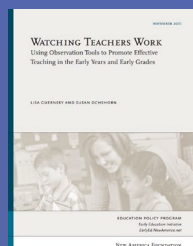
Replace states' omnibus (K–5 or K–6) teaching licenses with at least two different licenses—one beginning with birth or pre-K and ending at third grade, and another starting at third or fourth grade and extending up through the middle grades. Understandably, teachers often choose to pursue the broadest license available. It makes them more marketable to school districts and principals. But this approach is not best for ensuring young children receive what they need. A better structure would separate licenses according to developmental spans.[12] If implemented well, this new structure could be developed in tandem with new state preparation program standards that align with the competencies

educators need to teach young children. Additionally, changing licensing practices would put teachers with knowledge and expertise in how young children learn best in K–3rd classrooms.

Require articulation agreements between two-year early childhood associate degree programs and bachelor's degree programs. Many early educators begin their education at community colleges or in other two-year degree programs. Those who move to a four-year degree early education program often face challenges in transferring applicable early childhood courses. Community colleges and universities need 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.

Train all teachers to support the academic growth of dual language learners (DLLs). First, with assistance from the federal government, states and preparation programs should endeavor to attract and train bilingual teacher candidates to instruct the growing numbers of dual-language learners—children who are simultaneously learning two languages (their parents' native language plus English). Second, states should set licensure standards that require all teacher candidates to take (at minimum) one course on specific instructional strategies for supporting English acquisition, home language development, and academic growth for DLLs. These standards should be aligned to—and enforced by—standards used to approve and accredit teacher preparation programs in each state.

Revamp how prospective early educators are prepared. Generally, traditional teacher preparation programs do not prepare prospective early education teachers well. Programs, traditional or alternative, should ensure that early-grade teachers are confident about how to best engage with families, have a strong base of content knowledge and child development, are able to develop young children's language and literacy skills and teach them to read, and have ample opportunity to practice teaching in a diverse mix of classrooms and grade levels. Early childhood and elementary higher education faculty should be required to spend time in early learning centers and schools. Teachers need professors who can translate theory into practice. Professors should immerse themselves in on-the-ground learning every three to five years. This experience could provide them with a better understanding of the needs of a modern and ever-changing classroom. Additionally, districts and common feeder preparation programs should work together to determine the district teachers who are best suited to serve as supervisors of student teachers. Supervising teachers should be those who receive effective ratings, are proven mentors, and have a willingness to impart lessons learned. These partnerships

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

Equip and train educators for the digital age. Any professional in the 21st century must have access to digital communication tools and high-speed Internet connectivity, and early educators are no exception. In addition to hardware and networking upgrades, educators need training in how to apply their knowledge of pedagogy and child development to decisions about technologies for teaching. Policymakers and program leaders should revamp teacher preparation and development for the digital age by aiming for high standards and developmentally appropriate integration of technology—not siloed "Technology 101" courses or workshops on how to manage "tech time" in which children are relegated to a wall of computers in the back of the room.

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Envisioning a Digital Age Architecture for Early Education

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Ready principals to be strong PreK–3rd-grade instructional leaders. States should require principal preparation programs to include early childhood development, as is the case in Illinois. Additionally, states should encourage the offering of professional learning programs that develop elementary school principals' understanding of early education, birth through third grade. School principals are central to building high-quality PreK–3rd grade settings for children. But current preparation and professional development programs do not prepare them for the task or even help them to understand how these grades are different from others. Principal development programs such as those in New Jersey, Pennsylvania, and Washington are promising models.[13]

End "Last In, First Out" policies. When education budgets run short and districts are forced to eliminate teaching positions, eleven states require that the resulting layoffs be based on seniority, and nearly thirty more states require that seniority be taken into account.[14] Given that research suggests little to no connection between seniority and teacher effectiveness after several years in the classroom, these quality-blind layoff policies frequently result in the firing of effective teachers.[15] Principals should be given more autonomy to make these decisions with their schools' specific needs in mind.

3 EMPHASIZE FAMILIES:
DEVELOP DUAL-GENERATION STRATEGIES

Children's success is unquestionably bolstered by the success of their parents. Children whose parents are financially stable avoid the toxic stress of poverty, have household income sufficient to afford critical items from food to health care to books, and frequently have more educated parents. Federal programs should work to promote families' opportunities to succeed, rather than create unintended disincentives to improve a family's overall situation.

Create common eligibility floors across federal programs. The low-income families who use federal social and educational programs—and the providers who serve them—are often expected to navigate a Byzantine maze of very different eligibility rules. Head Start is primarily aimed at families at or below 100 percent of the federal poverty level (FPL); free lunch eligibility and food stamp eligibility is set at 130 percent; reduced-price lunch eligibility is set at 185 percent; the federal government sets child care eligibility at a maximum of 85 percent of a state's median income; and state pre-K programs vary substantially, using either the federal poverty level or the state median income. All child-focused programs that receive federal dollars should have a common floor (we suggest 130 percent), with the option for states to lift the limit. Moreover, enrollment should be far simpler for families. Already, children of beneficiaries of the federal food stamps program may be directly enrolled in school lunch programs; similar processes should be used to more easily provide comprehensive services across the board for early educational, nutritional, and developmental programs

Revise federal programs to encourage parents' employment success. The federal child care program leaves eligibility determinations to states, many of which set a maximum income limit at which families become ineligible. This creates a "cliff effect" in which some parents turn down jobs that pay modestly more than their present jobs because that will cause them to lose their subsidy, and often their child's

slot, for child care.[16] Instead, Congress should revise the law to accommodate modest changes to parents' work situations, should include longer eligibility periods, and should encourage education and training to avoid codifying deterrents to working in higher-paying jobs.

Use the Pell Grant model to increase child care access. The Pell Grant program, which helps low-income students afford college, awards grants to all eligible students on a sliding scale. If the Child Care and Development Fund functioned in this way, as an entitlement program, more low- and middle-income families would receive CCDF subsidies. The sliding scale would eliminate the funding cliffs currently in place that may act as disincentives to work.[17] This, of course, means the government would need to fund child care at a higher level. To bring in more revenue, lawmakers should explore reforming the tax code and child care tax credits to more effectively assist families. Despite being expensive, the Pell Grant program is popular and largely politically untouchable; lawmakers have gone to extreme lengths to find the dollars they need to meet their obligations. Early education deserves the same.

4 INTENTIONALLY SUPPORT DUAL-LANGUAGE LEARNERS:
EMBRACE CHILDREN'S LANGUAGES AS ASSETS

Currently, nearly a quarter of American children are growing up in homes where a language other than English is regularly spoken—and their numbers have been steadily increasing. In an aging country with low birth rates, these students are enormously valuable to the workforce. Yet they garner infrequent attention in education debates—except when they are used to excuse low academic performance in schools.

Policies should embrace bilingualism—supporting dual-language learners in acquiring English while continuing their growth in their home languages. The growing research consensus suggests that young dual-language learners (DLLs) have different academic and developmental needs than monolingual students. These needs differ from those of older children who have already "mastered" their home language. Younger language learners have not yet completed a basic level of linguistic development in their home language. As a result, they need ongoing home language support at school even as they are exposed to English in a structured manner. Research shows this to be the best means for supporting their academic growth, linguistic development, and English acquisition. It also allows children to retain their bilingualism, which carries a host of cognitive, social, academic, and even economic benefits.[18] Currently, Title III of ESEA requires districts to support DLLs with "scientifically based" instructional choices that are "demonstrated to be effective." While research shows that structured English immersion programs are better than nothing at all, there is increasing evidence to show that dual language models are more effective for DLLs in the long term. Congress should revise this language so that districts shift their emphasis and provide home language supports to DLLs before third grade.[19]

> "
> The growing research consensus suggests that young dual-language learners have different academic and developmental needs than monolingual students.

5 RETHINK STANDARDS & ASSESSMENT:
COORDINATE TEACHING & LEARNING FOR YOUNG CHILDREN

While children, especially in the early years, acquire knowledge and develop at different rates, there are key concepts that all children should understand and skills they should acquire at various points, including kindergarten entry. Standards provide teachers of children birth-through-kindergarten with a road map for developing activities and lessons that support this skill-building. Assessments can provide useful data for educators, pre-K program directors, policymakers, and parents. Regardless of a child's age, there is a place for both informal and formal assessment, as long as it is administered in a developmentally appropriate way and not used for high-stakes purposes.[20]

Develop common early learning and development standards birth-to-kindergarten entry that are aligned to the Common Core State Standards and Head Start Framework. Currently each state has its own set of early learning guidelines or standards. All states have standards for three- and four-year-olds and most also have them for infants and toddlers. States typically cover the same domains of learning in the standards, including language development (English language arts), math, science, social studies, social-emotional development, approaches to learning, and creative expression. And states generally aim to align standards with the Head Start Child Development and Early Learning Framework, academic standards for K–3, as well as commonly used curricula. This means, as the Ounce of Prevention Fund has pointed out,[21] that while standards do vary by state, much of what is included, especially for three- and four-year-olds, is very similar already. It makes little sense to have 50+ sets of individual standards. States should develop one comprehensive set of standards based on research and aligned to K–12 Common Core Standards for English Language Arts and Math and to the Head Start Framework. Doing so would enable states to share resources and reduce costs.

> **"**
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Generate comprehensive standards to guide teaching for kindergarten, first, second, and third grade. In addition to the common subject areas included in K–12 state standards (English language arts, math, science, social studies, the arts, and physical education), K–3 standards should also include standards related to social-emotional development (impulse control, interactions with peers and adults, and appropriate self-expression) and children's growth in their approaches to learning (curiosity, persistence, attentiveness, etc.) that are aligned to birth-to-5 early learning and development standards. Broadening the focus of K–3 standards to include these other domains would send an important signal to educators that children's development in these areas is essential to their success in school and later in life.

Create a common kindergarten entry assessment (KEA) and accompanying K–3 formative assessments. Increasingly, states are developing or planning for comprehensive assessments so they can determine what children have learned so far and what support they need in kindergarten. In 2012, while 25 states required assessments during the kindergarten year, in most cases decisions about which assessment to use were left to local school districts. In 2013, two consortia (one led by North Carolina and the other by Maryland) came together—with support from the federal government—to develop common KEAs. The North Carolina consortium (nine states and Washington, D.C.) is also developing aligned formative assessments for K–3. A common KEA across states would allow for the sharing of resources for revising assessments and for training teachers to administer and use assessment data. It would enable policymakers to make comparisons across state lines. It also has the potential to facilitate conversations between pre-K and K–3 educators about children's learning and developmental needs and how teachers can most effectively support them.

Move away from literacy policies that require children to repeat third grade if they are not proficient readers. All states should make children's literacy a priority. To improve children's literacy outcomes, state strategies must begin much earlier than school entry and they must be comprehensive and coordinated with other initiatives. Research conducted by Nonie K. Lesaux, professor of education at the Harvard Graduate School of Education, shows that isolated, compartmentalized policy reforms are insufficient to the task in the PreK–3rd grade years. Lesaux argues for an approach that includes teacher professional development, early identification of reading difficulties, comprehensive assessment systems, and more.[22]

6 STRENGTHEN AND IMPROVE ACCOUNTABILITY SYSTEMS:
PROMOTE CHILDREN'S LEARNING AND DEVELOPMENT

For years, education policy debates have focused on increasing the transparency and accountability of American public education. In early education, this has taken the form of considerable public investment in building systems for evaluating and monitoring quality. Meaningful accountability in early education means designing these systems carefully—but also implementing them faithfully and with an eye to making adjustments as necessary. Decision makers should streamline and simplify metrics and procedures to focus on indicators that have the most influence on child outcomes and that are most useful in improving program and teacher effectiveness. These systems should be designed with students' specific developmental needs in mind.

When evaluating teachers, account for the special attributes of the PreK–3rd grades. Effective PreK–3rd grade teachers are essential for building a solid foundation for children's future success. Policymakers should not assume that whatever works for the seventh-grade history teacher would also work for early educators. PreK–3rd grade teachers' and researchers' input should be sought on suitable measures of learning and development in the early years. The measures used to determine student growth and teacher effectiveness should not be narrow measures of basic reading and math skills. So far, variations of student learning objectives (SLOs) appear to be the most common approach for measuring young students' growth. But to administer SLOs effectively, teachers and principals need training in how to set attainable but challenging goals, select appropriate assessments, and interpret the results. States and districts should provide SLO exemplars for each grade level, provide a list of vetted measures, and limit the use of teacher-created measures.[23] Finally, measures of teacher effectiveness should include tools for observing and rating teaching practices validated in PreK–3rd settings and should include measures of the quality of interactions occurring between teachers and students and among students.

**Take the necessary time to get the implementation of teacher evaluation systems right.** Before full implementation, states and school districts should conduct pilots and coordinate a staged implementation of the teacher evaluation system to ensure continuous improvement. Evaluation systems should include a robust professional learning and improvement component, which means principals must be able to do more than deliver feedback to teachers; they must also have the knowledge, expertise, and resources to match teachers with the help they most need. This may include individualized coaching, use of video for reflection and improvement, or visiting other colleagues with specific strengths. Teachers who are consistently identified as effective should be identified as instructional resources for peers. Importantly, high-stakes consequences
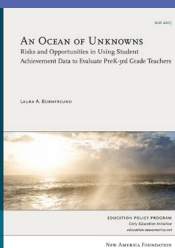
should not be attached immediately, but applied cautiously after the system has been deemed valid and reliable.

Use metrics in teacher evaluation systems that 1) are valid and reliable for assessing the progress of dual-language learners (DLLs) and 2) recognize their unique linguistic trajectories. DLLs—and their teachers—must be held to high academic expectations. Research shows that we do these students no favors by segregating them in language support services for extended periods of time. However, research also shows that these students' linguistic development differs from their monolingual peers' language development.[24] With these twin principles in mind, policymakers should seek creative ways to adjust accountability systems to meet DLLs' needs. For instance it may be appropriate to track growth in English language abilities on English language proficiency assessments in addition to evaluating comprehension in various subject areas. Educators may also find it useful to include data on students' home language development.

Ensure that broader accountability systems encourage teachers to teach DLLs in ways that align with research findings on how they learn best. This means considering whether assessments and data are aligned with the choices teachers of DLLs make. Many teacher evaluation systems include measures of students' English proficiency (i.e. "grade-level reading") as well as growth measures on student learning objectives. These are often in tension with one another—and with research on what DLLs need. Linking English literacy to evaluations can encourage teachers to prioritize short-term English acquisition over long-term academic success. In addition, many systems require teachers to gauge students' progress by designing and administering small assessments to students at the beginning and end of the year to gauge progress. If educators are teaching exclusively in English with an eye towards the English literacy benchmark, it would seem

obvious that these tasks should be conducted in English. However, as is often the case, if DLLs are more proficient in their home language, they may be better able to demonstrate what they know in that language.[25]

When designing or upgrading quality rating and improvement systems (QRIS), states should put more weight on indicators that measure teacher-child interactions. Many states are investing in QRIS for child care and pre-K.[26] But many QRIS do not reward programs that have teachers and assistants who engage in emotionally responsive, language-rich and content-rich interactions with children. Research shows those interactions are important for advancing learning.[27] Because of this strong relationship, states' QRIS should not only include measures of these interactions but also add weight to the interactions indicator. Furthermore, the improvement component of QRIS should emphasize helping programs to provide relevant professional learning opportunities. Additionally, to prevent different expectations for teachers in varied settings, QRIS should be aligned with other monitoring systems for programs including state pre-K, Head Start, early intervention, home visitation, and teacher evaluation.

Promote standards for high-quality child care. The current child care system serves more than 1.5 million children each year, aiding more than 900,000 working families.[28] However, the quality of child care settings is wildly variable, with nearly one in five children enrolled in an unlicensed program.[29] Lawmakers should require states to guarantee child care quality in federally funded settings and provide federal funding incentives to assist in paying for comprehensive professional development for teachers and caregivers. All child care providers should be included in each state's quality rating and improvement system. All providers, including those in home-based settings, should be subject to high standards of safety and quality. No federal dollars should be awarded to unlicensed child care providers.

> " High-stakes consequences should not be attached immediately, but applied cautiously after a teacher evaluation system has been deemed valid and reliable.

7 COLLECT AND USE DATA RESPONSIBLY:
INFORM EDUCATORS AND POLICYMAKERS

With more attention focused on the collection of basic data points about children's learning experiences than ever before, policymakers, teachers, and parents have new opportunities to ensure early education is reaching those who need it most and to ensure they are addressing children's needs in the classroom. Stronger policies around the use of data in the statehouse, on Capitol Hill, and in the classroom are necessary to make sure that information is timely, relevant, and used effectively and with appropriate protections for families' privacy.

Instruct teachers in using data in the classroom. Early childhood teachers, including those in the early grades of elementary school, are sometimes left out of policies that seek to promote the use of data in the classroom because of the challenges in assessing young children in valid and reliable ways. However, the federal government should encourage, and states should begin to implement, the expansion of data-driven instruction for those teachers, both by expanding the pool of multiple-measure formative assessments for young children and by providing technical and content expertise, time, and flexibility to their teachers in showing them how to use data to improve their instruction.
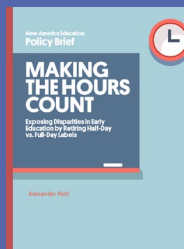
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Promoting Data in the Classroom
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Read More

Making the Hours Count
Exposing Disparities in Early Education by Retiring Half-Day vs. Full-Day Labels

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Identify and rectify disparities in the number of hours per week and per year that children have opportunities to attend publicly funded pre-K and kindergarten. Because there is no standard definition of a "half day" or "full day" in kindergarten or pre-K, it is difficult to make fair comparisons between the two. Instead of "half-day" and "full-day" debates, policymakers should be focused on using a standard unit of measure—the hour—to determine how many hours per week or per year children have the opportunity to be in the classroom. Providers of any publicly funded education program should be required to report the number of hours per week and per year that children can be enrolled in their corresponding jurisdictions.[30]
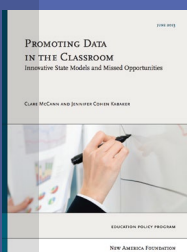
Extend statewide data systems to include early childhood data. Most states do not include all early education programs in their statewide longitudinal data systems, and nearly all exclude Head Start data.[31] The federal government should continue to prioritize the integration of early education data in awarding Statewide Longitudinal Data Systems grants, and states should begin to develop processes for creating dashboards that display data from different programs and break down silos between various state agencies responsible for them. Additionally, states should work to collect and protect additional information critical to research and policy efforts, including on children's absenteeism, and to make those data comprehensible and available to teachers.

Create an additional round of National Assessment of Educational Progress (NAEP) testing at the end of first grade. The earliest national indicators of students' progress are scores from the fourth-grade NAEP. That is too late. First grade is a critical year for learning to read and developing basic decoding skills. Students' long-term struggles with reading start early—poor readers at the end of first grade have a one in 10 chance of ever catching up.[32] The early years are also critical for student success in math. This is when students learn basic geometry, number sense, and mathematical operations—and these early math skills may be a powerful predictor of later math and reading achievement.[33] A first-grade NAEP conducted by the Institute of Education Sciences would provide a consistent source of data—collected via scientific sampling methods with no stakes attached for teachers—on student progress towards reading on grade level by third grade and the development of fundamental math skills.

8 BRING RESEARCH CLOSER TO POLICY AND PRACTICE:
USE IMPLEMENTATION SCIENCE AND OPENNESS

Too often, key findings on how children learn are never applied in practice, whether in child care centers, classrooms, home-visiting programs, or other education settings, nor do they account for children's or teachers' experiences in the years or months before and after interventions. Two approaches can help to bridge these divides: an emphasis on implementation science and open access to research so that all can benefit from new findings.

Take implementation and policy into account in publicly funded grants for research on interventions. The field of early education has benefited greatly from basic research on child development and brain science, as well as decades of research on small-scale interventions to support children and families. Now it is time to focus on scale-up and population-level change by recognizing the systems and structures that are barriers to, or facilitators of, good implementation of those interventions. Research funded by federal and state agencies should include data gathering and measurement tools used in implementation science, such as gathering in`formation on entrenched administrative structures, missing expertise, or teachers' time constraints before and during the process of putting new programs in place.[34] Also needed: evaluation of initiatives that cross the birth-through-third-grade continuum and that apply online technologies to prepare the workforce.

Open publicly funded research to the public. Educators and policymakers need timely access to the findings of studies on child development, especially those studies that specify issues related to children's learning and pedagogical approaches or wide-scale policies that foster it. Too often, these findings are locked away in expensive journals, unavailable to those who have the most opportunities to apply the findings. Resources financed through public funding—including articles in academic journals and other final research reports—should be open and freely available to the public as soon as possible.

CONCLUSION

Our Subprime Learning report pointed to some progress made over the last five years in home visiting programs, 0–5 infrastructure building, standards accountability across many state and federal policies, and PreK–3rd grade alignment within a small but growing number of places. But to realize the vision we have outlined in this paper, policymakers must be open to adopting both bold ideas and sensible plans. To do otherwise is to continue duplicating efforts while never creating a complete learning staircase for children to ascend. Gaps in opportunities and achievement will continue to widen for far too many American children. Early education policies must evolve to help young children and their families reach the top of the staircase, enabling success later in school and in their lives as America's next generation of adults.

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