

Strengthening the Early Childhood Education Continuum

Tom Keily, Alyssa Evans and Bruce Atchison

Nationally, there are notable gaps in student achievement across the early childhood education continuum, and these gaps manifest themselves in many ways. For example, [2 out of 3 fourth-graders](#) are not reading proficiently, as determined by 2017 National Assessment of Educational Progress. Gaps such as these [can be attributed](#), in part, to the fact that many children living in poverty enter school with cognitive and language skills that are often lower than their peers from higher-income families. Quality early childhood learning experiences can give all students a pathway to success. By providing a solid foundation, these programs have the potential to improve children's future success and assist in closing achievement gaps.

As few as 15 years ago, early childhood education was defined as serving children from birth to age five. With a growing understanding of how children learn and develop, a paradigm shift began to occur, and many state and national early childhood organizations extended their definition of early childhood education to include children in kindergarten through third grade. Part of this evolution in thought was based on a greater understanding of developmentally appropriate practice, as defined by the [National Association for the Education of Young Children](#).

More than a decade of research suggests that high-quality early childhood education may help close achievement gaps. Separate from some exemplar local programs that align across the continuum from birth to third grade, policymakers are seeking ways to scale similar alignment at the state level. This paper outlines some of these efforts.

Early childhood education encompasses programs from birth to age five AND those from kindergarten through third grade.

Practitioners often focus on the birth-to-age-five sector, and policymakers center on pre-K and K-3 policies. Bridging the disconnect provides opportunities to improve quality and effectiveness across the continuum.

Creating a quality, aligned continuum can create opportunities to close the achievement gap and improve third-grade reading and math proficiency.

Lessons Learned and Approaches to Consider

In 2016, Education Commission of the States and its national partners set out to address the disconnect between the birth-to-age-five sector and kindergarten through third grade. This included bringing together early childhood education experts from across the country for a Thinkers Meeting to [identify policies](#) that have the greatest potential to impact the quality of early childhood education. Since that time, with the help of technical assistance from Education Commission of the States, several states have prioritized and adjusted a series of policies with the intent of creating a quality P-3 education continuum in their state. There is not one perfect approach; there are [many interrelated policies](#) that states can use to address quality issues and student outcomes across the early childhood education continuum.

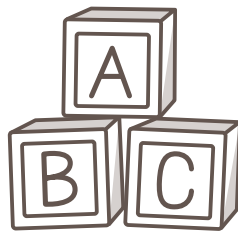
In December 2018, as part of the ongoing project to provide technical assistance to states on P-3 education, teams from **Arizona, Colorado, Kentucky, Massachusetts** and **Mississippi** convened in Denver for a Policy Academy. Teams consisted of representatives from state education agencies, governors'

offices, higher education institutions and advocacy organizations. The discussion focused on how each state is addressing policy issues in its P-3 education system. In addition to learning from peers, state teams worked with national experts — from New America, Center on Enhancing Early Learning Outcomes, National Institute for Early Education Research, National P-3 Center, National Governors Association, National Association of Elementary School Principals and National Association of State Boards of Education — to identify challenges and build solutions in their early childhood education systems. As state teams advanced toward changing their policies, Education Commission of the States observed practices that could be used by other states looking to address issues in their early childhood education systems. Those practices include:

- **Convening a diverse group of policymakers and stakeholders:** State teams brought together members of state agencies, the governor's office, higher education institutions, and advocacy and business organizations to gain insight into their complex policy landscape.

Early Childhood

EDUCATION CONTINUUM



Birth - Pre-K



Kindergarten

- Identifying concerns and their root cause:** State teams identified concerns about issues ranging from the quality of kindergarten programs to low third-grade reading and math performance. With their unique perspectives, state teams were able to identify root causes and think holistically about possible policy solutions.
- Setting a shared vision and set of goals:** With a definition of the concerns and their cause, states were able to identify a vision and goals to ground their work to create change. Creating a shared goal equipped states to establish cross-agency buy-in and to avoid working at cross purposes in the P-3 continuum.
- Forming policy solutions:** Based on their vision and goals, state teams looked for [opportunities in policy](#) to address their specific concerns.
- Building broad consensus:** State teams agreed that, without engaging key policymakers and stakeholders outside of their teams, policy proposals did not gain traction. A key part of this work was identifying the best person or organization to deliver the message to specific audiences to build buy-in.

FOR MORE: For state policymakers and others working to improve the quality and effectiveness of early childhood education, see the end of this report for a pull-out list of [guiding questions](#).

While policy changes varied based on states' unique challenges, state teams received technical assistance from Education Commission of the States to address the following areas in a P-3 education system:

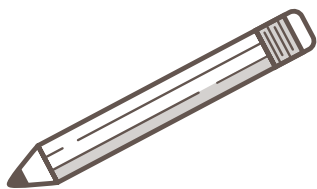
Third-grade reading and math proficiency.

Teacher and school leader workforce development.

Pre-K and K-3 governance.

Transitions and alignment across the P-3 continuum.

Kindergarten.



First Grade



Second Grade



Third Grade



Third-Grade Reading and Math Proficiency

What Research Shows

Third grade is considered a key turning point as students are [transitioning from learning to read to reading to learn](#). [Research](#) finds that 23 percent of students who score below basic on a third-grade reading assessment will either drop out later in their educational career or not complete high school on time; this is compared with 4 percent for students who score proficient in third grade. [Research](#) also suggests that early math achievement is predictive of later reading achievement, perhaps even more than early reading skills are. Despite the importance of early math skills, the overall emphasis in state policy remains on reading.

The Current Landscape

Assessments

To identify struggling readers at an earlier age, states put policies in place that require the use of reading [assessments](#) (sometimes referred to as screeners) in kindergarten through third grade. In most states, policies require that the [data from the assessments](#) be used to inform and develop student-centered instruction and intervention strategies.

Intervention

Once identified, struggling readers receive targeted, research-based instruction as part of a reading intervention. [State intervention policies](#) often require extended instructional time, parental engagement, evidence-based instruction, summer reading opportunities and small group instruction.

Retention

[Fourteen states](#) require that struggling readers be held back; but some state policies are shifting toward a preventative, intervention-based approach in which retention is optional.

Teacher Professional Development and Training

To support teachers in providing quality reading and math instruction and interventions, states established teacher preparation and professional development policies for both [reading](#) and [math](#).

In 2010, **Arizona** passed the [Move on When Reading](#) law to promote reading proficiency. The policy is focused on providing evidence- and research-based reading instruction in kindergarten through third grade. To support teachers, the Arizona Department of Education offers [professional development](#) opportunities. Initially the policy required that third-grade students be retained if they were not reading at grade level, but the law changed in [2016](#) to allow underperforming third-graders to be promoted to fourth grade if they participate in an intensive reading intervention during the summer.

Additionally, state policy requires districts to submit annual [K-3 Literacy Plans](#) and [student achievement data](#) to the Arizona Department of Education. The department shares with districts the plans from schools that have shown the most improvement. [Read on Arizona](#) — a coalition of school districts, state agencies, philanthropic organizations, education stakeholders and the business community — was established to support the continuation of the state's early literacy initiative.



Teacher and School Leader Workforce Development

What Research Shows

Continuous [exposure to informed and well-trained teachers is critical](#) to supporting the rapid and cumulative nature of early childhood development and learning. Teachers and principals with an understanding of the research on how young students learn to read or do math are better equipped to support the development of strong early literacy and numeracy skills and to assess when students need interventions. To achieve this understanding, teachers' and principals' preparation and professional development can focus on providing and supporting developmentally appropriate instruction and to foster learning environments that provide the supports students need to succeed seamlessly through the early childhood education continuum.

The Current Landscape

[States' policies](#) often address how teachers are prepared to effectively teach young students; the requirements for licensure; and how teachers are provided with ongoing, effective professional development. Some states' policies also focus on the areas of preparation, training, professional development and licensure for principals.

Teacher Preparation

Some states require that prospective elementary teachers be taught the science of reading instruction. Even though math instruction and numeracy skills have not received the same focus in state policy, it is

important that teachers receive training in these subjects. Teachers who do not have this preparation may undervalue the importance of teaching math in the early years, which can [negatively affect students' academic success](#).

In a 2014 evaluation of a sample of teacher-preparation programs by the National Council on Teacher Quality, 29 percent instructed prospective teachers in the five essential components of literacy education (phonemic awareness, phonics, fluency, vocabulary and comprehension).¹ In 2016, that number increased to [39 percent](#). Additionally, NCTQ's 2016 report found that 13 percent ensure prospective elementary teachers receive instruction in early math and numeracy.

In **Delaware**, approved teacher-preparation programs for prospective elementary school teachers [must provide instruction](#) on research- and evidence-based best practices and strategies for teaching childhood literacy and numeracy.

Teacher Licensure and Endorsements

In some states, teachers are required to get [specialized licenses](#) or endorsements specific to early learning, elementary school or explicit grade ranges — such as P-3 or K-3. Criteria for such a license or teaching endorsement can include course credits in areas such as child development and literacy or assessments to demonstrate professional knowledge.

Teacher Professional Development

State policies around professional development can be useful in ensuring that current teachers receive ongoing training and information about best practices for teaching P-3 students.

In 2006, **Kentucky**'s legislature established the [Kentucky Center for Mathematics](#), which provides teachers — including those who teach kindergarten through third grade — with professional learning experiences aimed at improving math teaching and learning. The center also provides professional development opportunities for schools that receive grant money from the Kentucky Department of Education's [Math Achievement Fund](#). Kentucky's long-standing program continues to support teachers in providing quality math instruction in P-3 classrooms. In 2017-18, the program served teachers in [95 schools](#) across the state.

School Leaders and Principals

According to New America's 2017 [50-state scan](#) of principal licensure and preparation requirements, at least nine states require principal preparation programs to offer coursework in either early learning or child development, and four of these require coursework in both. Twelve states have elementary school-specific principal licenses; some of these states offer elementary school licenses as well as K-12 or P-12 licenses. Three states require elementary school principals to have prior teaching experience in elementary grades, and 10 states require elementary school principals to have elementary school-specific clinical experience.

Innovative Approach

While most states do not consider pre-K in principal preparation, **Illinois** [adopted regulations](#) that require principal preparation programs to offer instruction across the P-12 spectrum. The programs must provide instruction on the needs of specific student populations, including those in pre-K programs. Additionally, the programs must offer training on the role instruction, curricula and assessments have on improving learning across the P-12 spectrum.



Pre-K and K-3 Governance

What Research Shows

When the experts convened for the Thinkers Meeting in 2016, they [asserted the importance](#) of creating a governance infrastructure to maintain efficiency, accountability and a vision to improve short- and long-term educational outcomes for children in early childhood education. Traditionally, states have not had

a formal governance structure that has a high-level decision-making ability to influence program alignment across the early childhood education continuum. In most cases, multiple governing entities — including education and human services agencies — contribute to administering these educational programs. The goals and objectives of the agencies for specific programs may not always align, which could ultimately impact quality.

The Current Landscape

States continue to work through funding and administrative challenges of intergovernmental cooperation to address gaps in quality and educational alignment. Some states have looked for ways to connect the birth-to-age-five sector with the K-3 sector or to develop a P-3 system, including creating a division charged with aligning pre-K with K-12 education. Other states have formed informal partnerships between agencies providing early childhood services and K-12 education to align standards and practice.

Colorado has established an [Office of P-3 Education](#) within the Colorado Department of Education. The office is charged with fostering an integrated system that connects a quality pre-K experience with K-12 education. Citing the importance of developing academic and social competencies by age 8, the office adopted a framework for a [P-3 approach to learning and development](#) with a primary focus of ensuring quality reading instruction and outcomes across the early childhood education continuum.



Transitions and Alignment Across the P-3 Continuum

What Research Shows

State transition policies have focused on supporting children moving from pre-K to kindergarten and elementary school. Research suggests that without successful [transitions](#) from a high-quality early childhood education system to a high-quality elementary system, the academic and social gains a child makes in the early years may not translate to future, long-term success.

a student's progress is measured). Intentional alignment increases the consistency of children's experiences across and within grades to create a continuum of learning that builds on previous years.

The Current Landscape

Alignment and Curricula Standards

[Alignment](#) refers to the coherence or interconnectedness between standards (what students are expected to know), curricula (what students are taught), instruction (how students are taught) and assessments (how

Pre-K to Kindergarten Transition Programs and Parent and Family Engagement

Eighteen states and the District of Columbia [have policies in place](#) to guide the transition from pre-K to kindergarten. The policies often include requirements for written transition plans, [guidelines for family engagement](#), pre-K and kindergarten teacher transition meetings and guidelines for sharing assessment data between programs.

Kindergarten Entrance Assessments

These are tools that evaluate a child's school readiness as they enter kindergarten. States implemented policies that require districts to

[administer these assessments](#) and [use the data](#) to identify gaps and measure learning as students advance through kindergarten and beyond.

California's [Transitional Kindergarten](#) program is the first year of a two-year kindergarten program that provides an additional year of

developmentally appropriate instruction for children who meet certain criteria. As part of the transitional year, the program uses [parent, family and community engagement](#) to support children's academic and social development so they are ready to enter kindergarten the following year.



Kindergarten

What Research Shows

Kindergarten is when children typically enter the traditional, public school system; it serves as an important educational starting point. However, many children do not enter kindergarten with the same cognitive and language skills as their peers, partly because of differences in accessibility to early learning programs. Quality kindergarten programs help identify and support students with the highest needs to mitigate achievement gaps rather than exacerbate them.

The Current Landscape

States face many issues related to kindergarten including access, program quality, length of school day, funding, content standards and entrance age. While there are many policy areas to consider, states are focused on entrance age and funding to improve access to full-day kindergarten.

Kindergarten is typically funded through the state school funding formula, but at different levels depending on the state. A few states fund full-day kindergarten, and [some](#)

[states provide financial support](#) for half-day kindergarten programs — leaving districts to make up the difference in cost for full-day kindergarten by either charging tuition or fees to parents, fundraising or redistributing the district's per-pupil revenue.

A 2018 [50-State Comparison](#) by Education Commission of the States found that 33 states either did not require or did not specify in state policy that children must attend kindergarten. Differences also exist in the compulsory attendance ages. Most states required children to start school at the age of either 6 or 7 — though 10 states had a compulsory attendance age of 5, when children typically start kindergarten. Whether kindergarten programs are required to be half-day or full-day varies by state and district. Twenty-eight states require districts to offer half-day kindergarten, and 14 states and the District of Columbia require districts to offer full-day kindergarten. Eight states do not require districts to offer either half-day or full-day kindergarten.

Improving Early Childhood Education Quality in Your State

Interested in improving the quality and effectiveness of early childhood education programs in your state? Here is a list of guiding questions, formulated based on the promising practices that Education Commission of the States has observed in states.

Convening a diverse group of policymakers and stakeholders:

Who should be involved in the discussion of P-3 education issues in your state?

How can they contribute to forming a shared vision and goal?

What could their role be in implementing and evaluating P-3 education policy?

Which policymakers, agencies, stakeholders and organizations play a role in forming, implementing and assessing policies?

Possible policymakers and agencies:

- State education agency
- State health and human service agency
- State board of education
- Office of the governor
- Legislature

Possible stakeholders and organizations:

- Teachers and school leaders
- Birth-to-age-five providers
- Higher education institutions
- Advocacy organizations
- Business community
- Foundations
- Parents

Identifying concerns and their root cause:

What are the root causes of the issues and outcomes you are looking to change?

What are the issues and outcomes you are trying to address in early childhood education?

What policies do you have in place that influence the issues you identified?

What are the perspectives of institutions and organizations involved in the early childhood education system?

Setting a shared vision and set of goals:

? What is shared among the institutions and organizations? What is different?

? Based on the root cause analysis, what processes and goals can be established among key stakeholders to create policy change?

Forming policy solutions:

? What are the policies associated with addressing the root cause of the issue?

- Third-grade reading and math.
- Teacher workforce development.
- Principal and school leadership development.
- Pre-K and K-3 governance.
- Transitions and alignment across the P-3 continuum.
- Kindergarten.

? How will proposed changes impact the issue identified? How will success be measured?

? Who influences the policies you are looking to change?

Building broad consensus:

? How do you communicate issues, proposed policy changes and possible implementation to a broad audience of policymakers and stakeholders?

Who needs to be informed?

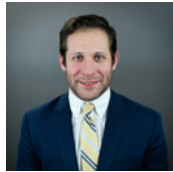
When should they be informed?

Who should deliver the message?



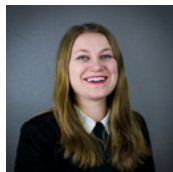
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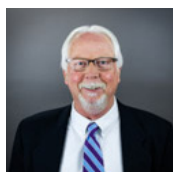
As a policy researcher, Tom contributes to the work of the policy team on issues across the education spectrum. Prior to joining Education Commission of the States, Tom taught middle school in Milwaukee, Wis. Tom is dedicated to providing state policymakers with quality research that supports them in making a positive impact on students' lives. Contact Tom at tkeily@ecs.org or **303.299.3694**.

Alyssa Evans



As a policy researcher, Alyssa contributes to the policy team's work in various areas of state education policy. Prior to joining Education Commission of the States, she worked as a legislative aide in the Colorado General Assembly. Alyssa earned a bachelor's degree in economics from the University of Denver and a master's degree in public policy and international law from the American University of Paris. Contact Alyssa at aevans@ecs.org or **303.299.3618**.

Bruce Atchison



With more than 35 years of experience working in early childhood education, Bruce has specialized in early learning policy initiatives since joining Education Commission of the States in 2014. In prior roles, Bruce worked in two governors' policy offices on education, served as president and CEO of a nonprofit child care center, served on the faculty at the University of Denver and the University of Colorado teaching child development, and taught in the classroom for 10 years. Bruce has been honored as an Educator of the Year and also received the Edna Oliver Nancy Swank Early Childhood Lifetime Achievement Award. Contact Bruce at batchison@ecs.org or **303.299.3657**.

ENDNOTES

1. Sam Lubell and Hannah Putman, *Landscapes in Teacher Prep: Undergraduate Elementary Ed* (Washington, DC: National Council on Teacher Quality, December 2016), https://www.nctq.org/dmsView/UE_2016_Landscape.