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Southern Regional Education Board

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Building a Strong Foundation

State Policy for Early Childhood Education

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The Report of the SREB Early Childhood Commission

"Investing now in our very youngest citizens — our infants, our toddlers, our preschoolers is not only a moral imperative. Economically, it is a no-brainer."

> Kentucky Governor Steve Beshear Chair, SREB Early Childhood Commission

The Sooner the Better

A Message From Governor Beshear

Our understanding about early childhood development has grown by leaps and bounds in recent years. New brain research tells us that children's brains form very rapidly early on, and their earliest experiences have lifelong effects on their likelihood to succeed. Now it's time to put what we've learned into practice so that our young children get the best start possible.

SREB's Early Childhood Commission brought our states together to define our role in building this foundation through state policy. While our approaches may vary from state to state, there is much we can learn by working together. Here are some things that we've learned in Kentucky:

Quality matters. High-quality early care and education programs along with highly qualified teachers are an essential part of preparing a child to succeed in school and life. In fact, children who experience high-quality early learning programs are healthier, more self-sufficient and less likely to enter the criminal justice system over their lifetime. Rating systems like Kentucky All STARS help us inform families and continually improve the environments and classrooms where young children grow and develop.

Families are foundational. Strong and independent families help build strong and healthy children. Babies learn most from those daily one-on-one interactions with parents — their first teachers. We can help families understand the importance of their role and give them the supports and tools to help them and their children be healthy and successful. Families must be at the center of our early childhood policy agenda if we are committed to every child having the best possible start.

Lead with governance. The landscape of funding and providers for early learning is complex. It takes committed leadership to bring together the various agencies and programs that play different roles in early childhood education. A coordinated and unified approach to early childhood governance facilitates progress in measurable ways.

I've made early childhood education a priority during my administration, and here's why: What our youngest children experience today lays the foundation for what they can achieve in school and in life. Each skill builds on another. Healthy development from birth to 3 makes children more likely to read on grade level, graduate from high school ready for college and careers, and become leaders in our next generation. In Kentucky, we've come to understand that early learning is the cornerstone of state education policy.



Steve Beshear, Governor, Commonwealth of Kentucky Chair, Southern Regional Education Board Chair, SREB Early Childhood Commission

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Building a Strong Foundation: State Policy for Early Childhood Education

Report of the SREB Early Childhood Commission

The SREB Early Childhood Commission convened leaders from 16 states to recommend policies that will give more young children a solid start when they enter school. Kentucky Governor Steve Beshear chaired the SREB Commission of legislators, heads of state school agencies and other advocates for early childhood education, which met in 2014 and 2015. Through presentations of the research on early childhood, the commissioners came to understand that while SREB states have led the nation in pre-K efforts for more than a decade, current knowledge compels states to do more for young children and their families and make some changes in their policies. Research now tells us that early conditions and experiences affect children's brain development, which occurs rapidly in the early years. It also informs us about what works in the classroom and how to prepare early childhood teachers.

The commissioners learned that what we invest now in babies, toddlers and preschoolers is likely to pay off at higher rates than investments further down the education continuum. Policymakers with foresight can likely reduce the number of children who need remediation or special education services, improve the human capital of their state, and bring home long-term social and economic returns.

Is this idealistic? The economics of education tell us otherwise. As SREB states aim to increase high school graduation rates, college attainment, workforce readiness and annual earnings for their residents, investing in very young children can bring the biggest payoffs. For example, when children fail grades or require special education placement that a high-quality early childhood program could have prevented, it costs states for years to come.

The Commission's recommendations focus on five areas that members agreed were high priority for SREB states. Commission members agreed that states need to promote high-quality programs and recognize the importance of highly skilled teachers. Then states need to improve access to these programs, especially for children facing risks. Fourth, states need to assess programs and reward quality. Finally, they need to better coordinate their various early childhood programs to take advantage of multiple funding streams and gain efficiencies.

Policymakers with foresight can likely reduce the number of children who need remediation or special education services and bring home long-term social and economic returns.

Start Early to Invest Wisely

Research on the science of early childhood development has provided new information and a renewed understanding of the importance of early childhood development to lifetime outcomes. The landmark 2000 study by the National Research Council and Institute of Medicine, Neurons to Neighborhoods: The Science of Early Childhood Development, presented an indisputable base of evidence regarding the early formation of brain architecture. It brought attention to principles and policy implications and called for a "fundamental re-examination of the nation's responses to the needs of young children and their families."

Young children's brains develop rapidly in utero and in the first few months and years of life, when neural connections in the brain are made at an extraordinary rate. Researchers now know that early experiences shape the formation of pathways for brain functions, setting the foundation for all future learning. Although intellect, behavior and abilities continue to develop throughout life, the brain's flexibility is greatest in the earliest years and decreases with age.

Early experiences forever shape an individual's capacities. The human brain is primed from birth to react to the environment and learn from interactions with parents and other caregivers. When a child has positive, healthy and nurturing experiences, the brain forms in healthy ways. Deprivations early in life shape the brain's structure in ways that can impede later language, cognitive, social and emotional capacity.

Because the process is sequential and cumulative, early experiences are all the more crucial for a child's future. Babies who learn trust early from their parents or guardians have an early building block of teamwork. From trust, they can learn to share. Sharing leads to reciprocal play, reciprocal play to rule-following and rule-making — and on to effective team skills. Without that first skill — trust — teamwork skills are nearly impossible to develop.

The benefits of skill development build on one another, with multiplying effects at each critical milestone. More secure families provide better environments for their babies' explosive brain development from 6 months to 3 years of age. Their toddlers, exposed to more words, are far more likely to be ready for kindergarten — and then to read on grade level by third grade. Pre-K participants are more likely to graduate from high school on time, earn more over their lifetimes and enjoy better health as they age. "Skills beget skills," wrote Nobel Laureate James Heckman, economics professor at the University of Chicago, in 2007.



Skills build on one another,

Skills beget skills. Every new competency is built on ones that came before. One example: Language skills build on basic hearing and vision. More complex thinking follows basic skills such as language skills. Graph adapted with permission from the Center on the Developing Child at Harvard University. Source: Nelson (2000).

Children grow up within families, with parents or primary caretakers in a role that has the most enduring influence on their lives. When children are born, conditions are in place that can pre-determine their chances for the future. For some children and families, risk factors from poverty, low birth weight, or single or undereducated parents may signal a need for targeted interventions to support healthy development. For other children, early exposure to abuse, neglect or trauma may trigger toxic stress response and lifelong negative impacts on physical and mental health.

But even such serious risk factors need not destine a child to failure. While recognizing the gravity of the risk and effect of toxic stress, Harvard University's Center on the Developing Child points to research that provides significant hope to children facing such dire circumstances: supportive, responsive relationships with caring adults early in life can prevent or reverse the damaging effects of the toxic stress response.

Children's earliest interactions with parents impact their ability to process information as they grow and learn. The conversation style of parents influences the speech of their children. The fact that children's language skills at 12 to 24 months of age predict their pre-literacy skills at age 5 should be both sobering and motivating to policymakers who seek to improve the education of their states' residents.

University of Kansas developmental psychologists Betty Hart and Todd Risley reported in 2003 that, by 4 years of age, children on welfare experienced less than a third of the words than did children whose parents held professional occupations. This gap persists through the ensuing years, predicting slow progress in language and literacy for economically disadvantaged children and accelerated progress for children in more advantaged families.

Despite the stark variation in the conditions young children experience at home and in their neighborhoods, the course of a child's learning and lifetime achievement can be altered with strategic interventions. By helping families access high-quality early learning opportunities and experiences for their young children, states can help many more children achieve healthy growth and strong cognitive development. These early investments, in fact, lay the foundation of skills and knowledge that make later investments and interventions — in K-12, higher education and job training programs — more successful.



The brain develops best early in childhood and is much less capable of adapting later in life.

It's easier and more effective to influence a baby's developing brain architecture than to rewire circuitry in later years. In other words, we can *invest now* in healthy conditions for early childhood development, or *pay more later* in remediation, incarceration and health-care costs.

Graph adapted with permission from the Center on the Developing Child at Harvard University. Source: Levitt (2009).

Returns on Investment Are Long-Term

A sturdy body of research provides evidence that pre-K and other early childhood interventions yield longterm benefits. For example, **the Abecedarian Project**, a study using a randomized trial on the effects of early childhood interventions on lifetime outcomes for high-risk children, documented robust results from high-quality early childhood development that affected participants over the course of their lives. Craig Ramey, professor and research scholar at the Virginia Tech Carilion Research Institute, discussed with the Early Childhood Commission findings from his research. He noted that lasting gains for children in early learning programs include improvements in IQ and significantly better educational, health, social and economic outcomes for participants as well as for society.

Longitudinal analyses followed participants in the Abecedarian program, documenting the impact from 15 months to 35 years of age. Outcomes for the cohort included:

Increases in

Intelligence (IQ) Reading and math skills Social competence Years in school College attendance Four-year college degree attainment Full-time employment Mothers' education Mothers' employment Cardiometabolic health

Decreases in

Grade repetition Special education placement Teen pregnancy Smoking and drug use Teen depression Welfare use Overweight Blood pressure

Studies by Heckman of the University of Chicago have provided rich insights into the return on various investments in human capital. Heckman's research on human productivity indicates that the greatest return comes from investment in programs for children birth to age 3.



ROI: Returns are highest on investments in the early years

The earlier the investment in education programs, the higher the return. *Source: Heckman, James J. (2008).*

Early Childhood Policy in SREB States: 1980s to the Present

SREB's focus on early childhood education began in the mid-1980s. In 1989, the SREB Commission for Education Quality issued the report *Reaching the Goal of Readiness for School*. Since then, school readiness has been among SREB's Goals for Education. In 1989, six SREB states funded pre-K programs, serving 80,000 children. Today, all 16 states have state-funded pre-K programs; in 2013, they served nearly 725,000 children.

SREB has focused on two key school readiness issues over the years.

Access to kindergarten and pre-K for at-risk children

SREB states recognized that kindergarten and pre-K programs should serve children who need a boost in school readiness — including those from families in economic distress. SREB states also focused on children with disabilities and on children whose families speak a language other than English at home.

The percentage of children in the SREB region who live in poverty has long been higher than in the United States — and the figure has grown.

- In 2000, 23 percent of children under age 5 in SREB states lived in poverty, 4 percentage points higher than the national rate. By 2013, the figure had grown to 30 percent in the SREB region, 4 points higher than in the nation.
- From 2000 to 2012, the percentage of school-age children living in low-income families in the region grew from 46 percent to 54 percent. In the nation as a whole, the rate grew from 40 percent to 50 percent.
- For the last decade, high school enrollment showed that students became more racially and ethnically diverse each year. The largest growth was among Hispanic and immigrant groups. Primary schools also experienced growing percentages of children whose home language was something other than English, but many schools lacked adequate professional development for teachers to support these children and their parents.

Quality programs to ensure success

SREB's reports have regularly stressed the importance of high-quality early childhood education programs. They have focused primarily on the importance of adequate funding, quality teachers and strong curricula.

- SREB's reports have been clear that stable funding is critical to strong programs. SREB encouraged the
 various state agencies responsible for children's programs to cooperate, particularly in accessing, leveraging
 and appropriating funding from state, federal and private sources. States that led in cooperative funding and
 programming led in outcomes.
- SREB has been a proponent of strong credentials for pre-K teachers and aides. It has stressed that competencies, professional development and training specific to early childhood education are more important than a bachelor's degree, regardless of field, as entry-level requirements for the lead teacher.
- SREB has promoted aligned standards and curricula from pre-K through the early grades, and particularly from
 pre-K to kindergarten. It has promoted age-appropriate school readiness assessments so states can set their
 expectations of early learning programs and provide feedback to providers on program performance. Assessments
 can also provide formative information to teachers on children's needs.

Even after years of work, the job is far from complete. National Assessment of Educational Progress (NAEP) results in fourth-grade reading show that too many children — about a third — are not ready for middle school. Research makes clear that most of these children were not ready for school when they started. Their learning gaps were already formed. But new understanding of what works in early childhood programs offers renewed hope that the next group can achieve at higher levels.

From his economic analysis of children's participation in the **HighScope Perry Preschool Program**, Heckman has concluded that each dollar invested in high-quality early childhood development produces a 7 percent to 10 percent return per child per year, which, he said at a 2015 conference in California, "exceeds the annual return of the U.S. stock market in the period following World War II up until the 2008 meltdown."

A study of the **Chicago Child-Parent Center**, a public preschool program for at-risk children, tracked participants to age 20. They were more likely to have finished high school — and less likely to have been held back a grade level in school, to need remedial help or to have been arrested. Steven Barnett, director of the National Institute for Early Education Research, has estimated that \$48,000 in benefits accrued to the public per child from participation, with an estimated return of \$7 for every dollar invested.

Federal Reserve Bank economists have noted the relevance of early childhood development to the nation's economic vitality. In a 2007 speech on education and economic competitiveness, then-chairman Ben Bernanke touted the importance of early childhood development to the U.S. workforce and economy and cautioned, "Early childhood education is only the beginning. Positive results from programs such as Head Start dissipate without further high-quality schooling at the elementary and secondary levels."

The U.S. Chamber of Commerce has emphasized the importance of high-quality early childhood development to achieving a strong, skilled workforce. In fact, to improve quality, a recent Chamber report encourages business leaders to promote early learning policies as part of their economic development agenda, encourage their states to adopt quality rating systems, and encourage business organizations and networks to adopt a policy position in support of public investments in effective, high-quality early education programs.

Intervene Early to Beat the Odds

The formal K-12 school system was well-established before education leaders had the benefit of clear science on early brain development. Access to early learning opportunities before kindergarten was not consistent or mandatory. We now know that if children enter the K-12 system at age 5 or 6, their learning capacity is already shaped, and achievement gaps among groups of children are already stubborn. Children's experiences and the conditions of their lives between birth and kindergarten entry

Participation in **high-quality** programs can mitigate early learning disparities for children from low-income families.

are pivotal to school readiness, reading proficiency by third grade and high school graduation.

Third-grade reading proficiency is a highly significant predictor of many outcomes later in life. If a child has developed basic skills by kindergarten, he or she is more likely to be on pace for reading proficiently in third grade. If children are not reading proficiently at that milestone, they are four times more likely not to graduate from high school on time. If they have also lived in poverty, the probability of not graduating on time is *13 times greater*.

Without intervention, disparities in learning are evident as early as 9 months of age. These disparities persist as children enter and continue in school. The gap is particularly stubborn for children with multiple risks: Children who live in disadvantaged families and communities are more likely to attend low-performing elementary schools. Under these conditions, school alone is unlikely to close gaps and improve paths to academic and workforce success.

Yet a consistent body of research provides evidence that if young children from low-income families have access to and participate in *high-quality* early childhood development programs, they can beat these odds. The course for children born with risk factors is highly predictable, but its trajectory can be altered by starting early and investing wisely.

The Research on Lasting Gains

The body of research on pre-K that dates to the 1960s has produced findings that support, overall, the benefits. Some studies, though, reported that academic gains made during the pre-K year appeared to fade out by the end of third grade. These reports gave some policymakers concern about investments in publicly funded early childhood programs.

Skeptics of pre-K often cite the 2010 National Head Start Impact Study that tracked a 2002 cohort of Head Start attendees. It reported that initial academic gains of Head Start participants had disappeared in first grade. However, the study is misleading on two counts. First, the study itself had a significant flaw. Many children assigned to the control group as *nonparticipants* actually attended Head Start at an alternate site or another preschool program. And other children assigned to the study as *participants* did not complete the school year.

Second, Head Start and pre-K programs in 2002 had different purposes, making comparisons unwarranted. Head Start's early purpose was clear: It was created as an economic development program with a focus on child care, not school readiness. (A focus on high-quality educational programming began later, in 2007.) State-funded pre-K programs, on the other hand, focused on school readiness from their inception. Even if the Head Start study had been conducted well, its results should not be generalized to pre-K programs.

The whole body of research on early childhood programs tells a complete story. Meta-analyses, or studies of many studies, bind together the narrative that the span of research tells. Multiple meta-analyses, over 25 years of research, found that the academic effect of preschool at school entry is equivalent to moving a child from significantly below par to average — from the 30th to the 50th percentile on achievement tests. On average, the gaps in results between pre-K participants and nonparticipants diminish by half from kindergarten to the later grades. So while the achievement gains faded somewhat, they did not fade away entirely, and **the children who participated in pre-K were still ahead**.

Researchers say that the term *fade-out* doesn't accurately describe this narrowing of the academic achievement gap. They use the terms *convergence* or *catch-up*. Convergence suggests that the results of the two groups grow closer together over time. If children from high-quality pre-K programs later attend poorer-quality primary schools — with curricula that don't align with the pre-K content — they will likely not sustain their gains. Studies show that when pre-K participants repeated pre-K content during the kindergarten year, they did not maintain the same academic advantage over their peers. Catch-up describes gains by children who did not participate in pre-K. Studies show that effective interventions for these non-pre-K participants in kindergarten and the early grades may bring their learning levels closer to those of their pre-K peers. However, these interventions can be at the expense of pre-K participants, because early grades teachers too often spend less time with children who attended pre-K so they can work with other students to improve their readiness for school.

Studies on early private, small-scale, high-quality pre-K programs (for example, the HighScope Perry Preschool in the 1960s and the Abecedarian Project in the 1970s) have documented that high-quality pre-K programs produced strong initial and long-term results — in some cases double the average initial academic benefits.

These programs served as models for what works in pre-K; from them new practices emerged that have been shown to work at cost-sustainable rates. The models have begun to transform practice: By 2010, the results in state-funded programs in Boston, New Jersey, North Carolina and Maryland showed that incorporating research-based elements of program quality — stimulating teacher-child interactions, observation, measurement, feedback, coaching and ongoing, specialized professional development — makes a difference. These programs are sustaining academic gains throughout the early grades.

Gains from pre-K are not limited to academic outcomes. Early childhood development involves cognitive, social, physical, emotional and behavioral development. Early development of nonacademic skills can make a long-term difference, too. Pre-K yields additional years of education completed, improved graduation rates and earnings, better long-term health outcomes and reductions in crime and teen pregnancy. Research also shows that pre-K participants are less likely to need special education or be retained in a grade. These benefits are long-lasting — yielding returns to individuals and to the state, in tax dollars and economic development.

Ensuring School Readiness: The State's Role *Policy Considerations and Priorities*

With the recognition of the critical and foundational importance of early childhood development comes the responsibility for states to identify the most strategic and reliable investments in human capacity at this best opportunity to strengthen a child's chances for school, workforce and lifetime success. The significance of this responsibility is articulated in the *Neurons to Neighborhoods* report: "Ultimately, informed early childhood policy making, effective service delivery, and successful parenting all depend on mastery of the existing knowledge base, sound judgment based on reasonable hypotheses, the avoidance of irresponsible practices, and continuous reassessment over time."

Charles Bruner, director of the Child and Family Policy Center, has concluded that in considering policy solutions for the school readiness of young children, state systems should respond to four universal needs of children: consistent parenting, responses to growth, identification of special needs, and continuous supervision. While these needs are basic, not all families have the economic capacity to secure and pay for services; some need targeted help accessing services to meet their needs. This is especially true in families headed by parents or guardians with low educational attainment, those facing chronic poverty, and house-holds limited by single parenthood. Families living in rural areas may need help accessing services if few programs for parents and young children are available nearby. The scale of the need for intervention services is evident in the percentages of children with one or more indicators of risk. According to a 2014 Child Trends report, about 35 percent of U.S. children birth to age 17 had one or two adverse childhood experiences — such as abuse or neglect, or a family member who is alcoholic or incarcerated — and 11 percent had three or more.

What is the state's role in developing and nurturing economic capacity? At *what age* and for *which children* should states provide publicly funded services? *Which services* and programs are most successful in supporting strong outcomes for young children? What is the state's role in preventing the costly outcomes that result when children do not have access to high-quality experiences during the years of their most crucial development? How can return on investment be most effectively demonstrated? Though these are complex questions, states must grapple with appropriate policy responses. During discussions of the SREB Early Childhood Commission, members articulated the complexity of setting education policy priorities for states to consider, especially related to early learning experiences and opportunities for children before kindergarten.

Universal Needs of Children

Consistent and nurturing parenting to guide and support their growth and development within a safe and supportive community, including meeting basic needs for shelter, clothing, food and other necessities

Timely responses to physical and mental growth, including primary and preventive health and nutrition services that support parents in keeping their children healthy and responding to illness and injury

Early identification and response to special health, developmental, behavioral or environmental needs that can jeopardize health and development

Continuous supervision throughout the day in developmentally appropriate environments where young children can safely explore their world and learn, including intentional learning where children gain mastery across the domains of early learning

- Child and Family Policy Center

The Importance of Families to Early Childhood Policy and Practice

Parent engagement is a term widely used, and it is generally accepted that parent engagement is critical for the success of the child. However, there is no general agreement on exactly what parent engagement is, what we hope to accomplish with it, or how it should be measured.

Studies present compelling evidence of the relationship of parent engagement to school success. The facts speak for themselves on the need to fully engage parents.

- On average, school-aged children in the SREB region spend about four times as much of their waking hours in their homes and communities as they do in school.
- Values, habits and attitudes are formed in the home, with the significant adult in a child's life.
- In SREB states, more than half of 3- and 4-year-olds did not attend preschool programs in 2013.

The question becomes not *whether* we provide the skills and knowledge parents need to support their children's learning, but *how* we do it. If a goal in early education is to mobilize parents to help their children succeed, what are the barriers?

- The most vulnerable children are often living with the most vulnerable parents.
- Millions of caregivers or parents of young children are only marginally literate, and some cannot read at all.
- · Poverty and parents' lack of literacy skills trump all other variables in predicting the success of the child.

Parents must be central to any effective early childhood practice or policy if the nation is to realize the promise of its investment in early learning. It is well-established that the education level of the mother is one of the most significant determinants of student academic success. This fact points to the critical need to go beyond engagement and provide parents themselves educational opportunities. They can learn new strategies to support the education of their children, and low-income parents can gain employability skills to help them climb out of poverty. Because parental poverty strongly influences children's chances for success, this is an important consideration for policymakers and an essential component of two-generational approaches. Simply put, a multigenerational problem needs a multigenerational solution.

Sometimes the idea of implementing early learning programs where parents and children have opportunities to learn together seems daunting, but it is critical to success. Research has consistently shown that a dual-generation approach prepares children for kindergarten and equips their parents with strategies to enhance education in the home and gain employment. These dual-generation approaches, particularly family literacy programs, have proven to be effective in rural as well as urban settings, and using culturally appropriate models has shown statistically significant results with diverse populations. The children and their parents continue to show positive results as children move through the elementary grades and parents become employed.

State leadership is essential to link systems and funding streams to promote a two-generational approach to early childhood education. Federal and state dollars can be combined for a more effective, holistic approach that includes families and communities.

The Commission outlined five priorities members considered most important as states address early childhood programs: *program quality, teacher quality, accountability, access* and *governance*.

Program Quality

In early learning programs, quality matters. The return on investment from early childhood interventions hinges on specific features of quality for both programs and practitioners. Achieving quality *statewide* is challenging because the landscape of early learning programs is diverse and fragmented. Programs and services are delivered in both public and private settings, including child care or preschools in homes, centers, private schools and faith-based institutions; Head Start; and state-funded prekindergarten classrooms. Services may be supported by a range of federal, state, local government, philanthropic and private-tuition funding.

According to the Center on the Developing Child at Harvard University, the principal elements of quality in early childhood development programs, no matter the type, include:

- highly skilled providers
- age-appropriate and evidence-based curricula and stimulating materials in a safe physical setting
- · language-rich environments
- warm, responsive teacher-child interactions
- · high and consistent levels of child participation
- small class sizes and high adult-to-child ratios.

Quality in early learning programming is demonstrated in both *structural features* — such as group size, teacher-to-child ratio and educational qualifications of staff — and *process features*, such as interactions, materials and toys, and parent engagement. Robert Pianta, dean of the Curry School of Education at the University of Virginia, discussed with the Commission the importance of effective interactions between teachers and children in early learning settings. The interactions are characteristic of process quality, which his research has shown to be paramount to young children's optimal development.

To evaluate quality elements in early learning settings, the majority of states (43) have established voluntary quality rating and improvement systems (QRIS) based on state-specific criteria. These ratings are often indicated on a star scale similar to those for restaurants and hotels.

Kentucky leads in quality rating systems

Kentucky has systematically pushed for improvement in the quality of its early childhood education and care programs. Since convening the Task Force on Early Childhood and Education in 2009, Governor Beshear has been committed to expanding the state's QRIS, **Kentucky All STARS**, throughout the early childhood system. In 2015, Kentucky passed House Bill 234, which required all publicly funded early education and care programs to participate in STARS. Mandatory participation will help programs continuously improve in quality and help families choose high-quality programs. For more information, visit KidsNow.KY.gov.



"Through Kentucky All STARS QRIS, parents will be able to make better choices to put their child, from the earliest years, in high-quality programs."

Terry Tolan Executive Director, Governor's Office of Early Childhood, Kentucky Across the full range of early learning programs and funding streams, QRIS provides a cohesive framework for identifying and supporting quality features. It gives parents a way to understand the quality options in early learning programs and weigh them with cost and convenience factors as they choose care and learning arrangements for their children. The QRIS model is intended to assist programs not only by establishing the status of quality in early learning classrooms of all types but also by identifying specific steps, strategies and supports to help programs make continuous quality improvement. Generally, early learning programs participate in QRIS assessments on a no-cost, voluntary basis. Participation is often accompanied by benefits and incentives, such as books and materials, professional development opportunities and increased reimbursement for delivering subsidized child care services.

Debi Mathias, director of the QRIS National Learning Network, described QRIS to Commission members as an effective framework to implement and align standards for programs, practitioners and children's learning. It is a strong tool for market intervention, impacting the *supply* of high-quality early learning options for families (by offering technical assistance, professional development and financial incentives) as well as the *demand* (by providing ratings, consumer education and financial incentives).

According to Child Trends researchers Marty Zaslow and Kathryn Tout, the goals for QRIS include improved child outcomes and school readiness, professionalization of early care teachers and instructional leaders, a more cohesive early childhood system and enhanced family outcomes.

The elements of structural quality for early learning programs that are prominent in QRIS — such as teacher to-student ratio and maximum group size — pave the way for process quality. If programs can demonstrate that they have these structural elements of quality in place, they show that they provide the conditions in which process elements — such as effective interactions and intentional teaching and learning — can take place. QRIS can be most effective when it emphasizes assessment of and support for high-quality classroom interactions, which can be achieved through a standardized observation tool such as the Classroom Assessment Scoring System (CLASS), plus specialized skills coaching.

Teacher Quality

Just as the early, nurturing parental bond is essential to a young child's foundational development, early relationships and interactions with providers and teachers continue to build what Pianta calls the "infrastructure for school success, including social competence with peers, self-regulation, emotional self-control, task orientation, persistence and following directions." Pianta's research suggests that the nature and quality of teacher-child interactions have the greatest impact on students' academic achievement and social skill development. Pianta described school readiness as a social process, in which interactions with teachers are the medium for learning. He emphasized to the Commission the urgency for states to ensure that providers and teachers are equipped, through training and coaching, with the specific competencies that foster social, emotional and cognitive development of young students.



"When North Carolina developed NC Pre-K, a big focus was put on the quality of the teacher in the classroom."

John Pruette Executive Director, North Carolina Office of Early Learning

While the research literature is inconclusive about the importance of

degree attainment and certifications in teachers' effectiveness in supporting young children's learning, it is consistent in showing the importance of specialized training in the knowledge of child development, effective interactions and application of evidence-based curricula. Paired with high-quality on-site or video coaching and focused, ongoing administrative support, specialized training can help teachers be effective in the kinds of experiences that close learning gaps among groups of young students.

North Carolina leads in program and teacher quality

North Carolina's prekindergarten program, **NC Pre-K**, has long been a national leader in program quality. NC Pre-K was one of the first two state-funded programs to implement (in 2005) and maintain all 10 nationally recognized standards of program quality identified by the National Institute for Early Education Research (NIEER). Since then, the state-funded program has incorporated additional evidence-based elements of high quality to foster the kinds of enriching interactions between children and teachers that yield lasting gains.

The state promotes quality within each pre-K classroom by requiring specialized teacher preparation. Lead teachers must acquire a bachelor's degree and a more specialized birth-through-kindergarten license. NIEER's *State of Preschool 2014* reports that NC Pre-K is evaluated annually for process quality, program impact and child outcomes. For more information, see NCChildcare.DHHS.state.NC.us.

Accountability

Rigorous longitudinal studies show that without participation in highquality early childhood programs, an at-risk child is more likely to experience long-term consequences: 50 percent more likely to need special education services, 25 percent more likely to drop out of school, 40 percent more likely to become a teen parent, and 70 percent more likely to be arrested for violent crime. Taxpayers and society reap the rewards from greater participation. Economic analyses have demonstrated higher economic return from these early investments than from later remediation programs.

To sustain gains and mitigate the fading of effects, services must be of sufficient quality, dosage and duration. Kristie Kauerz, research assistant professor of P-3 policy and leadership at the University of Washington, asserts that to combat fadeout, standards, curricula and assessments must align from pre-K to third grade. Education experts encourage states to ensure alignment of these core components of learning both horizontally (across all subjects or areas of learning within each age group or grade level) and vertically (across the continuum of grades).



"The bottom line is this: If we are going to change the mindset and drive dollars down to lower ages, we're going to have to convince people that we have quality programs that make a difference. And the way we can do this in all of our states is with good data."

Fran Millar Georgia State Senator

A singular focus on building *cognitive* skills in young learners is misguided. Our education systems are typically structured to focus on measuring cognitive ability with standardized achievement tests. Heckman urges policymakers to take a broader view when measuring outcomes of education, especially early childhood programs. In recent speeches he has emphasized that "an important lesson from the recent research on the economics of skills is that cognitive skills are only part of what is required for success." He argues that "personality skills, 'soft skills,' physical and mental health, perseverance, attention, motivation and self-confidence are also important and are often neglected."

The recognition of the importance of these *noncognitive* skills has led states to consider and implement accountability systems that embrace the full range of skills and holistic development of human capacity that the science supports. For many states, this has led to a shift from a singular focus on standardized achievement tests, particularly for young children, to measures that draw on a range of assessment strategies. These include formative tools that measure regularly and comprehensively the skills children need for success in school — and in life. The results can then be used to guide instruction. Research supports the use of such

formative assessments as long as they are developmentally appropriate (aligned with the natural progression of children's development) and measure all the essential domains of early childhood development. Research also indicates that these assessments — including kindergarten readiness assessments that some SREB states use — should be ongoing and observational rather than paper-and-pencil. These kinds of school-readiness assessments are designed to benefit young learners by monitoring their progress and informing instruction customized for individual children.

Most states have implemented longitudinal data systems to promote accountability for investments and interventions across the life course and to drive more-informed decisions about programs, financing and policies. Because many states' longitudinal data systems evolved in departments of education, some states are just now recognizing the importance of including early childhood data sets from other systems and state agencies — birth data from vital statistics, for example, and data from home visiting, early screening, subsidized child care and preschool assessments. These data sets can provide insights on the effectiveness of state-provided services across the full continuum of residents' lives, beginning at the earliest stages. They can also help ensure program quality throughout the early grades by providing feedback to program developers.

Georgia leads in linking early childhood data to its longitudinal system

In Georgia, early childhood education data is incorporated into the state's longitudinal data system, **GA AWARDS**. The state's office of early learning, Bright from the Start: Department of Early Care and Learning (DECAL), promotes effective data sharing by coordinating data agreements across the state and linking child data from early education programs. The Early Childhood Data Collaborative reported that DECAL had data-sharing agreements with 100 percent of Georgia's Head Start providers in March 2015. Such connected data will encourage quality instruction and better outcomes by allowing early grades teachers to plan instruction more effectively, based on the early care and education preparation of each student. More information: DECAL.GA.gov.

Access

A state policy focus on high-quality programming is a priority, but it isn't enough. Policymakers must also ensure that the populations of children who can benefit most have the opportunity to participate in high-quality programs — and that programs are distributed throughout the state so that rural children and their families have ready access to services.

Families' barriers in accessing publicly funded programs are typically related to socioeconomics factors including race and ethnicity. The U.S. Census Bureau reported in 2012 that 3- and 4-year-olds from the poorest families (with annual incomes below \$20,000) are less likely to be enrolled in preschool: 42 percent, compared with 61 percent for peers from upper-income families (\$75,000 or more a year). Hispanic 3- to 5-year-olds have the lowest preschool participation rate, at 31 percent, compared with black and white children at 37 percent and 41 percent respectively.



"Access must be a commitment on the part of your state." John Ford Oklahoma State Senator

The readiness gap at kindergarten entry can be attributed, in large part, to racial and economic disparities in access to high-quality early learning. A longitudinal study from the National Center for Education Statistics found that at kindergarten entry, white students showed higher reading and math scores than black and Hispanic students. Kindergartners living in poverty scored lower on reading and math than their more affluent peers.

Oklahoma leads in access

Oklahoma's **Early Childhood Four-Year-Old Program** has been a national leader in access to pre-K for nearly two decades. The state was one of the first in the nation to fund access for *all* its 4-year-olds. It later formed an innovative collaborative to leverage resources and extend access to even younger children who needed help to gain skills for school. Beginning in 2010-11, the **Pilot Early Childhood Program** extended high-quality year-long services to at-risk children age birth to 3 and their families. The program, overseen by the Oklahoma Department of Education, is administered by the nonprofit Community Action Project of Tulsa County, with funding from public and private sources. The pilot sites are located at private and public providers, including Head Start, to ensure that more children have access. See OK.gov/sde and CAPTulsa.org for more information.

The troubling trajectory for students from low-income families and for black and Hispanic children continues through school. Sixty-six percent of all fourth-graders were not reading at the Proficient level on NAEP, the National Assessment of Educational Progress, in 2013. For black and Hispanic students, the percentages were about 80 percent. A 2012 study by Hunter College sociologist Donald Hernandez showed that black and Hispanic third-graders who were not reading proficiently failed to graduate on time at nearly double the percentages of other struggling third-graders.

Access to publicly funded intervention programs is disparate, but barriers to access to high-quality intervention programs are even more problematic. The data show that the children who can benefit most from high-quality early learning — children in low-income households and black children — are the least likely to have that opportunity.

Many policymakers do not believe states have the responsibility to assist *all* children with access to these programs. Public policy and funding, they believe, should be targeted to those most at-risk and those who may benefit most from increased access to high-quality early childhood development programs, including children from low-income families and black and Hispanic children.

Governance

Children's growth and development in the early years is multidimensional and involves a comprehensive array of services and resources across health, mental health, family support, social services and education sectors. The systems of funding and providers can be diverse and fragmented. Services are delivered by both public and private providers and are delivered in home-, faith-, center- and school-based settings. These services can involve multiple funding sources — public and private — at federal, state, and local levels. Governance of these broad and diverse service systems can be challenging, and it varies across states.

Typically, state governments organize early childhood services according to the categorical federal funding blocks that govern



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Maryland leads in coordinated governance

Maryland has been a national leader in coordinating early education and care programs through a streamlined statelevel governance structure. In 2005, the state consolidated numerous funding streams and early childhood programs under one office, the Maryland Department of Education **Division of Early Childhood Development**. The division now includes the state-funded pre-K, the state child care subsidy, credentialing and licensing systems, the Head Start State Collaboration Office and the state's newly revised quality rating and improvement system, Maryland EXCELS. By bringing all of these interconnected programs under one state department, policymakers can better ensure that all available resources are leveraged. To learn more, visit MarylandPublicSchools.org.

them, such as the Child Care and Development Fund, Temporary Assistance for Needy Families, Head Start, Individuals with Disabilities Education Act or Title I. Because these federal grants flow through different state agencies to address different needs, the funding streams and services are disconnected. Kindergarten readiness programs for children birth to age 5 are usually administered by multiple state agencies. Too often, silos among the agencies that administer the funds result in duplicated services, service gaps, confusion for families and funding inefficiencies.

To coordinate early childhood services across multiple systems, some states have created an office or department of early learning as a separate agency. Others have added a focused division for early childhood within an existing agency, such as a state department of education. The majority of states have used early childhood advisory councils (stimulated by the federal Head Start Reauthorization Act of 2007) or P-16 or P-20 councils to drive coordination and align standards, practices and policies. No matter which structure a state uses, setting a statewide vision for early childhood education and establishing a means to coordinate agencies to achieve the vison can play a significant role in bridging the divide between early childhood services and the K-12 system.



Streamlining governance of early childhood programs in Maryland "focused on the goal that every student would enter school ready to learn. We were looking for efficiencies, and to stop confusing families."

Lillian Lowery Former State Superintendent of Schools, Maryland

It may be useful to consider how components of the education continuum are organized in states. In contrast to the K-12 system — which is compulsory, universal and largely publicly provided — early childhood and higher education segments are voluntary, varied or fragmented, and they are funded by a mix of public and private sources, the majority tuition-based and privately purchased.

Early Childhood	K-12	Postsecondary Education
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Recommendations of the SREB Early Childhood Commission

Because a comprehensive approach to state policy on early education is critical for the return on investment in early learning, SREB's Early Childhood Commission offers five recommendations, with 25 actions to support them.

Discussion among members of the Commission pointed out variations among SREB states in governance and policy related to early childhood programs. Members developed the recommendations knowing that states will take different approaches to identifying their own agendas of work from the list. Some states have early learning legislation in place and will focus on implementation; others need to develop their policy frameworks. And while some states focus more singularly on pre-K, others will want to broaden their policies to include programs such as home visiting that strengthen families and support young children's growth and development.

Another difference among states: Some have highly coordinated and effective governance structures, while others will need to begin by defining leadership in this area. The Commission faced questions of which agencies or individuals should be responsible for each of the recommendations. Several actions will clearly benefit from leadership by the governor or a group of state legislators. Strong leadership from business leaders or nonprofit groups has been powerful in some states. No matter who steps up to lead, states need a framework in place for early learning — bold policies and high standards based on current research — to help children and families build better futures.

Program Quality

Recommendation 1 *Provide incentives to improve quality in early childhood development programs.*

States should:

- 1.1 Develop and regularly update: standards for programs for children from birth to third grade; learning guidelines for children; and practice standards for teachers and classrooms.
- 1.2 Align quality standards for early childhood programs to each other and to K-12 programs, with special attention to aligning standards from pre-K to third grade.
- 1.3 Coordinate funding streams across public and private settings to achieve efficient use of resources and promote high-quality programs for children and families.
- 1.4 Promote effective, evidence-based and developmentally appropriate curricula in early childhood programs.
- 1.5 Establish systematic quality improvement initiatives, such as quality rating systems for child development programs, as well as incentives that reward and improve performance.

Teacher Quality

Recommendation 2

Develop and sustain a high-quality early childhood program workforce that has the competencies to foster the social, emotional and cognitive development of young children.

States should:

- 2.1. Ensure that pre-service early childhood practitioner-training programs at postsecondary institutions provide opportunities for future teachers to develop the specialized competencies they will need to work effectively with young children.
- 2.2 Regularly review, and improve as needed, licensing and professional development requirements for practitioners, to ensure that workforce standards are continuously realigned with program standards.
- 2.3 Ensure that practitioners in early childhood programs have access to high-quality and affordable professional development and that high-impact strategies such as coaching are available for those who need skills to meet program standards or licensing requirements.

Accountability

Recommendation 3

Enact state accountability systems that assess program performance and reward quality.

States should:

- 3.1 Establish assessment systems and strategies that support teachers' and caregivers' instruction, measure children's progress in essential domains of growth and development, and are developmentally appropriate for young children.
- 3.2 Set expectations and performance targets for publicly funded programs, and report outcomes to policymakers and education leaders regularly.
- 3.3 Enact performance-based financing policies that promote continuous improvement and reward quality in early childhood development programs and services.
- 3.4 Align standards, curricula and assessment both horizontally (within a grade level) and vertically (from prekindergarten to the third grade) to maximize the gains for young learners.
- 3.5 Ensure that financing policies call for a full analysis of the various sources of available funding which can inform policy and future investment.
- 3.6 Incorporate early childhood program data into state longitudinal data systems to enhance capacity to track results taking appropriate steps to ensure full security of information about individual students.
- 3.7 Establish cross-agency data analytics systems and processes that inform long-term policy and financing solutions.
- 3.8 Conduct cost-benefit analyses of programs and services to determine the effectiveness of interventions.

Access

Recommendation 4

Provide high-quality early learning services to the groups of young children most likely to benefit from interventions.

States should:

- 4.1 Identify general demographic and economic factors that most interfere with school readiness in the state, and ensure services are available to address the needs of children at risk and their families.
- 4.2 Devise early-warning systems to identify specific groups of children who may benefit from early and sustained interventions those born at low birthweight, for example, and those living with single parents in disadvantaged homes and coordinate networks of support services for them and their families.
- 4.3 Set a goal to serve a high proportion of at-risk children in the state, and establish a plan and timetable for reaching the goal.
- 4.4 Establish eligibility priorities for participation in early childhood programs to target services to the most at-risk students so that available resources meet the greatest need.
- 4.5 Assess statewide needs, and survey programs periodically to determine if the state's early childhood programs are geographically and socioeconomically distributed to meet the state's highest needs.

Governance

Recommendation 5

Establish a comprehensive and integrated framework of policies and programs to support early childhood development in the state.

States should:

- 5.1 Establish a policy and fiscal framework for early childhood development, from birth through 8 years old, as a strategic priority.
- 5.2 Create a statewide cabinet or coordinating council responsible to the governor, legislature or key education or human services leader to provide policy direction and coordinate overall planning for early childhood education in the state.
- 5.3 Conduct a comprehensive budget analysis of all funding streams related to early childhood development, and use the results to coordinate among multiple agencies and maximize the federal, state, local and private resources available for young children and their families.
- 5.4 Recognize early childhood programs as strategic elements of the state's overall economic and cultural development efforts, and include improvement and targeted expansion of these programs as part of any strategic state effort.

A Foundation to Grow on

What we know today about how young children learn builds an inarguable case for making early childhood development a priority in our states. The challenges are complex, but the evidence is compelling.

We know how important the first few months and years are to a child's future, that "skills beget skills." We've learned what quality looks like in teaching and learning environments for young children.

It's time to build on what we've learned, to implement high-quality programs on a large scale, connecting many more children and families to the kind of programs that work. The payoff is a few years ahead, in an educated citizenry and productive workforce.

We know the costs if we *don't* invest now. We're already paying them, in fact, when children need extra services to stay on track in elementary school. When teenagers drop out. When citizens remain unemployed and our tax revenues shrink. And when health care, welfare and criminal justice demand large shares of our state budgets.

Investing now in our youngest lays a sturdy foundation for our investments in education. The sooner the better for a strong start in school and in life.



It's time to build on what we've learned, to implement high-quality programs on a large scale, connecting many more children and families to the kind of programs that work.

SREB Early Childhood Commission

Commission Chair

Steve Beshear, Governor, Kentucky Chair, Southern Regional Education Board, 2013-15

Members of the Commission

Matt Arthur, Deputy Commissioner, Technical College System of Georgia Tamara Barringer, State Senator, North Carolina Melanie Barton, Executive Director, Education Oversight Committee, South Carolina Harry Ray Brooks, State Representative, Tennessee Steve Carter, State Representative, Louisiana Ann Coody, State Representative, Oklahoma Sharon Darling, President and Founder, National Center for Families Learning, Kentucky Joyce Elliott, State Senator, Arkansas Marsha Farney, State Representative, Texas Vivian Davis Figures, State Senator, Alabama John Ford, State Senator, Oklahoma Rolf Grafwallner, Assistant State Superintendent for Early Childhood Development, State Department of Education, Maryland Derrick Graham, State Representative, Kentucky Dolores Gresham, State Senator, Tennessee Sheila Ellis Hixson, State Delegate, Maryland

Janet Howell, State Senator, Virginia Lillian Lowery, Former State Superintendent of Schools, State Department of Education, Maryland Jennifer McClellan, State Delegate, Virginia Fran Millar, State Senator, Georgia Joseph Miro, State Representative, Delaware John Moore, State Representative, Mississippi David Perry, State Delegate, West Virginia John Pruette, Executive Director, Office of Early Learning, Department of Public Instruction, North Carolina Johnnie Roebuck, Former State Legislator and Retired Educator, Arkansas Inez Tenenbaum, Attorney at Law, Nelson Mullins Riley & Scarborough, South Carolina Terry Tolan, Executive Director, Governor's Office of Early Childhood, Kentucky Gray Tollison, State Senator, Mississippi Mike Walsworth, State Senator, Louisiana Mark White, State Representative, Tennessee Mike Wilson, State Senator, Kentucky



Members at the March 2015 Commission meeting in Louisville, Kentucky: (Front, from left) Sharon Darling, Johnnie Roebuck, Vivian Davis Figures, Inez Tenenbaum, Joyce Elliott, Janet Howell. (Back, from left) Derrick Graham, Terry Tolan, John Ford, Steve Carter, Tamara Barringer, Governor Steve Beshear, Dave Spence, Marsha Farney, Rolf Grafwallner, Melanie Barton, Mike Wilson, Matt Arthur.

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The Southern Regional Education Board works with 16 member states to improve public education at every level, from early childhood through doctoral education. A nonprofit, nonpartisan organization based in Atlanta, SREB was created in 1948 by Southern governors and legislatures to advance education and improve the social and economic life of the region. Member states are Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia and West Virginia.