

OCTOBER 2013





GETTING ALL STUDENTS READING BY THIRD GRADE







THE NATIONAL GOVERNORS ASSOCIATION (NGA), founded in 1908, is the collective voice of the nation's governors and one of Washington, D.C.'s, most respected public policy organizations. Its members are the governors of the 55 states, territories, and commonwealths. NGA provides governors and their senior staff members with services that range from representing states on Capitol Hill and before the Administration on key federal issues to developing and implementing innovative solutions to public policy challenges through the NGA Center for Best Practices. NGA also provides management and technical assistance to both new and incumbent governors.

THE NGA CENTER FOR BEST PRACTICES (NGA Center) is the only research and development firm that directly serves the nation's governors and their key policy staff. Governors rely on the NGA Center to provide tailored technical assistance for challenges facing their states, identify and share best practices from across the country, and host meetings of leading policymakers, program officials and scholars. Through research reports, policy analyses, cross-state learning labs, state grants, and other unique services, the NGA Center quickly informs governors what works, what does not, and what lessons can be learned from others grappling with similar issues.

For more information about NGA and the NGA Center, please visit www.nga.org.

Acknowledgments

Anna Lovejoy, an independent early childhood consultant, served as the lead writer for this publication. Amanda Szekely and Albert Wat, Senior Policy Analysts in the Education Division of the National Governors Association compiled background research and drafted and edited the report. Cortney Rowland, Senior Policy Analyst; Richard Laine, Education Division Director; and David Moore, Director of the NGA Center for Best Practices, also contributed to the research, drafting, and/or editing of the report. Elena Waskey and Jodi Omear from the NGA office of communications assisted with the editing and design process.

NGA would like to thank the following individuals for participating in the Early Literacy Expert Roundtable in January 2013 and for reviewing outlines and/or initial drafts of this report: Diane August, Sue Bredekamp, Bobbie Burnham, Dina Castro, Kathy Christie, David Dickinson, Nell Duke, Linda Fandel, Ellen Frede, Theresa Hawley, Rich Long, Ashley Parrott, Kathy Hirsh-Pasek, Nonie Lesaux, Susan Neuman, Barbara O'Brien, Jeanne Paratore, Jada Rupley, Christine Scanlan, Timothy Shanahan, Dorothy Strickland, and Emily Workman. Their participation and input informed this report, but NGA alone is responsible for its contents.

This report is made possible with financial support from the Alliance for Early Success, the Annie E. Casey Foundation, the Heising-Simons Foundation, the Robert R. McCormick Foundation, the David and Lucile Packard Foundation, and an anonymous donor.

Contents

Executive Summary	3	Action 4: education
Part I. Meeting the Imperative to Increase		early lang
Third-Grade Reading Proficiency	7	4.1
		for
Part II. Promoting Reading Proficiency by	-	ad
Third Grade: The Research-Policy Gap	9	an
1. Starting at kindergarten is too late	10	4.2
Reading proficiency requires three sets of interrelated skills and knowledge that are taught and cultivated over time	12	cei po pro
-	12	4.3
Parents, primary caregivers, and teachers have the most influence on children's		4.4
language and literacy development	14	ca
		lite
Part III. Five Policy Actions to Ensure All		4.5
Children Are Reading by Third Grade	17	in
Action 1: Adopt comprehensive language and		de
literacy standards and curricula for early care		Actio
and education programs and kindergarten		contir
through third grade (K-3)	19	5.1
1.1 Ensure B-3rd grade learning standards		res
reflect the three areas of early language		ins
and literacy skills and knowledge	19	5.2
1.2 Align ECE and K-3 curricula and		as
instruction to the B-3rd learning standards	20	me
Action 2: Expand access to high-quality		su int
child care, pre-kindergarten (pre-K), and		5.3
full-day kindergarten	21	to
2.1 Expand access to high-quality		for
child care	21	5.4
2.2 Expand access to high-quality		sys
pre-K programs	23	5.5
2.3 Expand access to high-quality,		su
full-day kindergarten	24	at
Action 3: Engage and support parents		
as partners in early language and literacy		Part IV. Leaderst
development	25	B-3rd Li
3.1 Invest in programs that increase		Use ti
parents' capacity to build their children's	<i>z</i> =	
language and literacy skills	25	Cultiv the ad
3.2 Incorporate parent engagement in		
existing ECE and K-3 policies, practices, and intervention planning	26	Conclusi
and intervention planning	20	

Action 4: Equip professionals providing care and education with the skills and knowledge to support	20
early language and literacy development 4.1 Ensure state professional standards for P-2rd togshore and school loaders	28
for B-3rd teachers and school leaders address all three areas of early language and literacy skills and knowledge	29
4.2 Increase the rigor of teacher certification and program accreditation policies and align them to the B-3rd professional standards	29
4.3 Raise the bar on ECE staff qualifications	31
4.4 Build elementary school principals' capacity to support language and literacy instruction	32
4.5 Set standards to promote investment in evidence-based professional development strategies	32
Action 5: Develop mechanisms to promote continuous improvement and accountability	34
5.1 Strengthen QRIS criteria to promote research-based language and literacy instruction in ECE programs	34
5.2 Develop comprehensive B-3rd assessment systems to appropriately measure children's progress and success, inform instruction, and target interventions as early as possible	35
5.3 Use assessment data appropriately to inform research-based interventions for struggling readers	37
5.4 Develop coordinated ECE and K-12 data systems to support quality improvement	39
5.5 Build the capacity of state agencies to support B-3rd quality improvement efforts at the program, school, and district levels	40
Part IV. What Governors Can Do: Leadership Actions for a Successful	
B-3rd Literacy Agenda	41
Use the bully pulpit to promote a B-3rd agenda	41
Cultivate cross-agency leadership to implement the agenda and communicate results	42
Conclusion: Moving Forward	43



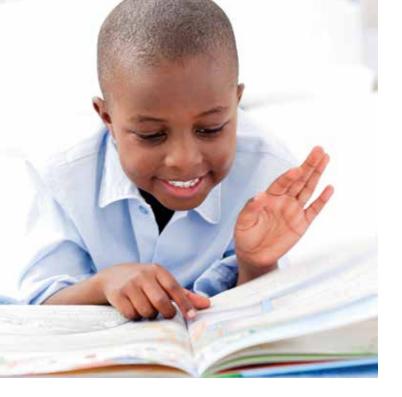
Meeting the Imperative to Increase Third-Grade Reading Proficiency

To increase economic growth and ensure the prosperity of all Americans, the nation must cultivate a future workforce that is highly literate, knowledgeable, and skilled. Education standards in the United States are rising to meet this need, and a critical early benchmark of success is whether students are reading proficiently by the end of third grade. Unfortunately, only onethird of America's fourth-graders are reading proficiently. Students who are not reading on grade level by this point will only fall farther behind their peers, and they are at much higher risk of dropping out of high school. The dropout risk is highest for struggling readers who are poor and living in neighborhoods of concentrated poverty. The individual and social costs of dropping out of high school are well documented, and the nation faces serious consequences if current trends in third-grade reading scores continue. The time is now to redesign this country's approach to language and literacy instruction, and governors who choose to can lead the charge. The purpose of this guide is to examine the gap between research and policy and to describe the five policy actions that governors and other state policymakers can take to ensure that all children are reading on grade level by the end of third grade.

Promoting Reading Proficiency by Third Grade: The Research-Policy Gap

Governors can increase the number of children proficient in reading by third grade in their states by ensuring that their states' efforts in early childhood and elementary education take account of three major and widely embraced results of educational research.

- Starting at kindergarten is too late. Language and literacy development begins at birth, and gaps in achievement appear well before kindergarten entry. Effective early care and education programs for infants, toddlers, and preschoolers can help close the gap.
- Reading proficiency requires three sets of interrelated skills and knowledge that are taught and cultivated over time. Many state policies and practices emphasize mechanics of reading (for example, matching letters to sounds and sounding out whole words) at the expense of other skills. However, proficiency requires more, notably development of oral language skills, an expanding vocabulary, the ability to comprehend what is read, and a rich understanding of real-world concepts and subject matter.
- Parents, primary caregivers, and teachers have the most influence on children's language and literacy development. An effective strategy to increase reading proficiency requires evidence-based policies that support those adults who are in the best position to support children's learning and development.



Those research findings apply to all children regardless of their socioeconomic standing or the language spoken in their homes, but to significantly improve the status quo, state policymakers also will need to address the challenges faced by children in poor families and in households where English is not the primary language.

Five Policy Actions to Ensure All Children Are Reading by Third Grade

Developing and implementing an agenda to ensure that all children are proficient in reading by third grade requires cross-agency and interdisciplinary support, collaboration, and leadership. Governors are the only state leaders who can create that environment, put a spotlight on the issue, and promote five policy actions that are necessary to improve outcomes in their states.

ACTION 1: Adopt comprehensive language and literacy standards and curricula for early care and education programs and kindergarten through third grade (K-3). Through state learning standards and guidance on curricula and instruction for early care and education programs and K-3 grades, governors and other state policymakers can promote a common definition of language and literacy development that reflects the research and pays attention to language and communication skills as well as the mechanics of reading, all within the context of building content knowledge across a range of subjects.

ACTION 2: Expand access to high-quality child care, pre-kindergarten (pre-K), and full-day kindergarten. Research shows that participation in high-quality early care and education programs can increase children's language and literacy skills. Governors can increase and sustain lowincome families' access to high-quality early care and education arrangements by calling for expansions of pre-K and full-day kindergarten. They also can make families with higher incomes eligible for child care subsidies, raise provider rates, and extend the number of months for which families are eligible for assistance. Raising program quality standards while investing in coaching, training, and technical assistance can also improve the quality of early care and education programs. The strength of the research on the academic and financial returns of these early investments suggests that state leaders should consider reallocating existing dollars to expand high-quality early learning opportunities.

ACTION 3: Engage and support parents as partners in early language and literacy development. Governors can call for policies that support parental involvement in children's reading and language development throughout the birth-3rd grade (B-3rd) continuum. To that end, state policymakers can leverage federal funding to expand home visiting programs that promote school readiness and effective parenting practices; pursue public-private partnerships to promote parent-child book reading and build home libraries; and adopt public awareness campaigns targeting parents. Governors also can call for the adoption of standards in state Quality Rating and Improvement Systems (QRISs) for early care and education programs that support stronger language and literacy outcomes. They can also call for policies that encourage or require districts and schools to involve parents in transition planning and designing and implementing interventions for struggling readers.

ACTION 4: Equip professionals providing care and education with the skills and knowledge to support early language and literacy development. Governors can promote early care and education and K-3 professional standards for language and literacy instruction that emphasize the development of language and communication skills, the mechanics of reading, and content knowledge. To ensure that early care and education professionals can meet those standards, governors can call for higher professional qualifications and training, coupled with financial support and incentives to help staff obtain them. State leaders can also consider improving policies (e.g., certification and program accreditation) that influence pre-service preparation for elementary school teachers and principals. Finally, state policymakers can ensure more strategic and effective use of public resources by calling for the adoption of researchbased criteria for investing in professional development.

ACTION 5: Develop mechanisms to promote continuous improvement and accountability. To ensure that investments and policy decisions have the intended effect, governors can ensure that sufficient infrastructure for monitoring and support are in place. For example, governors can call on state agency leaders to incorporate indicators of effective language and literacy practices in measures of quality, like those within QRIS rating criteria for early care and education programs. Governors can call for the development of a B-3rd assessment system that assesses instructional quality and student outcomes reliably, informs data-driven midcourse improvements, and keeps all stakeholders accountable for student outcomes. Such a system should assess the full range of language and literacy skills, be valid for dual language learners, and support professionals in using assessment data appropriately. Governors can support data-informed continuous improvement and accountability by investing in longitudinal data systems that link early childhood data with K-12 data. Finally, they can develop state agency budgets with adequate resources to deliver technical assistance, research and disseminate best practices, and offer incentives that spur local innovations.

Research shows that participation in high-quality early care and education programs can increase children's language and literacy skills.



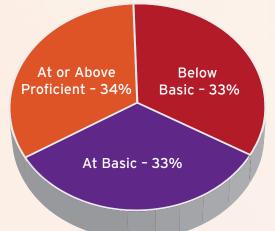
Part I. Meeting the Imperative to Increase Third-Grade Reading Proficiency

he end of third grade is a critical milestone for most students because it marks the point at which they must have mastered foundational language and literacy skills necessary to succeed in other subject areas. Beginning in fourth grade, students are expected to read accurately and fluently, increasing their capacity to understand written text to learn and evaluate new information and, in turn, to generate and communicate ideas.¹

Scores on third-grade reading assessments are early predictors of students' long-term academic achievement. Most third graders reading below grade level have great difficulty catching up with their peers. In fact, they tend to fall farther behind as the complexity of text, subject matter, and concepts increases from grade to grade. Third-grade reading scores are now considered a leading indicator of high school graduation rates. Research shows that struggling readers are at far greater risk of dropping out of high school than their proficient peers, and the risk is highest among non-proficient third-grade readers who are poor and living in neighborhoods of concentrated poverty.²

In today's economy, the consequences of not being able to read by the end of third grade extend beyond high school because dropouts face lifelong barriers to success. Economists project that the economic consequences of school failure are likely to worsen, with as many as two-thirds of jobs in the United States workforce soon





Source: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2011 Reading Assessment.

requiring some level of postsecondary education. High rates of school failure can also be costly to states because dropouts are more likely to receive public assistance and much more likely to be incarcerated, with each high school dropout

¹ See for example: Joseph Torgesen, Debra Houston, Lila Rissman, Marcia Kosanovich, *Teaching All Students to Read in Elementary School: A Guide for Principals*. Florida Center for Reading Research, Florida State University, 2007. Accessed from: http://www.centeroninstruction.org/files/Principals%20Guide%20Elementary.pdf

² Hernandez, Donald J., Double Jeopardy: How Third-Grade Reading Skills and Poverty Influence High School Graduation. The Annie E. Casey Foundation; Center for Demographic Analysis, University at Albany, State of New York; Foundation for Child Development (2012). Accessed from http://www.aecf.org/KnowledgeCenter/Publications.aspx?pubguid=%7b8E2B6F93-75C6-4AA6-8C6E-CE88945980A9%7d. In this study, the researchers used the Peabody Individual Achievement Test and divided the children into three groups whose performance roughly corresponded with the proficient, basic, and below basic levels as defined by the NAEP test.

costing the public sector more than \$292,000 over a lifetime.³

It is alarming, then, that far too many children in the United States are not reaching reading proficiency by the end of third grade. As shown in Figure 1, according to the 2011 National Assessment of Education Progress (NAEP), only a third of America's fourth-graders are proficient readers or better.⁴ One third of the nation's fourth-graders demonstrate only basic reading skills⁵, while another third fall below even the basic achievement level. The statistics are even worse for certain subgroups. More than 80 percent of children qualifying for the free lunch program (a proxy measure for low family income), about 80 percent of all African-American, Hispanic, and Native American children-and more than 90 percent of dual language learners-score below proficiency on the NAEP fourth-grade reading assessment.6

Gubernatorial leadership on this issue has never been more critical. An effective strategy for improving third-grade reading proficiency requires reforms not only in the K-12 system but also in early care and education (ECE), higher education, and family supports. With leadership of the state agencies that oversee these areas, governors are uniquely positioned to promote an ambitious B-3rd policy agenda to confront this challenge.



³ Sum, A. et al, Joblessness and Jailing for High School Dropouts and the High Cost for Taxpayers. Center for Labor Market Studies, Northeastern University (October 2009). Accessed from http://www.northeastern.edu/clms/wp-content/uploads/The_Consequences_of_Dropping_Out_of_High_School.pdf

⁴ According to NAEP, "Fourth-grade students performing at the *Proficient* level should be able to integrate and interpret texts and apply their understanding of the text to draw conclusions and make evaluations." Definition from NAEP Reading Achievement Levels by Grade, 2009 - 2011 Achievement-Level Descriptions, Grade 4. Accessed from http://nces.ed.gov/ nationsreportcard/reading/achieve.aspx#2009_grade4

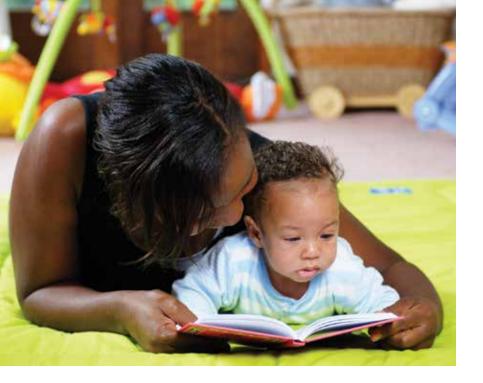
⁵ According to NAEP, "Fourth-grade students performing at the *Basic* level should be able to locate relevant information, make simple inferences, and use their understanding of the text to identify details that support a given interpretation or conclusion. Students should be able to interpret the meaning of a word as it is used in the text." NAEP Reading Achievement Levels by Grade, 2009 - 2011 Achievement-Level Descriptions, Grade 4. Accessed from http://nces.ed.gov/nationsreportcard/reading/achieve.aspx#2009_grade4

⁶U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2011 Reading Assessments. Results data accessed from http://nationsreportcard.gov/reading_2011/nat_g4.aspx

Part II. Promoting Reading Proficiency by Third Grade: The Research-Policy Gap

Decades of research offer clear guidance on what policymakers and practitioners need to do to support children from early childhood through third grade in developing language and literacy skills. Yet, in the following three areas, governors and other state leaders can make decisions that better reflect lessons learned from research.

THE RESEARCH SHOWS:	BUT STATE POLICY:
1. Starting at kindergarten is too late. Language and literacy development begins at birth, and gaps in achievement appear well before kindergarten entry. High-quality early learning experiences can help close the gap.	Does not sufficiently support access by low-income and working families to the type of high-quality early childhood programs that can promote early language and literacy development.
 Reading proficiency requires three sets of interrelated skills and knowledge that are taught and cultivated over time - language and communication skills 	Typically supports a narrower focus on the mechanics of reading within standards, curricula, and assessment and often does not adequately support the full breadth of language and literacy skills among dual language learners.
(e.g., oral language, vocabulary, and comprehension);	
 mechanics of reading (e.g., matching letters to sounds, sounding out whole words, reading with speed and accuracy, etc.); 	
 content knowledge (e.g., knowledge of facts and concepts that informs understanding of new text) 	
3. Parents, primary caregivers, and teachers have the most influence on children's language and literacy development.	Often fails to equip these adults with the skills and knowledge to teach children effectively and support them at all stages of development.



1. Starting at kindergarten is too late.

The research is clear that language and literacy development begins at birth and that gaps in achievement appear well before kindergarten entry.⁷ Children who are strong readers grow up in environments (e.g., homes, communities, ECE programs, and schools) that offer frequent interactions with books and print materials, promote engaging conversations with adults and peers, and expose them to rich content knowledge. From the earliest ages, the quantity and quality (i.e., complexity and warmth) of speech that children hear from adults help children distinguish sounds and words and learn new vocabulary while encouraging their oral language development.

Research shows that participation in high-quality ECE programs can increase children's language and literacy skills before school entry and through at least the elementary grades.⁸There is also evidence that for dual language learners, participation in high-quality ECE programs has particularly large effects on their cognitive development and could potentially reduce the Hispanic-

Caucasian gap in literacy and language skills at school entry significantly.⁹ ECE programs that show positive results tend to support and offer a high degree of verbal stimulation,¹⁰ along with age-appropriate curriculum and diverse materials that encourage hands-on learning and support development across all critical skills and subject areas. Through small group sizes, low staff-child ratios, and staff qualifications and training that include content on child development, these programs promote frequent teacher-child interactions, extended conversations, and the exchange of rich and varied vocabulary.¹¹

⁷ Halle, T., Forry, N., Hair, E., Perper, K., Wandner, L., Wessel, J., & Vick, J. (2009). Disparities in Early Learning and Development: Lessons from the Early Childhood Longitudinal Study – Birth Cohort (ECLS-B) Executive Summary. Washington, DC: Child Trends. Accessed from http://www.childtrends.org/wp-content/uploads/2013/05/2009-52DisparitiesELExecSumm. pdf; Aber, J.L. et al, *Middle Childhood Success and Economic Mobility*. Washington, DC: Center on Children and Families at Brookings, February 2013. Accessed from http://www.brookings. edu/research/papers/2013/02/15-education-success-economic-mobility-aber-grannis-owen-sawhill

⁸ Belfield, C. R., Nores, M., Barnett, W. S., & Schweinhart, L. (2006). The High/Scope Perry Preschool Program: Cost-benefit analysis using data from the age-40 follow-up. *Journal of Human Resources*, 41(1); Barnett, W. S., & Masse, L. N. (2007). Comparative benefit-cost analysis of the Abecedarian Program and its policy implications. *Economics of Education Review*, 26; Reynolds, A J., Temple, J. A., Robertson, D. L., & Mann, E. A. (2002). Age 21 cost-benefit analysis of the Title I Chicago Child-Parent Centers. *Educational Evaluation and Policy Analysis*, 24; Andrews, R. J., Jargowsky, P., & Kuhne, K. (November, 2012). The effects of Texas's pre-kindergarten program on academic performance. Washington, DC: National Center for Analysis of Longitudinal Data in Education Research; Gornley, W. T., Gayer, T., Phillips, D., & Dawson, B. (2005). The effects of universal pre-k on cognitive development. *Developmental Psychology*, 41(6); Wat, A. (2010). The case for pre-k in education reform. Washington, DC: Pew Center on the States; Vandell, D. L., et al. (2010). Do effects of early child care extend to age 15 years? *Child Development*, 81(3); Dearing, E., McCartney, K., & Taylor, B. A. (2009). Does higher quality early child care promote low-income children's math and reading achievement in middle childhood. *Child Development*, 80(5); Loeb, S., Bridges, M., Bassok, D., Fuller, B., Rumberger, R. W. (2007). How much is too much? The influence of preschool centers on children's social and cognitive development. *Economics of Education Review*, 26; Magnuson, K. A., Ruhm, C., Waldfogel, J. (2007). Does prekindergarten improve school preparation and performance. *Economics of Education Review*, 26; Balsky, et al. (2007). Are there long-term effects of early child care. Child Development, 78(2); Camilli, G., Vargas, S., Ryan, S., & Barnett, W. S. (2010). Meta-analysis of the effects of early ducation interventions on cognitive and social development. *Teachers College Record*, 112(3).

⁹ Magnuson, K. A. & Waldfogel, J. (2005). Early childhood care and education: Effects on ethnic and racial gaps in school readiness. *Future of Children*,15(1), Princeton,NJ: Princeton/Brookings. ¹⁰ Cohen, J. and Ewen, D., *Infants and Toddlers in Child Care*. Washington, DC: ZERO TO THREE and the Center for Law and Social Policy, 2008. Accessed from http://main.zerotothree. org/site/DocServer/Infants_and_Toddlers_in_Child_Care_Brief.pdf?docID=6561

¹¹ Hirsh-Pasek, K., & Golinkoff, R.M. (2011) The great balancing act: Optimizing core curricula through playful learning. In E. Zigler, W. & Gilliam S. Barnett (Eds.) The preschool education debates.110-116; Camilli et al., 2010; Dickinson, D. K. and Porche, M. V. (2011). Relation Between Language Experiences in Preschool Classrooms and Children's Kindergarten and Fourth-Grade Language and Reading Abilities. *Child Development*, 82: 870-886; Justice, L. M., Mashburn, A. J., Hamre, B. K., Pianta, R. C. (2008). Quality of language and literacy instruction in preschool classrooms serving at-risk pupils. *Early Childhood Research Quarterly*, 23.

The age at which children start, and the amount of time they spend, in high-quality learning environments also matters. The National Early Literacy Panel found that intervening before age 3 is more advantageous than doing so later.¹² ECE programs that last longer than one year have demonstrated greater effects than a singleyear program.¹³ Full-day kindergarten programs produce more academic and social-emotional gains than half-day programs. These gains are sufficient to narrow the achievement gap between the highest- and lowest-performing students by nearly one-third in reading and by one-fourth in math by the end of the kindergarten year.¹⁴

Finally, transitions and alignment between ECE programs and kindergarten are important.¹⁵ Teachers who have opportunities to engage parents and preschoolers in more interactive activities throughout the year before kindergarten tend to have more positive perceptions of the children, who, in turn, tend to learn more and faster during the kindergarten year.¹⁶ Alignment of early learning and early elementary standards, curricula, and assessments can also promote more consistency in expectations and approaches to teaching and learning between ECE and K-12 systems.¹⁷

Unfortunately, despite the evidence, state policies and investments are too often insufficient to support wide access to high-quality early learning opportunities.¹⁸ About 60 percent of children under age 6 participate regularly in child care or preschool programs, whether in homes, centers, or schools, but the quality of these programs varies.¹⁹ Child care licensing standards in most states fall short of nationally recommended standards for health and safety, provider education, group size and ratios, and other quality measures.²⁰ Even so, child care costs are significant for working families, and restrictive eligibility requirements for public subsidies can put quality care out of reach for many families. State pre-kindergarten programs have expanded and improved in recent years, but access and quality remain uneven across the country.²¹ Many states lack policies that encourage smooth transitions to kindergarten, and they neither fund nor require districts to offer full-day kindergarten. Without opportunities to participate in highquality early learning programs, young children are likely to, and indeed already do, fall through the cracks and miss opportunities to develop to their full potential.

¹⁶ Patton, C. and Wang, J., Ready for Success: Creating Collaborative and Thoughtful Transitions into Kindergarten. Cambridge, MA: Harvard Family Research Project, Harvard Graduate School of Education, 2012. Accessed from http://www.hfrp.org/content/download/4287/116636/file/ReadyForSuccess.pdf

17 Patton, C. and Wang, J. 2012.

¹² Developing Early Literacy: Report of the National Early Literacy Panel. A Scientific Synthesis of Early Literacy Development and Implications for Intervention, 2008. National Institute for Literacy and National Center for Family Literacy, 2008.

¹³ E.g., Loeb et al., 2005; Reynolds et al., 2002; Frede, E., Jung, K., Barnett, W. S., & Figueras, A. (2009). The APPLES blossom: Abbott Preschool Program Longitudinal Effects Study (APPLES), Preliminary results through 2nd Grade. New Brunswick, NJ: National Institute for Early Education Research.

¹⁴ Walston, J. & West, J. (2004). Full-day and half-day kindergarten in the United States: Findings from the Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 (No. NCES 2004-078). Washington, DC: U.S. Department of Education, National Center for Education Statistics., as cited in Kauerz, K. (2010). *Pre-K-3rd*: *Putting Full-Day Kindergarten in the Middle* (Pre-K - 3rd Policy to Action Issue Brief No. 4). New York: Foundation for Child Development. Accessed from http://fcd-us.org/sites/default/files/FINAL%20Kindergarten%20Brief.pdf

¹⁵ Bohan-Baker, M. and Little, P.M.D, The Transition to Kindergarten: A Review of Current Research and Promising Practices to Involve Families. Cambridge, MA: Harvard Family Research Project, 2002. Accessed from http://www.hfrp.org/publications-resources/browse-our-publications/the-transition-to-kindergarten-a-review-of-current-research-and-promising-practices-to-involve-families

¹⁸ We Can Do Better: Child Care Aware® of America's Ranking of State Child Care Center Regulations and Oversight 2013 Update. Arlington: Child Care Aware® of America, 2013. Accessed from http://www.naccrra.org/sites/default/files/default_site_pages/2013/wcdb_2013_final_april_11_0.pdf; The NICHD Study of Early Child Care and Youth Development: Findings for Children Up to Age 4 + Years. National Institute of Child Health and Development, NIH Pub. No. 05-4318, 2006. Accessed from, https://www.nichd.nih.gov/publications/pubs/documents/ seccyd_06.pdf; National Research Council and Institute of Medicine (2000) From Neurons to Neighborhoods: The Science of Early Childhood Development. Jack P. Shonkoff and Deborah A. Phillips, eds. Board on Children, Youth, and Families, Commission on Behavioral and Social Sciences and Education. Washington, D.C.: National Academy Press.

¹⁹ Iruka, I. U., and Carver, P. R. (2006). Initial Results From the 2005 NHES Early Childhood Program Participation Survey (NCES 2006-075). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Accessed from http://nces.ed.gov/pubs2006/2006075.pdf

²⁰ Child Care Aware® of America, 2013.

²¹ Barnett, W.S., Carolan, M.E., Fitzgerald, J., & Squires, J.H. (2013). *The state of preschool 2012: State preschool yearbook*. New Brunswick, NJ: National Institute for Early Education Research. Accessed from http://nieer.org/publications/state-preschool-2012

2. Reading proficiency requires three sets of interrelated skills and knowledge that are taught and cultivated over time.

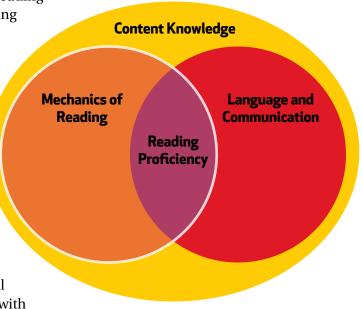
"Reading at grade level" requires more than the ability to sound out words. It requires mastery of three sets of teachable skills and knowledge that develop in concert and are the foundations of language and literacy:²²

- 1. Language and communication skills²³ (e.g., oral language, vocabulary, and comprehension): These skills refer to the readers' ability to gain knowledge from written and spoken words, communicate information, and express ideas orally or in writing. While some of these skills may not be strong early predictors of reading ability, they are critical for reading and listening comprehension and later reading proficiency.²⁴
- 2. Mechanics of reading: These skills relate to readers' knowledge of letters and their associated sounds, their ability to "sound out" words, and their capacity to read words quickly enough to retain the meaning of what is read from the start of a passage to its end.²⁵ With adequate instruction and frequent practice, most children will achieve competency in these skills with

minimal challenges by the end of the early elementary years. Some children, however, may need more intense interventions.²⁶

3. Content knowledge: Children who are knowledgeable about different subjects and the world around them have an easier time understanding what they read, making connections between text and knowledge and drawing inferences and conclusions.²⁷

Research finds that, while children typically develop all of these skills during the first eight years of life, the mastery of language and communication skills is more likely to distinguish good readers from poor readers in the long run.²⁸ These findings imply then that policies and practice across the



²² E.g., Powell, D. R., & Diamond, K. E. (2012). Promoting literacy and language development. In R. C. Pianta, W. S. Barnett, L. M. Justice, & S. M. Sheridan (Eds.), Handbook of early childhood education (pp. 194-216). New York: Guilford.

²³ Some reading experts refer to skills in this first category as "meaning-based" skills, and to those in the second category as "code-based" skills.

²⁴ Dickinson, D. K., Golinkoff, R. M., & Hirsh-Pasek, K. (2010). Speaking out for language: Why language is central to reading development. Educational Researcher, 39(4), 305-310.

²⁵ Foorman, B. R. & Connor, C. M. (2011). Primary grade reading. In M. L. Kamil, P. D. Pearson, E. B. Moje, & P. P. Afflerbach (Eds). *Handbook of Reading Research*, Vol. IV.New York: Taylor & Francis; Lesaux, N. K., *Turning the Page: Refocusing Massachusetts for Reading Success Strategies for improving children's language and literacy development, birth to age* 9.Boston: Strategies for Children, 2012. Accessed from http://www.strategiesforchildren.org/Oreading.html; Farran, D., Aydongan, C., Kanyg, S.J., & Lipsey, M. (2006). Preschool classroom environments and the quantity and quality of children's language and literacy behaviors (pp.257 - 268). In D.K. Dickinson & S.B. Neuman (Eds). *Handbook of Early Literacy Research Vol. II.* New York: Guilford; Dickinson, et al., 2010.

²⁶ Lesaux, 2012; Farran et al., 2006.

²⁷ Neuman, S. B., & Carta, J. J. (2011). Advancing the measurement of quality for early childhood programs that support early language and literacy development. In Zaslow, M., Martinez-Beck, I., Tout, K., & Halle, T. (Eds.). *Quality measurement in early childhood settings*. Baltimore: Brookes Publishing.; Neuman, S. B. (October, 2006). N is for nonsensical. *Educational Leadership*. ²⁸ Lesaux, 2012.

B-3rd continuum should focus on all three sets of skills and knowledge.²⁹ (Developmental science also points to non-linguistic skills that contribute to reading proficiency, as described in the sidebar on page 14.)

Despite this research consensus, however, current policies and practice often focus on the mechanical skills and overlook the other two areas of language and communication skills and content knowledge.³⁰ One reason for this gap may be that state learning standards - whether for ECE programs or K-12 grades - have historically lacked sufficient focus on reading comprehension and content knowledge³¹, although the Common Core State Standards (CCSS) initiative, discussed further on page 19, is prompting state policymakers to address this gap.³² Also, commonly used assessments of children's literacy skills in both early childhood and early elementary settings tend to focus on mechanics of reading rather than language and communication skills.33

Finally, state policymakers need to pay special attention to the unique challenges of dual language learners.³⁴ Dual language learners are

children who learn English while continuing to develop their first language, and they represent a growing population who now make up more than 10 percent of students in K-12 classrooms.35 While dual language learners need to acquire the skills at an early age that all children need in order to become successful readers, evidence shows that the current literacy achievement gap between dual language learners and native speakers usually relates to language and communication skills as opposed to the mechanics of reading (e.g., they can sound out an unfamiliar word but not know its meaning).36 Research also shows that dual language learners' proficiency in language and literacy skills in their home language contributes to their proficiency in English.³⁷ Unfortunately, most curricula and assessments currently used are not effective for dual language learners because they are not typically sensitive to dual language learners' unique English language development trajectory. They also fail to provide teachers with strategies to help dual language learners succeed and promote native language development - both as an end in itself and as a means to increase proficiency in English and content knowledge.38

32 Duke and Block, 2012.

³⁷ August and Shanahan, 2006; Castro, et al., 2011.

²⁹ Wasik, B. H. & Newman, B. A. (2009). Teaching and learning to read. In O. A. Barbarin & B. H. Wasik (Eds). Handbook of Child Development and Early Education. New York: Guilford.

³⁰ Farran et al., 2006; Duke, N. K., & Block, M. K. (2012). Improving reading in the primary grades. In Sawhill, I., Murnane, R., & Snow, C. (Eds.), *Future of Children.* 22(2) Princeton, NJ: Princeton/Brookings; Lesaux, 2012; Wasik, B. H. & Newman, B. A. (2009). Teaching and learning to read. In O. A. Barbarin & B. H. Wasik (Eds). *Handbook of Child Development and Early Education.* New York: Guilford; Dickinson, D. K., Darrow, C., Ngo, S. M., & D'Souza, L. A. (2009). Changing classroom conversations. In O. A. Barbarin & B. H. Wasik (Eds). *Handbook of Child Development and Early Education.* New York: Guilford; Pianta, R. C., et al. (2005). Features of pre-kindergarten programs, classrooms, and teachers: Do they predict observed classroom guality and child-teacher interactions? *Applied Developmental Science*, 9(3): Duke and Block, 2012.

³¹ Scott-Little, C., Kagan, S., and Stebbins Frelow, V., Inside the Content: The Breadth and Depth of Early Learning Standards. Greensboro: SERVE, 2005. Accessed from http://www.serve. org/uploads/publications/insidecontentfr.pdf; Duke and Block, 2012.

³³ Lesaux, 2012; Salinger, T. (2006). Policy decisions in early literacy assessment. In D.K. Dickinson & S.B. Neuman (Eds). *Handbook of Early Literacy Research Vol. II.* New York: Guilford. One exception to this finding is in the area of assessments of teacher practice in early childhood programs. These assessments typically focus on how teachers support children's oral language development, and have only recently begun to assess teachers' ability to promote skills like phonological awareness and letter knowledge. Neuman and Carta, 2011.

³⁴ The term "dual language learners" encompasses other terms frequently used, such as Limited English Proficient (LEP), bilingual, English language learners (ELL), English learners, and children who speak a Language Other Than English (LOTE)." Source: Definition of Dual Language Learners, U.S. Department of Health and Human Services, Administration for Children and Families, Office of Head Start, 2009. Accessed from http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/cultural-linguistic/Dual%20Language%20Learners/dll_%20resources/ ohsdefinitionof.htm.

³⁵ Key Demographics & Practice Recommendations for Young English Learners, Task 5.3.1: Short Turnaround Report. National Clearinghouse for English Language Acquisition & Language Educational Programs, 2011. Accessed from http://www.ncela.gwu.edu/files/uploads/9/EarlyChildhoodShortReport.pdf

³⁶ August, D. & Shanahan, T. (2006). Developing literacy in second-language learners: report of the National Literacy Panel on Language-Minority Children and Youth. Executive Summary. Mahwah, New Jersey: Lawrence Erlbaum Associates, Inc.

³⁸ Neuman and Carta, 2011; Castro, et al., 2011

OTHER SKILLS AND EXPERIENCES THAT SUPPORT LANGUAGE AND LITERACY DEVELOPMENT

Children's physical, cognitive, and social and emotional skills also contribute to reading proficiency. For example, hearing is a sensory skill that supports the ability to differentiate sounds in words. Gross- and fine-motor skills enable children to hold books appropriately, turn pages, hold pencils, and write legibly.³⁹ Strong social and emotional skills (e.g., sharing, playing well with others, and resolving conflicts peacefully) facilitate children's verbal interactions with peers and adults.

Participation in imaginative play, hands-on activities, singing and rhyming, and engaging conversations are all experiences which promote mechanics of reading and the use of language while expanding content knowledge.⁴⁰ Researchers have found children's math skills and the ability to focus attention at kindergarten entry are also predictive of later reading achievement.⁴¹

To raise reading proficiency, policies that address learning standards, curriculum, assessment, educator preparation, and professional development should reflect and promote this broad range of developmental skills and experiences.⁴²

3. Parents, primary caregivers, and teachers have the most influence on children's language and literacy development.

Research shows that parents have the greatest influence on children's language and literacy development. Parental and home environment characteristics that are associated with language and literacy development include: parental expectations regarding reading; frequent and engaging conversations that expose children to a variety of words, complex sentences, and subjects; parent-child shared book reading; and access to high-quality reading material in the home.⁴³

Unfortunately, for reasons ranging from lack of resources and time to their own limited educational backgrounds, low-income parents

are less likely to provide a home environment that fully supports literacy development.⁴⁴ While the research on the importance of parental support and the home environment is unequivocal, state policymakers have struggled to implement and sustain effective strategies to increase parents' capacity to support their children's language and literacy development, especially among those parents who are low-income, have low education levels, speak a home language other than English, or meet other family risk factors. While some community-level initiatives have effectively engaged parents and boosted their capacity, state policymakers have not been able to weave together a comprehensive strategy that is scalable and sustainable.

Second to parents, ECE providers and elementary school teachers are the next-most influential adults

³⁹ Wasik and Newman, 2009

⁴⁰ Snow, C. E., Burns, S. M., & Griffin, P. (Eds.). (1998). Preventing reading difficulties in young children. Washington, DC: National Academy Press.

⁴¹ Duncan, G. J., et al. (2007). School readiness and later achievement. Developmental Psychology, 43(6), 1428-1446.

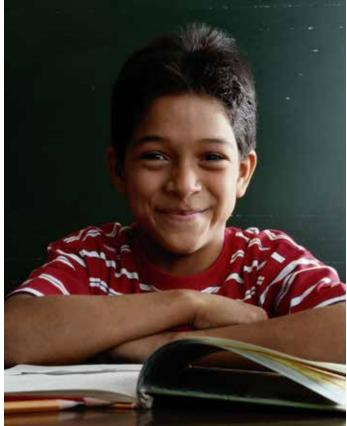
⁴² NAEYC Standards for Early Childhood Professional Preparation: A Position Statement of the National Association for the Education of Young Children. Washington, DC: National Association for the Education of Young Children, July, 2009. Accessed from http://www.naeyc.org/files/naeyc/files/2009%20Professional%20Prep%20stdsRevised%204_12.pdf

⁴³ Snow et al., 1998; Paratore, J. R. (2011). Parents and reading: What teachers should know about the ways they can help. In S. J. Samuels & A. Farstrup (Eds.), What research has to say about reading instruction, 4th ed. (pp. 406-424). Newark, DE: International Reading Association; Hart, B., & Risley, T.R. (1995). Meaningful differences in the everyday experience of young American children. Baltimore, MD: Paul H. Brookes Publishing Co.; Snow, C. E., Barnes, W. S., Chandler, J., Goodman, I. F., & Hemphill, L. (1991). Unfulfilde expectations: Home and school influences on literacy. Cambridge, MA: Harvard University Press; Waldfogel, J. (2012). The role of out-of-school factors in the literacy problem. In Sawhill, I., Murnane, R., & Snow, C. (Eds.), Future of Children. 22(2), Princeton, NJ: Princeton/Brookings.

⁴⁴ Waldfogel, 2012; Murnane, R., Sawhill, I., and Snow, C. (Fall 2012). Literacy Challenges for the Twenty-First Century: Introducing the Issue. In Sawhill, I., Murnane, R., & Snow, C. (Eds.), *Future of Children*. 22(2) Princeton, NJ: Princeton/Brookings.

on children's learning and development.45 Effective educators during the early childhood and K-3 years understand child development and have the knowledge, skills, and dispositions necessary to shape interactive and conversational experiences for children, promote both language and communication skills and mechanics of reading, and expose them to interesting subjects.⁴⁶ These educators also have the support of administrators and principals who are themselves knowledgeable about early childhood development, language and literacy development, and the appropriate use of assessments to inform instruction and support teachers.

Currently, state policies for ECE and early elementary educators' training, professional development, and evaluation are failing to ensure that education professionals are equipped with the necessary skills and knowledge to support reading proficiency.⁴⁷ The result is poor literacy instruction in both early childhood and early elementary classrooms, especially for low-income children.⁴⁸ For example, most ECE teachers in child care or state pre-k programs are not required to have a college degree.⁴⁹ Typically, preparation programs and requirements for early childhood educators, elementary teachers, and principals lack the rigor



needed to ensure effective language and literacy instruction.⁵⁰ Finally, the types of in-service professional development practices and policies which state funds often support, such as isolated workshops or trainings that are disconnected from classroom practice, tend to show limited sustained impact on practice or child outcomes.⁵¹

⁴⁹ Child Care Aware® of America, 2013

⁴⁵ Roskos, K., Rosemary, C. A., & Varner, M. H. (2006). Alignment in educator preparation for early and beginning literacy instruction: a state-level case example. In M. Zaslow & I. Martinez-Beck (Eds.), Critical issues in early childhood professional development (pp. 255-282). Baltimore: Brookes Publishing.

⁴⁶ Strickland, D.S. and Riley-Ayers, S. (April 2006). *Early Literacy: Policy and Practice in the Preschool Years*. National Institute for Early Education Research (NIEER); Castro et al., 2011. ⁴⁷ Justice, L. M., Mashburn, A. J., Hamre, B. K., Pianta, R. C. (2008). Quality of language and literacy instruction in preschool classrooms serving at-risk pupils. *Early Childhood Research Quarterly*, 23; Pianta, R. C. (Winter, 2007). Preschool is school. Education Next; Pianta, R. C., et al. (2005). Features of pre-kindergarten programs, classrooms, and teachers: Do they predict observed classroom quality and child-teacher interactions? *Applied Developmental Science*, 9(3).

⁴⁸In one study, only 15 percent of 700 preschool classrooms achieved a rating at or above even moderate quality on several performance measures. In particular, teacher performance was poorest in the instructional support domain, which covers the extent to which teachers support children's content knowledge, provide helpful feedback, engage children in rich dialogue, and promote both higher-order reasoning and procedural skills. See LoCasale-Crouch, J., et al. (2007). Observed classroom quality profiles in state-funded pre-kindergarten programs and associations with teacher, program, and classroom characteristics. *Early Childhood Research Quarterly*, 22.

⁵⁰ Whitebook, M. and Ryan, S., *Policy Brief - Degrees in Context: Asking the Right Questions about Preparing Skilled and Effective Teachers of Young Children*, National Institute for Early Education Research (NIEER) Policy Brief (Issue 22, April 2011). Accessed from http://nieer.org/publications/policy-matters-policy-briefs/policy-brief-%E2%80%93-degrees-contextasking-right-questions; Maxwell, K. L., Lim, C.-I., & Early, D. M. (2006). Early childhood teacher preparation programs in the United States: National report. Chapel Hill, NC: The University of North Carolina, FPG Child Development Institute, as cited in Castro, D., A Briefing Paper on Dual Language Learners. National Head Start Association Dialog Brief, Volume 14, Issue 2, 2011. Accessed from http://www.nhsa.org/files/static_page_files/FFC09A23-1D09-3519-ADCOCI84F88FE401/NHSA_Dialog_Briefs_V14_2_FA%5B1%5D.pdf; Bornfreund, L. *Getting in Sync: Revamping Licensing and Preparation for Teachers in Pre-K, Kindergarten, and the Early Grades.* Washington, DC: New America Foundation, 2011. Accessed from http://earlyed. newamerica.net/publications/policy/getting_in_sync; Sara Mead, Pre-K-3rd: Principals as Crucial Instructional Leaders. New York: Foundation for Child Development, April 2011.

⁵¹ Dickinson, D.K., and Brady, J.P. (2006). "Toward Effective Support for Language and Literacy Through Professional Development." In Critical Issues in Early Childhood Professional Development, Martha Zaslow and Ivelisse Martinez-Beck (eds). Brookes Publishing Company: Baltimore; Moats, L. (1999). Teaching reading IS rocket science. Washington, DC: American Federation of Teachers.



Part III. Five Policy Actions to Ensure All Children Are Reading by Third Grade

Recent state actions to improve third-grade reading proficiency have relied on a number of interventions for struggling readers, including adding instructional time, using tutors, reducing class size, requiring summer school, notifying parents of difficulties promptly, and retaining students who are deemed to be not reading at grade level. While research suggests that some of these interventions can improve reading outcomes, their effectiveness will be limited without a broader, systemic effort to bridge the gaps between research and current policies discussed above. Success requires an ambitious B-3rd agenda. Governors and other policymakers can take five actions to adopt policies and change systems to better ensure that all children are on track to be strong readers by the end of third grade.

ACTION 1: Adopt comprehensive language and literacy standards and curricula for early care and education programs and kindergarten through third grade (K-3);

ACTION 2: Expand access to high-quality child care, pre-kindergarten (pre-K), and full-day kindergarten;

ACTION 3: Engage and support parents as partners in early language and literacy development;

ACTION 4: Equip professionals providing care and education with the skills and knowledge to support early language and literacy development;

ACTION 5: Develop mechanisms to promote continuous improvement and accountability.

Governors and other state policymakers can execute many of these actions through low-cost policy

changes and/or strategic redeployment of existing funds. Partnerships with business, nonprofit organizations, and philanthropies can support and enhance pieces of the agenda. State policymakers can also leverage many federal funding opportunities, including Title I and Title II of the Elementary and Secondary Education Act; the Individuals with Disabilities Education Act (IDEA); Maternal, Infant, and Early Childhood Home Visitation Program (MIECHV); Early Childhood Comprehensive Services; Investing In Innovation Fund; Race to the Top; and the State Longitudinal Data Systems grant program. While some aspects of the agenda, such as expanding access to high-quality ECE programs, require reallocation of existing funds or new state dollars, research shows such investments can yield important economic returns through more proficient students, a better-prepared workforce, and less spending on remediation in later years.52

⁵² Wat, A. *Dollars and Sense: A Review of Economic Analyses of Pre-K.* Pre-K Now Research Series, May 2007. Accessed from http://www.pewstates.org/uploadedFiles/PCS_Assets/2007/ PEW_PkN_DollarsandSense_May2007.pdf

FIVE POLICY ACTIONS TO ENSURE ALL CHILDREN ARE READING BY THIRD GRADE

Action 1: Adopt comprehensive language and literacy standards and curricula for early care and education programs and kindergarten through third grade (K-3)

- 1.1 Ensure B-3rd learning standards reflect the three areas of early language and literacy skills and knowledge
- 1.2 Align ECE and K-3 curricula and instruction to the B-3rd learning standards

Action 2: Expand access to high-quality child care, pre-kindergarten, and full-day kindergarten

- 2.1 Expand access to high-quality child care
- 2.2 Expand access to high-quality pre-kindergarten programs
- 2.3 Expand access to high-quality, full-day kindergarten

Action 3: Engage and support parents as partners in early language and literacy development

- 3.1 Invest in programs that increase parents' capacity to build their children's language and literacy skills (e.g., home visiting, public-private partnerships to promote parent-child book reading and build home libraries, and early literacy campaigns targeting parents)
- 3.2 Incorporate parent engagement in existing ECE and K-3 policies, practices, and intervention planning

Action 4: Equip professionals providing care and education with the skills and knowledge to support early language and literacy development

- 4.1 Ensure state professional standards for B-3rd teachers and school leaders address all three areas of early language and literacy skills and knowledge
- 4.2 Increase the rigor of teacher certification and program accreditation policies and align them to the B-3rd professional standards
- 4.3 Raise the bar on ECE staff qualifications
- 4.4 Build elementary school principals' capacity to support language and literacy instruction
- 4.5 Set standards to promote investment in evidence-based professional development strategies

Action 5: Develop mechanisms to promote continuous improvement and accountability

- 5.1 Strengthen QRIS criteria to promote research-based language and literacy instruction in ECE programs
- 5.2 Develop comprehensive B-3rd assessment systems to appropriately measure children's progress and success, inform instruction, and target interventions as early as possible
- 5.3 Use assessment data appropriately to inform research-based interventions for struggling readers
- 5.4 Develop coordinated ECE and K-12 data systems to support quality improvement (e.g., link teacher and program data to child outcome data, link child outcome data across ECE programs, and link ECE data to the K-12 longitudinal data system)
- 5.5 Build the capacity of state agencies to support B-3rd quality improvement efforts at the program, school, and district levels (e.g., invest in a state-level support system for districts, research and promote best practices across the state, and create incentives to spur local innovations)

Action 1: Adopt comprehensive language and literacy standards and curricula for early care and education programs and kindergarten through 3rd grade (K-3)

Action 1 includes the following recommendations:

- 1.1 Ensure B-3rd learning standards reflect the three areas of early language and literacy skills and knowledge
- 1.2 Align ECE and K-3 curricula and instruction to the B-3rd learning standards

A successful B-3rd literacy agenda rests on a foundation of research-informed learning standards that reflect the three necessary sets of skills and knowledge: language and communication, mechanics of reading, and content knowledge. The standards must recognize that these skills develop over time and are best taught in the context of curricula that expose children to rich content areas (including science and math). They can inform policies addressing curricula and assessment, promote more effective instruction, and ensure continuity of standards and practices between ECE and K-3 (aligning the "front end" of the P-20 pipeline).

1.1 Ensure B-3rd learning standards reflect the three areas of early language and literacy skills and knowledge

All states currently have learning standards for pre-K, and 45 states have learning standards for infants and toddlers.⁵³ Meanwhile, 46 states have adopted and are implementing the English language arts standards of the CCSS for K-12 education, which reflect the importance of both language and communication skills and the mechanics of reading. The CCSS also emphasize building content knowledge by placing language and literacy instruction in the context of multiple subject areas. Stakeholders in many states are currently revising their early learning standards to better reflect both the science of child development and the expectations of the CCSS. In doing so, state leaders can act to ensure that these standards address all aspects of language and literacy development and consider the unique needs of dual language learners.54 To support implementation, state policymakers can develop guidance for professionals who provide care and education.

California's preschool learning standards for language and literacy encompass both language and communication skills and the mechanics of reading, as well as interest in reading and writing strategies. State guidance explicitly directs preschool teachers to infuse language and literacy instruction across subject areas to build content knowledge. The preschool learning standards also include a distinct set of standards and guidance related to dual language learners.⁵⁵

⁵³ B. Gebhard (personal communication, July 13, 2013)

⁵⁴ Strickland and Riley-Ayers, 2006; Paratore, 2011.

⁵⁵ To view California's Preschool Learning Foundations, visit http://www.cde.ca.gov/sp/cd/re/documents/preschoollf.pdf. To view the Preschool Curriculum Frameworks, visit http://www.cde.ca.gov/sp/cd/re/documents/psframeworkkvoll.pdf. To view Preschool English Learners: Principles and Practices to Promote Language, Literacy and Learning, visit http://www.cde.ca.gov/sp/cd/re/documents/psenglearnersed2.pdf.

Colorado updated its standards to align with the CCSS, developing enhanced standards for pre-K through second grade. These standards address oral expression and listening, reading for all purposes, writing and composition, and research and reasoning. Additional concepts like "Relevance and Application" recognize the importance of content knowledge and promote the integration of reading instruction across all subject areas.⁵⁶ To address the unique learning needs of dual language learners, Massachusetts has developed infant-toddler language and literacy guidelines for dual language learners, as well as guidance for professionals serving dual language learners from birth through the third grade.⁵⁷ In addition, the state's department of early education and care is working with the World-Class Instructional Design and Assessment (WIDA) initiative to develop pre-K English language development standards.

RESOURCES ON EARLY LEARNING STANDARDS FOR INFANTS AND TODDLERS AND DUAL LANGUAGE LEARNERS

Early Learning Guidelines for Infants and Toddlers: Recommendations for States from ZERO TO THREE (2008). http://www.del. wa.gov/publications/development/docs/ ZerotoThree_guidelines.pdf

Dual Language Learners in State Early Learning Guidelines and Standards from the Office of Head Start. http://eclkc.ohs.acf. hhs.gov/hslc/tta-system/cultural-linguistic/ center/state-guidelines/dll_guidelines.html.

Early English Language Development Standards, World-Class Instructional Design and Assessment[™]. http://www.wida.us/ standards/eeld.aspx

1.2 Align ECE and K-3 curricula and instruction to the B-3rd learning standards

State policy can also articulate research-based criteria for curriculum and instruction in ECE and K-3 settings so that they align to the B-3rd learning standards. This would promote effective language and literacy instruction, build continuity of practice across settings, and support children's smooth transition into kindergarten.58 As discussed later in Action 5, the standards could also inform a comprehensive assessment system to monitor children's progress and success in all three areas of language and literacy development. It also is important to note that a quality curriculum alone is not sufficient. Teachers also need rigorous preparation programs, professional development, and other supports to help them turn great curricula into great instruction.⁵⁹ (A complete discussion of professional development follows in Action 4 on page 29).

Massachusetts law established an early literacy expert panel to make recommendations about appropriate literacy curricula for ECE and K-3 that support all three aspects of language and literacy instruction. The law specifies that an acceptable curriculum "is anchored in rich content," uses a wide variety of types of text to convey the content, emphasizes oral language and discussion, and supports instruction in language and communication skills and mechanics of reading.⁶⁰ New Jersey has aligned its standards, curricula, and assessments from pre-K through third grade and provides training for school administrators and teachers to support their implementation. Connecticut's 2012 education reform law requires that the state put a system in place to facilitate sharing of information regarding

⁵⁶ To review the Colorado standards, visit http://www.cde.state.co.us/CoReadingWriting/Documents/RWC_Standards_2010.pdf

⁵⁷ To view the Massachusetts infant-toddlers guidelines for dual language learners, visit http://www.eec.state.ma.us/docs1/Workforce_Dev/Layout.pdf . To view the accompanying guidance document, visit http://www.eec.state.ma.us/docs1/Workforce_Dev/Layout.pdf . To view the accompanying guidance document, visit http://www.eec.state.ma.us/docs1/Workforce_Dev/Layout.pdf . To view the accompanying guidance document, visit http://www.eec.state.ma.us/docs1/Workforce_Dev/Layout.pdf . To view the accompanying guidance document, visit http://www.eec.state.ma.us/docs1/Workforce_Dev/Layout.pdf . To view the accompanying guidance document, visit http://www.eec.state.ma.us/docs1/Workforce_Dev/Layout.pdf . To view the accompanying guidance document, visit http://www.eec.state.ma.us/docs1/Pegs_policies/20101203_dual_language_education_policies.pdf.

⁵⁸ Patton, C. and Wang, J., 2012.

⁵⁹ Dickinson, D. K. (2011). Teachers' language practices and academic outcomes of preschool children. Science 333 and Justice et al., 2008.

⁶⁰ Chapter 287 of the Acts of 2012. An Act relative to third grade reading proficiency. Accessible at http://www.malegislature.gov/Laws/SessionLaws/Acts/2012/Chapter287.

students' language and vocabulary skills between pre-K and kindergarten teachers.⁶¹

Governors should bear in mind that typical curricula and approaches to instruction may not be appropriate for dual language learners. State agency leaders may consider contracting with experts to develop materials that ECE and K-3 teachers can use to serve this population effectively. In New York, for example, as the state education agency works with expert curriculum developers to create curricula that are aligned to the CCSS for English language arts and mathematics, it is also requiring the contractors to create supports that help teachers better serve dual language learners and children with special needs and to draw on dual language learner experts and English-as-a-second-language and bilingual teachers to provide quality assurance for these products.⁶²

Action 2: Expand access to highquality child care, pre-kindergarten, and full-day kindergarten

Action 2 includes the following recommendations:

- 2.1 Expand access to high-quality child care
- 2.2 Expand access to high-quality pre-kindergarten programs
- 2.3 Expand access to high-quality, full-day kindergarten

Governors and other state policymakers can use many policy levers to expand families' access to high-quality early learning experiences. All states regulate home- and center-based child care for both young and school-age children and provide financial assistance to low-income families to access child care while parents work. Most states also invest in pre-K programs for 4-year-olds (and in some cases 3-year-olds), and some fund full-day kindergarten as well. While the recent recession and tight budgets have slowed policy advances in early learning, state policies to promote the supply and quality of ECE opportunities are critical to improve reading proficiency by third grade. The potential of ECE programs to reduce later spending on remediation (e.g., grade retention) and special education and help boost graduation rates and future earnings63 suggests that reallocating existing state funds to support early learning opportunities could be a prudent use of public resources.

2.1 Expand access to high-quality child care

In recent years, many state policymakers have made tough budget decisions that have restricted low-income families' access to ECE programs. For example, decision-makers in several states have lowered income eligibility limits for child care subsidies, and administrating agencies in 23 states now have waiting lists or have stopped intake for new subsidy recipients. For families who do receive subsidies, provider reimbursement rates in all but one state are lower than the federally recommended level, making it more difficult for providers to support quality

⁶¹ State of Connecticut Public Act No. 12-116, Sec. 96, An Act Concerning Educational Reform. Accessed from http://www.cga.ct.gov/2012/ACT/PA/2012PA-00116-R00SB-00458-PA.htm

⁶² A. Benjamin-Gomez (personal communication, May 28, 2013).

⁶³ Barnett, S.W., Jung, K., Youn, M. and Frede, E.C., *Abbott Preschool Program Longitudinal Effects Study: Fifth Grade Follow-Up*. National Institute for Early Education Research, March 2013. Accessed from http://nieer.org/sites/nieer/files/APPLES%205th%20Grade.pdf; Schweinhart, L.J., Xiang, Z., Daniel-Echols, M., Browning, K., & Wakabayashi, T. *Michigan Great Start Readiness Program Evaluation 2012: High School Graduation and Grade Retention Findings*, HighScope Educational Research Foundation, 2012. Accessed from http://www.highscope.org/ file/Research/state_preschool/MGSRP%20Report%202012.pdf; Karoly, L.A., Kilburn, M.R., Cannon, J., Early Childhood Interventions: Proven Results, Future Promise. RAND Corporation, 2005; Reynolds, A.J., Temple, J.A., White, B., Ou, S., Robertson, D.L. (201). Age 26 Cost-Benefit Analysis of the Child-Parent Center Early Education Program. *Child Development*, 82(1).



services and instruction.⁶⁴ Finally, the common policy requiring renewal of a family's eligibility for subsidy more frequently than once a year often disrupts the continuity of care that children receive. These policy decisions compromise the quality of ECE services while pushing low-income families into an unregulated market. Governors and other state policymakers can consider a number of policy options to ensure that working families have access to a sufficient supply of high-quality child care. Research suggests the following best practices:

Setting family income eligibility limits for subsidized child care at up to 85 percent of the state median income (or 200 percent of the federal poverty level, or FPL) and adjusting annually for inflation;

- Ensuring sufficient funding to eliminate waiting lists;
- Capping family copayments for child care subsidies at 10 percent of family income; and
- Setting provider reimbursement rates at the 75th percentile of current market rates to ensure families have adequate choice of providers in their communities.⁶⁵

Despite continuing tight fiscal conditions, some states are taking action to improve access to quality child care. For example, **Washington** increased its income eligibility limit from 175 percent of the 2011 FPL to 200 percent of the 2012 FPL. **South Dakota** recently adjusted its reimbursement rate for inflation to bring it in line with the 75th percentile of 2010-2011 market rates.⁶⁶

State child care licensing, monitoring, and family income eligibility policies also affect child care quality. Program characteristics that are particularly relevant to language and literacy development include: adult-child ratios, group sizes, staff's training requirements, alignment of services to early learning standards, and family engagement.⁶⁷ State policymakers can consider raising licensing policies to better reflect nationally recommended standards. (See sidebar for links to these standards.) For example, **Minnesota** requires 40 hours of annual training for licensed center-based providers on topics including child development and learning activities.⁶⁸

⁶⁴ Schulman, K. and Blank, H. Downward Slide State Child Care Assistance Policies 2012. Washington: DC, National Women's Law Center, 2012. Accessed from http://www.nwlc.org/ resource/downward-slide-state-child-care-assistance-policies-2012

⁶⁵ These policy recommendations are based on available research and analysis by the National Center for Children in Poverty. For more information, see *Improving the Odds for Young Children: User Guide to the State Policy Profiles,* New York: National Center for Children in Poverty, Columbia University School of Public Health, available at http://www.nccp.org/publications/pdf/download_230.pdf.

⁶⁶ Schulman and Blank, 2012.

⁶⁷ See for example, National Resource Center for Health and Safety in Child Care and Early Education (Caring for Our Children 3rd Edition) available at http://nrckids.org/CFOC3/; the "Program and Oversight Benchmarks" within We Can Do Better: 2013 Update: Child Care Aware® of America's Ranking of State Child Care Center Regulation and Oversight available at http://www.naccrra.org/sites/default/files/default_site_pages/2013/wcdb_benchmarks_O40813.pdf and within Leaving Children to Chance: 2012 Update: Child Care Aware® of America's Ranking of State Standards and Oversight of Small Family Child Care Homes, accessed from http://www.naccrra.org/sites/default/files/default_site_pages/2012/tcc_benchmarks_o40813.pdf gdf; and standards established by accreditation bodies such as the National Association for the Education of Young Children (NAEYC) available at http://www.naetcc.org/media/pdf/accreditation/NAFCCQualityStandardswith2013Updates.pdf.

⁶⁸ We Can Do Better: Child Care Aware[®] of America's Ranking of State Child Care Center Regulations and Oversight - 2013 Update (2013). Child Care Aware[®] of America, accessed from http://www.naccrra.org/node/3025

NATIONALLY RECOMMENDED STANDARDS FOR QUALITY CHILD CARE

We Can Do Better: 2013 Update - Child Care Aware® of America's Ranking of State Child Care Center Regulations and Oversight, 2013 http://www.naccrra.org/sites/default/ files/default_site_pages/2011/supporting_ tables_041211-3.pdf.

Caring for Our Children 3rd Edition, National Resource Center for Health and Safety in Child Care and Early Education, 2013 http://nrckids.org/CFOC3/

National Association for the Education of Young Children (NAEYC) Accreditation Standards and Criteria, 2006 http://www. naeyc.org/academy/primary/standardsintro

National Association for Family Child Care (NAFCC) Accreditation Standards, 2013 http://www.nafcc.org/media/ pdf/accreditation/NAFCCQuality Standardswith2013Updates.pdf

Because stable and nurturing relationships are critical to young children's learning and development, policymakers may also consider setting family income eligibility determination requirements that promote greater continuity of care. For example, **Rhode Island** and **Washington** recently lengthened the eligibility period to 12 months (instead of the typical six). Decisionmakers in other states have expanded the definition of "work" to include job search. The U.S. Department of Health and Human Services provided additional guidance to encourage more stable ECE arrangements in a recent memo to state child care administrators.⁶⁹

Governors should bear in mind the need to provide resources (e.g., financial incentives, technical assistance, and coaching) to help providers reach higher standards. Many states are doing so through their QRIS. A QRIS provides parents and the ECE field a common understanding of program quality standards and a path to reach them. It rates ECE providers according to these standards (e.g., programs can earn 1 to 4 "stars"), serves as an accountability measure, and provides financial incentives and technical support for quality improvement (e.g., higher reimbursement rates and incentive grants). Early evidence suggests that a well-designed QRIS that combines clear standards with effective supports is able to raise quality in the child care market.⁷⁰ Recommendations for using a QRIS as a policy lever to improve reading proficiency appear in later sections of this document.

2.2 Expand access to high-quality pre-kindergarten programs

Over the last decade, policymakers in many states have acted to dramatically expand children's access to publicly funded pre-K programs for 4-year-olds and have made steady progress in raising standards for program quality. Promising results from **Michigan**, **New Jersey**, and other states demonstrate that state investments yield significant early gains in children's academic and social development that last through elementary school.⁷¹ However, in 2012, only 4 percent of 3-year-olds and 28 percent of 4-year-olds were enrolled in state-funded pre-K programs. Ten states have no investments in preschool. Furthermore, while pre-K policies have higherquality standards than child care policies, recent

⁶⁹ The federal Administration for Children & Families recently issued an Information Memorandum highlighting the importance of stable, nurturing relationships to very young children and recommending several policies that state agencies can adopt to support continuity of care in non-parental child care settings. (*Policies and Practices that Promote Continuity of Child Care Services and Enhance Subsidy Systems*, Administration for Children & Families, Office of Child Care, Information Memorandum: CCDF-ACF-IM-2011-06, 2011). Accessed from http:// www.acf.hhs.gov/programs/occ/resource/im2011-06.

⁷⁰ Elicker, J. & Thornburg, K. R. (2011). Evaluation of Quality Rating and Improvement Systems for Early Childhood Programs and School-Age Care: Measuring Children's Development, Research-to-Policy, Research-to-Practice Brief OPRE 2011-11c. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children & Families, U.S. Department of Health and Human Services. http://www.acf.hhs.gov/sites/default/files/opre/improv_systems.pdf

⁷¹ Barnett, S.W., Jung, K., Youn, M. and Frede, E.C., *Abbott Preschool Program Longitudinal Effects Study: Fifth Grade Follow-Up.* National Institute for Early Education Research, March 2013. Accessed from http://nieer.org/sites/nieer/files/APPLES%205th%20Grade.pdf; and Schweinhart, L.J., Xiang, Z., Daniel-Echols, M., Browning, K., & Wakabayashi, T. Michigan Great Start Readiness Program Evaluation 2012: High School Graduation and Grade Retention Findings, HighScope Educational Research Foundation, 2012. Accessed from http://www.highscope. org/file/Research/state_preschool/MGSRP%20Report%202012.pdf

budget cuts have weakened some standards in many states.⁷²

Governors and other policymakers in several states have recognized that high-quality pre-K programs are a critical plank of a literacy agenda. Colorado, Kentucky, and Wisconsin include pre-K and other ECE settings as a prominent part of their statewide literacy plans.73 To improve early literacy and learning outcomes, Minnesota's department of education is using its Race to the Top – Early Learning Challenge grant to provide technical assistance and incentive funds to targeted districts to encourage them to use Title I funds to increase pre-K quality and enrollment. As state investments in such programs rise, policymakers can consider putting in place requirements for high-quality standards (such as those promoted by the National Institute for Early Education Research), developing systems to monitor and support instructional quality, and contracting with third-party evaluators to examine these programs' impact on children's learning and development.

2.3 Expand access to high-quality full-day kindergarten

Governors seeking to ensure that all kindergartners can meet the demands of the CCSS and are reading proficiently by third grade should consider investing in expanded access to high-quality full-day kindergarten programs. Currently, only 11 states require districts to provide full-day kindergarten, and five states do not even have a mandate that districts provide half-day kindergarten.⁷⁴

To spur expansion, policymakers in some states successfully added full-day kindergarten to the school funding formula at the same level or higher than that for first grade. Delaware passed legislation in 2006 to require all districts to offer full-day kindergarten. Programs are funded at the same level as first through third grades, and districts must provide at least six hours per day of instruction. Legislation in other states authorizes use of state funds to provide incentives to districts to offer full-day kindergarten or encourage districts and schools to use other sources of funding, such as federal Title I funds. Under the Colorado READ Act, full-day kindergarten is an allowable use of the state's Early Literacy Grant Program.75

State policy can also promote consistently high levels of quality in full-day kindergarten through: consistent standards for the number of days and length of instruction time, teacherchild ratios and group sizes, and policies guiding curriculum, assessments, teacher certification, and professional development.⁷⁶ In New Mexico, voluntary full-day kindergarten was phased-in over five years, with initial funding prioritized for districts with higher populations of at-risk students. Although not required, all districts now offer full-day programs. The state requires programs to be at least 5.5 hours per day with a maximum group size of 20. Teachers with more than 14 students are entitled to a teaching assistant.

72 Barnett, et al, 2013.

⁷³ For more information on Colorado, visit http://earlychildhoodcolorado.org; on Kentucky, visit http://education.ky.gov/curriculum/lit/Documents/LiteracyPlanForKentucky.pdf; and on Wisconsin, visit http://walker.wi.gov/education/read-to-lead.

⁷⁴Workman, E., *Inequalities at the Starting Line: State Kindergarten Policies.* Denver: Education Commission of the States, 2013. Accessed from http://www.ecs.org/clearinghouse/01/06/78/10678,pdf ⁷⁵ For more information, see Colorado House Bill 12-1238, available at http://www.leg.state.co.us/clics/clics2012a/csl.nsf/fsbillcont3/BE80872E0CC93D2987257981007DC105?Open&f ile=1238_enr.pdf.

⁷⁶ More information state policies to support full-day kindergarten is available from the Education Commissions of the States, Full Day Kindergarten: What States Are Doing, accessible at http://www.ecs.org/html/lssueSection.asp?issueid=260&subissueid=285&ssID=0&s=What+States+Are+Doing.

Action 3: Engage and support parents as partners in early language and literacy development

Action 3 includes the following recommendations:

- 3.1 Invest in programs that increase parents' capacity to build their children's language and literacy skills (e.g., home visiting, publicprivate partnerships to promote parent-child book reading and build home libraries, and early literacy campaigns targeting parents)
- 3.2 Incorporate parent engagement in existing ECE and K-3 policies, practices, and intervention planning

State policies can set the expectations and encourage the conditions to involve parents as partners to ensure their children are strong readers by third grade. In addition, state policymakers can invest in strategies to provide additional support to those families who might need more help to cultivate their children's language and literacy development at home.

3.1 Invest in programs that increase parents' capacity to build their children's language and literacy skills

All parents benefit from information and guidance on how to best support their children's development, and some parents need additional support to develop their full capacity in this role. For parent-targeted interventions to have an impact on reading outcomes, research suggests that the strategy needs to model specific skills and behaviors that are meaningful and practical for the parents. In addition, the interventions must be sustained and intense enough to help parents develop the capacity and continued motivation to use them.⁷⁷ For parents who are not English speakers, it is also important that they know that developing their children's language and literacy skills in their home language can contribute to their English acquisition.⁷⁸

Governors and other state leaders have taken several approaches to bolster parents' skills, knowledge, and capacity to be their children's first teachers. Though not exhaustive, some examples of these efforts include:

3.1a) Home visiting programs to promote school readiness and effective parenting **practices.** Evidence is mounting that home visiting programs yield lasting improvements in children's developmental and academic outcomes.⁷⁹ State policymakers have a particularly critical opportunity to integrate home visiting into a comprehensive early language and literacy agenda under the \$1.5 billion federal MIECHV Program. State policymakers can prioritize expansion of home visiting models that equip parents with skills and knowledge to support their children's language and literacy development.⁸⁰ For example, North Carolina's Transformation Zone strategy targets high-need, rural counties with interventions such as the Triple P (Positive Parenting Program),

⁷⁷ Paratore, J., Cassano, C., & Schickedanz, J. (2010). Supporting Early (and Later) Literacy Development at Home and at School: The Long View. In M. Kamiil, P. D. Pearson, E. Moje, & P. Afflerbach (Eds.), Handbook of Reading Research, Vol. 4. (pp. 107-135). NY: Routledge Education.

⁷⁸ August, D. & Shanahan, T. (2006). Developing literacy in second-language learners: report of the National Literacy Panel on Language-Minority Children and Youth. Executive Summary. Mahwah, New Jersey: Lawrence Erlbaum Associates, Inc.

⁷⁹ Deborah Daro, Home Visitation: Assessing Progress, Managing Expectations (Chicago, IL: University of Chicago, Chapin Hall Center for Children, and Ounce of Prevention Fund, 2006); Kirkland, K. and Mitchell-Herzfeld, S., Evaluating the Effectiveness of Home Visiting Services in Promoting Children's Adjustment in School. New York: New York State Office of Children and Family Services, Bureau of Evaluation and Research, 2012. Accessed from http://www.pewstates.org/uploadedFiles/PCS_Assets/2013/School_Readiness_report.pdf; Peterson, C. A. et al, Family Participation and Involvement in Early Head Start Home Visiting Services: Relations with Longitudinal Outcomes, Des Moines: Iowa State University, 2013. Accessed from http://www.pewstates.org/uploadedFiles/PCS_Assets/2013/Early_Head_Start_Evaluation_report.pdf;

⁸⁰ The federal Maternal and Child Health Bureau identifies the following evidence-based practices that have demonstrated impacts on school readiness outcomes: Child FIRST, Early Head Start-Home Visiting, Early Start (New Zealand), Family Check-Up, Healthy Families America, Home Instruction for Parents of Preschool Youngsters (HIPPY), Nurse Family Partnership, Oklahoma's Community-based Family Resource and Support Program, Parents as Teachers and Play and Learn Strategies, and Project 12-Ways/SafeCare. For more information visit MCHB's Home Visiting Evidence of Effectiveness website at http://homvee.acf.hhs.gov/programs.aspx

a multi-level, evidence-based parenting and family support system, and programs such as Motheread/Fatheread and Reach Out and Read to help parents and community members support children's literacy development.⁸¹ Providence Talks, an innovative pilot in Providence, **Rhode Island,** seeks to help new low-income parents support their children's language development. With a \$5 million innovation prize from the Bloomberg Philanthropies' Mayors Challenge, the program will record daily parent–child verbal interactions to inform monthly coaching sessions conducted by home visitors.⁸²

3.1b) Public-private partnerships to promote parent-child book reading and build home libraries. Agency leaders in several states are partnering with national initiatives such as Reading Is Fundamental and First Book to distribute books to families and promote more frequent and effective reading by parents to their children.⁸³ In Washington, the state Department of Early Learning and Thrive by Five partnered with Reach Out and Read, which involves pediatricians and other health professionals sharing effective reading practices with new parents as part of the developmental screening process and well-baby visits.⁸⁴ Massachusetts established a public-private partnership with IBM to supplement existing adult education programs with computers and software that help strengthen parents' and family members' language and literacy skills and give them tools to support their children's reading and language development.⁸⁵ State officials are also working with the Boston Children's Museum, the local PBS

station, and the state library association to give families and library and museum professionals the skills and tools they need to support early literacy development.⁸⁶

3.1c) Public awareness campaigns targeting parents. Washington developed a public engagement campaign targeting parents called "Love, Talk, Play," which provides everyday family activities that are aligned with the state's B-3rd early learning standards. The campaign disseminates information to families through regional early learning coalitions, a website with informational videos and materials, an email service, and social media.⁸⁷ The standards are written in accessible language and include activities that parents can do with children to promote their language and literacy skills and support their physical, cognitive, social and emotional development.⁸⁸

3.2 Incorporate parent engagement in existing ECE and K-3 policies, practices, and intervention planning

Parents can provide valuable information to programs and schools about their children's strengths, needs, and past experiences in language and literacy development as well as other areas. Ongoing communication and engagement activities throughout the year are important to sustain and strengthen parents' roles as teachers and advocates.⁸⁹ In a number of states, decision-makers have built family engagement standards into their QRIS criteria for ECE programs. **New York's** QRIS specifies family engagement standards related to regular,

⁸¹ Race to the Top - Early Learning Challenge: Annual Performance Report, CFDA Number: 84.412, North Carolina Year 1: 2012. U.S Department of Education, 2013. Accessed from http:// www2.ed.gov/programs/racetothetop-earlylearningchallenge/annual-performance-reports/ncfinalapr.pdf

⁸² For more information, visit http://mayorschallenge.bloomberg.org/index.cfm?objectid=EB68F7C0-8B47-11E2-92C8000C29C7CA2F

⁸³For more information, visit http://www.firstbook.org; http://www.rif.org

⁸⁴ For more information, visit http://www.reachoutandreadwa.org/index.php

⁸⁵ For more information, visit http://www.mass.gov/edu/government/departments-and-boards/department-of-early-education-and-care/press-releases/2012/support-early-literacyprograms-for-families.html

⁸⁶ For more information, visit http://www2.ed.gov/programs/racetothetop-earlylearningchallenge/performance.html.

⁸⁷ For more information, visit http://lovetalkplay.org/

⁸⁸ Washington State Early Learning and Development Guidelines, Birth through 3rd Grade. Olympia, WA: Washington State Department of Early Learning. Accessed from http://www.del. wa.gov/publications/development/docs/guidelines.pdf

⁸⁹ Bohan-Baker, M. and Little, P.M.D, 2002.

ongoing communication with families, family involvement and support, and transitions. They also acknowledge the importance of supporting children and families in their home language.⁹⁰ **Colorado**'s QRIS requires programs to use a family questionnaire to collect information about their child's activities, interests, and behavior at home and the parents' goals for the child. ECE programs are evaluated on the extent to which they provide parents with information about their children's progress, family education and support services, opportunities to give feedback, etc.

RESOURCES TO INFORM PARENT ENGAGEMENT STANDARDS IN ECE

State Approaches to Integrating Strengthening Families into Quality Rating and Improvement Systems, Center for the Study of Social Policy, 2013. This document describes how state leaders are using the Strengthening Families™ approach to inform their QRIS standards so that ECE programs engage parents as partners, build parents' capacity to support their children's learning, and help families build five protective factors that promote children's optimal development (parental resilience, social connections, knowledge of parenting and child development, concrete supports in times of need, and the social and emotional competence of children). http://www.cssp.org/reform/ strengthening-families/resources/gris/ Strengthening-Families-in-QRIS.pdf

Head Start Parent, Family, and Community Engagement Framework, Head Start National Center on Parent, Family, and Community Engagement, 2012. This document is a roadmap for Head Start and other ECE programs to promote parent and family engagement and achieve key outcomes for families. http://eclkc.ohs.acf. hhs.gov/hslc/tta-system/family/center.

Transition points, such as children's entry into ECE programs or kindergarten, offer particular opportunities to establish positive relationships with parents, gather important information, and engage them in decisions about their children's education. State policy can encourage or require districts and schools to establish kindergarten transition plans that promote communication among ECE and kindergarten teachers and family members.⁹¹ New Jersey, for example, requires districts to submit to the department of education transition plans that address processes for collaborating with ECE programs and elementary schools in the community; communication and data-sharing among ECE and K-3 teachers; and support for ongoing and year-round transition practices with families. Every three years, the division of early care and education visits the districts to make sure that the plans are being implemented as intended.

Stakeholders in many states are now developing statewide Kindergarten Entry Assessments (KEAs) so that kindergarten teachers have a better understanding of their students' strengths and weaknesses. These decision-leaders can consider incorporating a family engagement component into the process. Delaware is piloting a statewide family questionnaire at kindergarten entry to inform decisions by teachers, schools, districts, and the state. In addition, the state is planning to train teachers to share the results of the forthcoming KEA and collaborate with families to develop goals for their children.⁹² In Washington, before or at the beginning of the school year, kindergarten teachers meet with parents of all incoming students to discuss their children's strengths and challenges. The conversation informs the formal kindergarten entry assessment process that teachers conduct and provides an opportunity for parents and teachers to share expectations about the children's learning and development.

⁹⁰ To view the Quality Stars NY standards, visit http://www.qualitystarsny.org/standards_guide.php

91 Patton, C. and Wang, J., 2012.

⁹² Allard Agnamba, L. and Bruner, C., Families Know Best: Integrating Parent Knowledge into Young Child Assessment Systems. Build Initiative, 2013.



Particularly for struggling readers, it is critical to inform parents, engage them in intervention decisions, and provide them with information and activities they can use at home to encourage their children. Arizona's proposed statewide literacy plan recommends use of the Academic Parent-Teacher Team model to engage parents in a series of meetings and activities with teachers to develop instructional support and progressmonitoring plans for students and equip parents with the skills and knowledge they need to help their children at home.93 In Colorado, a new state law requires that, upon finding that a student has a significant reading deficiency in the early grades, the local education provider meet with the student's parents to communicate the importance of early literacy development and to jointly create an individualized "READ" plan that includes targeted interventions that are scientifically or evidence-based. The teacher then provides regular, ongoing updates to parents on the child's progress.

Action 4: Equip professionals providing care and education with the skills and knowledge to support early language and literacy development

Action 4 includes the following recommendations:

- 4.1 Ensure state professional standards for B-3rd teachers and school leaders address all three areas of early language and literacy skills and knowledge
- 4.2 Increase the rigor of teacher certification and program accreditation policies and align them to the B-3rd professional standards
- 4.3 Raise the bar on ECE staff qualifications
- 4.4 Build elementary school principals' capacity to support language and literacy instruction
- 4.5 Set standards to promote investment in evidence-based professional development strategies

Governors can use several state policy levers including professional standards, teacher certification, accreditation of teacher preparation programs, and professional development investments — to equip the B-3rd workforce with the necessary skills and knowledge that support children's early language and literacy development.

93 To view the Arizona state literacy plan, visit http://www.azed.gov/k12-literacy/arizona-state-literacy-plan-home-page/.

4.1 Ensure state professional standards for B-3rd teachers and school leaders address all three areas of early language and literacy skills and knowledge

Developing professional standards is a critical first step for improving the preparation of ECE and K-3 educators. These standards define what professionals must know and be able to do to support child development and student learning. They are typically used to inform professional certification and program accreditation policies that influence the scope and content of professional preparation programs. They also inform performance assessments and professional development offerings. ECE and K-3 professional standards exist in at least 40 states, but they vary in whether they apply to all ECE and K-3 professionals, what content is included, and the degree to which the standards influence practice.94

Policymakers can follow the lead of their peers in states such as **Nevada** and **New York** to adopt professional standards that address language and literacy instruction (among other critical skills) that emphasize both language and communication skills and the mechanics of reading.⁹⁵ State leaders can consider using nationally recognized standards as the basis of their own standards for child care providers, teachers, literacy specialists, and coaches and teachers of dual language learners across the B-3rd continuum. (See sidebar for a list of such standards.)

LINKS TO MODEL PROFESSIONAL STANDARDS:

The National Association for the Education of Young Children. http://www.naeyc.org/ files/naeyc/files/2009%20Professional%20 Prep%20stdsRevised%204_12.pdf

International Reading Association. http:// www.reading.org/General/CurrentResearch/ Standards/ProfessionalStandards2010/ ProfessionalStandards2010_Role5.aspx

National Board for Professional Teaching Standards. http://www.nbpts.org/generalistec; http://www.nbpts.org/literacy-readinglanguage-arts-emc

Dual Language Learner Teacher Competencies (DLLTC) Report. Alliance for a Better Community and National Council of La Raza, 2012. http://www.afabc.org/ getattachment/dc29dace-6bf4-4216-9f1d-5eab2d975bd1/DLLTC-Report.aspx

4.2 Increase the rigor of teacher certification and program accreditation policies and align them to the B-3rd professional standards

Professional standards, while important, are not sufficient to move the needle on teacher skills and knowledge. High-quality teacher preparation and training programs are vital when it comes to making sure that ECE and K-3 teachers are able to apply these standards in the classroom. Governors can revisit policies that govern teacher preparation programs to encourage entry of highquality candidates, ensure they receive training that is both appropriate and specific to the pre-K-3rd age range and reflects the research on effective language and literacy instruction. For example, governors can use accreditation policy as a lever to encourage institutions of higher

⁹⁴ Whitebook & Ryan, 2011.

⁹⁵ A preliminary scan finds that ECE professional standards in at least six states directly address language and literacy development (Florida, Massachusetts, Michigan, Nevada, New York, and West Virginia). According to the National Center on Child Care Professional Development Systems and Workforce Initiatives (PDW Center), 19 states' professional standards span the B-3rd continuum. Email correspondence, Sarah LeMoine, Project Director, PDW Center, April 4, 2013.

education to align their professional preparation programs to the B-3rd professional standards. In 39 states, governors appoint the entities that make decisions regarding preparation program standards and approval.⁹⁶

Governors can also use teacher certification policy as a lever to ensure entry of high-quality candidates into professional preparation programs, influence the content of what is taught, and ensure that candidates can demonstrate mastery of necessary knowledge and competencies upon program completion. Though it varies by state, candidates can often pursue certification to teach in elementary grades up to the fifth or sixth grade (in some cases, up to the eighth grade). Broader certificates are more appealing to teachers and principals because they widen the range of teaching opportunities and assignments. Such a strategy, however, may not allow student-teachers to focus sufficiently on the distinct skills and concepts that are needed to work effectively with early elementary students (for example, strategies to promote oral language development and vocabulary across all content areas and developing hands-on learning opportunities.)97 As a result, many experts are now calling on state policymakers to minimize the overlap of teaching certificates in the early grades and to develop separate certificates for developmentally appropriate age spans. For example, in 2007, policymakers in Pennsylvania approved regulations to eliminate their broad K-6 elementary teaching license and develop a pre-K-4 license to provide more focus on the early grades. To offer this new license, teacher preparation programs must follow new guidelines that require a heavier dose of language and literacy coursework, as well as more attention to child development principles and assessment methods.⁹⁸

Teacher certification policy can also require candidates to demonstrate mastery of researchbased, age-appropriate language and literacy instruction practices. As of 2012, policy in only 10 states requires elementary teachers to pass an assessment of reading instruction as part of their certification process.⁹⁹ **Connecticut** law requires all certified teachers in early childhood and elementary grades to pass a one-time reading instruction examination,¹⁰⁰ while **Wisconsin** law greatly expanded the certification examination's section on reading instruction.¹⁰¹

Some states' policies require teacher candidates demonstrate proficiency in classroom to instruction before receiving certification.¹⁰² The American Association of Colleges for Teacher Education, together with Stanford University, developed a new model called edTPA, which has created performance assessments for a variety of grade levels and subject areas, including Early Childhood, Elementary Literacy and Mathematics, and English as an Additional Language. Four states so far have adopted this model as part of the requirements for completing a teacher preparation program or becoming certified: Minnesota, New York, Tennessee and Washington.¹⁰³

⁹⁶ 2012 State Teacher Policy Yearbook: Improving Teacher Preparation - National Summary. National Council on Teacher Quality, 2012. Accessed from http://www.nctq.org/dmsView/2012_ State_Teacher_Policy_Yearbook_National_Summary_NCTQ_Report.

⁹⁷ Bornfreund, L., 2011.

⁹⁸ Pennsylvania Department of Education, Chapter 354 General Standards and Specific Program Guidelines for State Approval of Professional Educator Program, Grades PreK-4. Accessed from http://www.portal.state.pa.us/portal/server.pt/community/institutional_program_approval/8817

⁹⁹ Improving Teacher Preparation: National Summary, 2012 State Teacher Policy Yearbook. National Council on Teacher Quality, 2012. Accessed from http://www.nctq.org/stpy11/reports/ stpy12_national_report.pdf

¹⁰⁰ Connecticut Public Act No. 12-116

¹⁰¹ 2011 Wisconsin Act 166. Accessed from http://docs.legis.wisconsin.gov/2011/related/acts/166

¹⁰² The Changing Teacher Preparation Profession: A Report from AACTE's Professional Education Data System (PEDS). American Association of Colleges of Teacher Education, 2013. Accessed from http://aacte.org/news-room/announcements/aacte-releases-data-report-on-state-of-teacher-preparation.html. AACTE estimates that about 23 percent to 38 percent of teacher education programs, depending on the type, require performance-based assessment as part of the certification process, and recommends this practice for wider adoption. ¹⁰³ For more information, see: http://edtpa.aacte.org/

Finally, research confirms that teachers of young dual language learners need expertise in how children acquire a second language and how to create the conditions to facilitate learning English.¹⁰⁴ As the number of dual language learners increases in U.S. schools, state decision-makers may consider revisiting certification and accreditation policies to ensure that all educators are trained on how to address these students' unique needs. For example, **Illinois** is requiring all state pre-K teachers who serve dual language learners to have an English as a Second Language endorsement by July 2014, just as the state requires for its K-12 teachers.

4.3 Raise the bar on ECE staff qualifications

State decision-makers can consider raising the bar on ECE staff and program director qualifications. For example, **Connecticut** recently passed legislation that requires candidates for a bachelor's degree in early childhood education to take an early language and literacy course.¹⁰⁵ The state is considering a gradual phase-in of a B.A. requirement for all early childhood educators who work in state-funded programs by 2020.¹⁰⁶

Governors should bear in mind, however, that raising these requirements is likely to fail if policymakers do not also address a number of other issues that may limit the supply of a more educated workforce, such as low wages and barriers to continuing education (e.g., cost of tuition and class schedule). Policymakers in some states have successfully paired higher ECE staff qualifications with supports to help providers meet the new requirements. For example, as part of the effort in **New Jersey** to provide pre-K for all children in its lowest-income districts, state policy requires all preschool teachers to acquire a college degree with a specialization in early childhood education, whether they work in public schools or childcare centers. Policymakers strengthened the pre-K teacher pipeline by working with higher education institutions to train more teachers, improving articulation policies between two-year and fouryear institutions, and investing in scholarships and adequate compensation to retain teachers.¹⁰⁷

Oklahoma's Early Childhood Program for at-risk infants, toddlers, and 3-year-olds requires that all lead teachers hold qualifications that conform to criteria established by the National Association for the Education of Young Children (NAEYC) and are paid comparably to public school teachers with similar experience and credentials. To meet the demand for qualified professionals for this program, the Oklahoma Department of Education established an Infant-Toddler-Three-year-old (IT3) license.¹⁰⁸

Policymakers in several states are using a QRIS as a lever to build a more highly qualified ECE workforce. **Pennsylvania's** QRIS, like many states', requires directors and lead teachers to have a bachelor's degree in ECE (or a related field) in order for a center-based ECE program to achieve the highest QRIS rating. To help and encourage programs to increase their rating, the state offers time-limited improvement grants, annual quality achievement awards, staff retention awards, and higher reimbursement rates than those for lower-rated programs.¹⁰⁹ The latest evaluations show

¹⁰⁴ Castro, 2011.

¹⁰⁵ Connecticut Public Act No. 12-116

¹⁰⁶ For more information, see Connecticut House Bill (HB) 6359, available at http://www.cga.ct.gov/asp/cgabillstatus/cgabillstatus.asp?selBillType=Bill&bill_num=6359&which_ year=2013&SUBMIT1.x=16&SUBMIT1.y=14&SUBMIT1=Normal

¹⁰⁷ Coffman, J. and Lopez, M.E., *Raising Preschool Teacher Qualifications*. Washington, DC: The Trust for Early Education, 2003. Accessed from http://www.leg.state.vt.us/ PreKEducationStudyCommittee/Documents/NCSL_raising_teacher_qualifications_NJ_Abbott_pdf_Document.PDF.

¹⁰⁸ Bornfreund, 2011.

¹⁰⁹ Mitchell, A., *Financial Incentives in Quality Rating and Improvement Systems: Approaches and Effects.* Alliance for Early Childhood Finance, April 2012. Accessed from http://www. qrisnetwork.org/sites/all/files/resources/gscobb/2012-05-24%2015:13/Approaches%20to%20Financial%20Incentives%20in%20QRIS.pdf

that in the highest-rated centers, the proportion of children demonstrating age-appropriate language and literacy skills increases from about 32 percent in the fall to more than 70 percent in the spring.¹¹⁰ Eighteen states' QRISs also incorporate scholarships such as T.E.A.C.H. Early Childhood[®] for providers to further their education, while eight states' QRISs offer wage enhancement and/ or retention bonuses such as the Child Care WAGE\$[®] program.¹¹¹

Finally, state policy can support higher education attainment among ECE teachers by making it easier to transfer credits between two-year and four-year colleges. **New Mexico** and **Pennsylvania** are among the states with B-3rd professional standards and policies that allow articulation of early childhood associate degree credits to baccalaureate early childhood degree programs statewide.

4.4 Build elementary school principals' capacity to support language and literacy instruction

Without adequate pre-service preparation in early childhood and language and literacy development, many elementary school principals struggle to support and evaluate pre-K-3rd teachers and may even unknowingly promote developmentally inappropriate classroom strategies that are more suitable to later grades. Also, evidence is emerging that principals may assign less effective teachers to the early grades, where state standardized tests typically are not used or not tied to high-stakes decisions.¹¹² School leaders who are knowledgeable about early learning issues may be more likely to ensure that pre-K-3rd classrooms are led by strong teachers.

State policy can strengthen preparation and support for principals so that they can better support effective instruction in the early grades. Through recently passed legislation, for example, Illinois has expanded its principal certification from a K-12 to a pre-K-12 certificate and is now requiring all principal preparation programs to include early childhood education content through both coursework and field experiences.¹¹³ Connecticut law charges the state superintendent with creating a professional development plan to help principals and teachers implement "scientifically-based reading research and instruction" that, among other requirements, provides "differentiated and intensified training in reading instruction for teachers, outline(s) how mentor teachers will train teachers in reading instruction, outline(s) how model classrooms will be established in schools for reading instruction, [and] inform(s) principals on how to evaluate classrooms and teacher performance in scientifically-based reading research and instruction."114

4.5 Set standards to promote investment in evidence-based professional development strategies

Finally, governors and other state policymakers can act to ensure that professional development resources for both ECE and K-3rd educators are allocated to strategies that have the greatest likelihood of improving literacy instruction. Experts agree that too much of states' professional development resources are being spent on isolated workshops or trainings that are disconnected from classroom practice.¹¹⁵ While research on effective practice is still emerging, evidence suggests that professional development

¹¹⁰ Research Brief: Children's Progress Update, Keystone STAR 3 and 4 programs, 2011-2012. Pennsylvania Office of Child Development and Early Learning, Departments of Education and Public Welfare, Issue Brief 8, July 5, 2012, Accessed from http://www.ocdelresearch.org/Research%20Briefs/OCDEL%20Research%20Brief%208.pdf

^{III} Austin, L. J. E., Whitebook, M., Connors, M. & Darrah, R. (2011). Staff preparation, reward, and support: Are quality rating and improvement systems addressing all of the key ingredients necessary for change? Berkeley, CA: Center for the Study of Child Care Employment, University of California at Berkeley. Accessed from http://www.irle.berkeley.edu/cscce/wp-content/uploads/2011/12/CSCCEQRISPolicyBrief_2011.pdf

¹¹² Bornfreund, L., 2011.

¹¹³ Szekely, A. Leading for Early Success: Building School Principals' Capacity to Lead High-Quality Early Education. National Governors Association Center for Best Practices, 2013.

¹¹⁴ Connecticut Public Act No. 12-116

¹¹⁵ Dickinson & Brady, 2006; Moats, 1999.

offerings should provide long-term support, directly link knowledge with practice, model and offer feedback on practice implementation, and provide opportunities for critical reflection in the context of collaboration with peers, parents, or advisers.¹¹⁶

State policymakers can ensure more strategic use of public resources by adopting researchbased standards or criteria for professional development. For example, decision-makers in some states have looked to Learning Forward's *Standards for Professional Learning* as a model, and two states, **Kansas** and **Michigan**, adopted these national standards as part of their state policy.¹¹⁷

Coaching—which involves observations by experts, ongoing classroom modeling, and supportive critiques of practice—is a promising form of more sustained and focused professional development.¹¹⁸ Emerging research demonstrates that coaching affects early language and literacy outcomes in both ECE and elementary classrooms.¹¹⁹ In particular, a combination of coaching and course-based professional development improves the quality of language and literacy practices in ECE programs.¹²⁰ **New Jersey's** investment in literacy coaches for preschools and K-3 teachers played a critical role in increasing the reading proficiency of students in some of the poorest districts in the state.¹²¹ Another promising practice is the use of children's librarians as literacy trainers for child care providers. For example, the **Colorado** Libraries for Early Literacy organization educates and trains public library staff in providing early literacy story times for children and caregivers.¹²² Two small studies show that through group trainings, provision of reading supplies and materials, and ongoing communication with the librarians, this kind of intervention can improve child care providers' practice and children's language and literacy development.¹²³

PROMISING MODEL: MYTEACHINGPARTNER

MyTeachingPartner, developed by the University of Virginia's Curry School of Education, is a promising program for ECE and elementary grades that uses the Classroom Assessment Scoring System[™] (CLASS) observation instrument and videos of teachers' practice to inform in-person and online coaching. Evaluation results show a positive impact on ECE literacy instruction and child outcomes.¹²⁴

¹⁶ Snow et. al., 1998; 2011; Dickinson et al., 2009; Dillon, D. R., O'Brien, D. G., Sato, M., & Kelly, C. M. Professional development and teacher education for reading instruction. In M. L. Kamil, P. D. Pearson, E. B. Moje, & P. P. Afflerbach (Eds). Handbook of Reading Research, Vol. IV. New York: Taylor & Francis.

¹¹⁷ For more information, visit http://learningforward.org/standards; Leaning Forward Kansas at http://www.learningforwardkansas.org/; Leaning Forward Michigan at http://www.learningforwardmichigan.org/

¹¹⁸ Shanklin, N. (2006). What are the characteristics of effective literacy coaching? Denver, CO: Literacy Coaching Clearinghouse. The International Reading Association (2010) has developed professional standards for "Reading Specialist/Literacy Coach" For more information, visit http://www.reading.org/General/Publications/Books/bk713.aspx

¹¹⁹ E.g., Dickinson, D.K., and Brady, J.P. (2006). "Toward Effective Support for Language and Literacy Through Professional Development." In Critical Issues in Early Childhood Professional Development, Martha Zaslow and Ivelisse Martinez-Beck (eds). Brookes Publishing Company: Baltimore; and Dickinson, D., & Caswell, L. (2007). Building support for language and early literacy in preschool classrooms through in-service professional development: Effects of the Literacy Environment Enrichment Program (LEEP). *Early Childhood Research Quarterly*, 22, 243-260; Poglinco and Bach, 2004.

¹²⁰ Neuman, S. B., & Cunningham, L. (2009). The impact of professional development and coaching on early language and literacy practices. *American Educational Research Journal*, 46(2), 532-566.

¹²¹ Mead, S., *Education Reform Starts Early: Lessons from New Jersey's PreK-3rd Reform Efforts*, New America Foundation, 2009. Accessed from http://earlyed.newamerica.net/sites/ newamerica.net/files/policydocs/Education%20Reform%20Starts%20Early_0.pdf

¹²² For more information, visit Colorado Libraries for Early Literacy at http://www.clel.org

¹²³ Campana, K. and Dresang, E. T. (2011). Bridging the early literacy gulf. Paper presented at the America Society for Information Science Annual Meeting, October 9-13, 2011, New Orleans, LA; Czarnecki, E. M. (2006). A report of the Carroll County Public Library Emergent Literacy Training Assessment Project. Maryland State Department of Education.

¹²⁴ For more information, visit http://curry.virginia.edu/research/centers/castI/mtp

Action 5: Develop mechanisms to promote continuous improvement and accountability

Action 5 includes the following recommendations:

- 5.1 Strengthen QRIS criteria to promote research-based language and literacy instruction in ECE programs
- 5.2 Develop comprehensive B-3rd assessment systems to appropriately measure children's progress and success, inform instruction, and target interventions as early as possible
- 5.3 Use assessment data appropriately to inform research-based interventions for struggling readers
- 5.4 Develop coordinated ECE and K-12 data systems to support quality improvement (e.g., link teacher and program data to child outcome data, link child outcome data across ECE programs, and link ECE data to the K-12 longitudinal data system)
- 5.5 Build the capacity of state agencies to support B-3rd quality improvement efforts at the program, school, and district levels (e.g., invest in a statelevel support system for districts, research and promote best practices across the state, and create incentives to spur local innovations)

To ensure that a B-3rd agenda has the intended impact on parents, educators, and ultimately children's reading proficiency, state policymakers need to be able to measure results and support continuous improvement efforts. This requires tools and systems that assess quality and outcomes reliably, inform data-driven midcourse improvements, and keep all stakeholders accountable for the outcome. While new accountability strategies are emerging in both ECE and public school systems, policymakers can take the following steps to make sure these strategies effectively serve these purposes.

5.1 Strengthen QRIS criteria to promote research-based language and literacy instruction in ECE programs

A QRIS is an increasingly popular state approach to monitor and support quality in ECE programs. Currently, the most common criteria included in a QRIS are: licensing compliance, quality of the environment, staff qualifications, family partnerships, administration and management, and program accreditation.¹²⁵ Recent analyses have found that these criteria often could be more tightly tied to instructional quality and child outcomes.¹²⁶ Governors can call on state agency leaders to explicitly incorporate indicators of effective language and literacy practices within QRIS rating criteria to strengthen adult-child interactions and improve instruction.

For example, **Indiana's** Paths to Quality standards specify practices to promote children's language, literacy, and mathematics. To achieve level two status (out of four levels), providers must demonstrate that they read to children daily and encourage them to explore books and other print materials. Environmental indicators include the presence of accessible books for independent reading and viewing, a variety of print materials, and props and toys that encourage use of language. Among the indicators specific to infants and toddlers, teachers are expected to "respond to sounds/speech" and

125 Zellman and Karoly, 2012.

¹²⁶ Smith, et al., 2012; Zellman, G. L. and Karoly, L., *Moving to Outcomes: Approaches to Incorporating Child Assessments into State Early Childhood Quality Rating and Improvement Systems*. RAND Corporation occasional paper series, 2012. Accessed from http://www.rand.org/pubs/occasional_papers/OP364.html.

"talk about objects and events that infants and toddlers experience."¹²⁷ To achieve the highest QRIS rating in Massachusetts, staff in centerbased ECE programs must demonstrate through observational measures that they "engage children in meaningful conversations, use open-ended questions, and provide opportunities throughout the day to scaffold their language to support the development of more complex receptive and expressive language, support children's use of language to share ideas, problem solve, and have positive peer interactions." In addition, educators must implement instructional strategies that create positive classroom environments, promote critical thinking skills, and engage children in learning. The QRIS also includes specific indicators of quality for serving dual language learners, such as using classroom materials that reflect the linguistic and cultural diversity of the children, employing staff with training in secondlanguage acquisition, and providing translators to improve communication with parents.¹²⁸

Governors should bear in mind that no state's QRIS includes children's outcomes as part of the rating methodology, and few state administrators have validated their QRIS ratings with child assessment data.¹²⁹ In part, this is due to the challenges of accurately and appropriately assessing young children, as discussed below. Moreover, a QRIS is typically voluntary and often has low participation rates. However, this may change as states that are part of the Race to the Top – Early Learning Challenge are receiving federal support to validate their QRISs. This is an emerging area that warrants close attention moving forward.

5.2 Develop comprehensive B-3rd assessment systems to appropriately measure children's progress and success, inform instruction, and target interventions as early as possible

Assessing the status and progress of children's language and literacy skills is key to measuring children's success, informing instruction, and identifying struggling children as early as possible for intervention. The nature of child development during the early years and young students' limited understanding of the testing situation make obtaining valid and reliable data through traditional standardized tests challenging. Experts overwhelmingly agree that multiple instruments are necessary to accurately understand young children's progress.

A comprehensive state assessment system should span the full B-3rd continuum, beginning with developmental screening in the earliest years to identify delays that are much harder to remediate later. The system should involve multiple assessment tools that measure the development of language and communications and the mechanics of reading, along with content knowledge and other important developmental and academic skills. These tools must be matched appropriately to their intended use-for example, formative assessments for informing instruction and summative assessments for evaluating impact and effectiveness. Researchers strongly caution against using an assessment designed for one purpose to fill multiple needs.

¹²⁷ Paths to Quality: Standards for Participation in Indiana, Licensed Child Care Center. Indiana Family and Social Services Administration, 2008. Accessed from http://www.in.gov/fssa/ pathstoquality/files/CentersPTQStandards.pdf

²⁸ Center and School Based QRIS Standards. Massachusetts Department of Early Education and Care, 2012. Accessed from http://www.mass.gov/edu/docs/eec/2012/20121116-qris-centerbased-standards.pdf

¹²⁹ Zellman and Karoly, 2012. As part of a larger early education reform effort, Louisiana is currently revamping its QRIS so that a program's rating includes a component "based on the use and outcomes of a child assessment." For more information, see *Act 3 Community Network Pilot Request For Applications (RFA)*, Louisiana Department of Education, 2013. Accessed from http://www.louisianabelieves.com/docs/early-childhood/q-a--community-network-pilot.pdf?sfvrsn=2.



State decision-makers who are working on KEAs can take this opportunity to ensure that any language and literacy assessments administered before and after kindergarten are well-aligned in terms of the types of skills covered and their expectations of what children should be able to do. For example, **Maryland** is developing a KEA that will serve as an anchor to an assessment system for birth through age 6. In **North Carolina**, the KEA is anchoring a K-3 formative assessment strategy. Both efforts aim to track children's growth and development in multiple areas, including language and literacy, coherently and consistently throughout the early grades.

Governors and other state policymakers should, however, exercise caution in using child assessment instruments to make high-stakes decisions about pre-K-3 teachers on issues such as compensation and employment. Stakeholders in many states are currently devising new teacher evaluation systems for these purposes, using students' growth data as one of several criteria. If these systems are to reliably support thirdgrade reading proficiency *and* inform high-stakes teacher evaluations in the early grades, they will need to meet several challenges. Because standardized tests are typically not used in pre-K-2 classrooms, alternative assessments will need

to be identified. Such assessments will need to (1) capture the breadth of language and literacy outcomes that contribute to reading success, (2) produce data with sufficient reliability and validity for high-stakes purposes, and (3) be sensitive to the high variability in children's development and performance at these ages. State leaders are just beginning to grapple with these challenges and have devised three main strategies to address them: adopting or developing alternative assessments, including portfolio assessments that rely on ongoing observations of student performance; developing "student learning objectives" and associated assessments that are tailored to specific teachers and classes; and using an aggregate measure of students' progress in a particular grade, subject, or across the school.130

Whatever role student growth data play in teacher evaluations, assessment systems that provide data on student progress have limited value for continuous improvement if they do not also provide insights on teacher practice. For that, high-quality observation instruments are needed. A number of these instruments— including the Classroom Assessment Scoring System (CLASS), the Early Language and Literacy Classroom Observation (ELLCO), and the Early Childhood Environment Rating Scale (ECERS)-have been developed for ECE programs whose purpose is at least in part to assess the quality of the linguistic environment and teachers' ability to support children's language and literacy development. Both ELLCO and CLASS also have versions that apply to K-3 teachers.

Finally, to ensure that a state assessment strategy is effective, state leaders should also ensure that preparation and professional development programs for early childhood and early elementary educators include training on the appropriate use of language and literacy assessments and the data that they yield.

¹³⁰ Bornfreund, L., An Ocean of Unknowns: Risks and Opportunities in Using Student Achievement Data to Evaluate PreK-3rd Grade Teachers. Washington, DC: New America Foundation, 2013. Accessed from http://www.newamerica.net/publications/policy/an_ocean_of_unknowns

RESOURCES ON SELECTING AND USING ASSESSMENT TOOLS

"Appendix D: Sources of Detailed Information on Test and Assessment Instruments" in *Early Childhood Assessment: Why, What, and How,* National Academy of Sciences, Board on Children, Youth and Families and Board on Testing and Assessment, 2008. http:// www.nap.edu/openbook.php?record_ id=12446&page=449

Washington State: A Guide to Assessment in Early Childhood - Infancy to Age Eight, Washington State Office of Superintendent of Instruction, 2008. http://www.k12. wa.us/EarlyLearning/GuideAssess.aspx

Understanding and Choosing Assessments and Developmental Screeners for Young Children Ages 3-5: Profiles of Selected Measures, Child Trends and U.S. Department of Health and Human Services, 2011. http://www.acf.hhs.gov/sites/default/ files/opre/screeners_final.pdf

Compendium of Student, Teacher, and Classroom Measures Used in NCEE Evaluations of Educational Interventions, Mathematica Policy Research and the U.S. Department of Education, 2010. While this document is focused on tools used in educational interventions, it also describes measures of early childhood language and literacy development. http://ies.ed.gov/ ncee/pubs/20104012/pdf/20104013.pdf

5.3 Use assessment data appropriately to inform research-based interventions for struggling readers

Assessment data should inform funding and delivery of high-quality interventions for struggling readers in the early elementary grades. In a number of states, data that point to a reading deficiency during the K-3 grades require at least one of several interventions. Most commonly used are additional instruction time, tutoring, and summer programs.¹³¹ Some states' policies also require developing intervention plans at the individual, school, or district level.

Colorado has approved a suite of comprehensive K-3 assessments covering several language and communication skills and the mechanics of reading. Districts are required to use at least one of these assessments to inform individual intervention plans for students who are deemed to have a "significant reading deficiency."132 Once a student is identified as a struggling reader in grades K-3, the school develops an individual intervention plan, which must include the use of "scientifically-based" or "evidencebased" programming, monitoring the student's progress and family engagement strategies. The teacher revises the plan as needed in response to assessment data, and if a student continues to show deficiencies for more than a year, the intervention plan will include "more rigorous strategies and intervention" (e.g., additional instruction time), reading instruction through other subject areas, and a teacher with reading expertise who has been identified as effective or highly effective.¹³³ Starting in the fall of 2013, Kentucky is requiring districts to implement the Response to Intervention (RTI) strategy for language and literacy instruction, in which teachers perform ongoing assessments and use the data to identify interventions of varying levels of intensity that match individual students' strengths and weaknesses. The state will provide training, technical assistance, and online resources to support effective implementation.¹³⁴

Governors should bear in mind that typical assessments may not be appropriate for dual language learners. State agency leaders should give special attention to including this population in developing and testing new assessment tools.

¹³¹ Rose, S. and Schimke, K., 2012. Third Grade Literacy Policies: Identification, Intervention, Retention. Education Commission of the States.

¹³² For more details, visit http://www.cde.state.co.us/coloradoliteracy/ReadAct/resourcebank.asp

¹³³ Colorado House Bill 1238, available at http://www.leg.state.co.us/clics/clics2012a/csl.nsf/fsbillcont3/BE80872E0CC93D2987257981007DC105?open&file=1238_01.pdf

¹³⁴ Kentucky Legislature House Bill 69, An Act relating to early education assessment and intervention. Accessed from http://www.lrc.ky.gov/record/12rs/hb69.htm

For example, **Colorado** statute requires that at least one of the recommended K-3 reading assessments is normed for Spanish speakers and is available in both English and Spanish.¹³⁵

More recently, new laws in some states require retention at third grade if students do not demonstrate reading proficiency at the end of that year. Research on the impacts of retention is mixed. An extensive body of research suggests that retaining students has potential negative long-term educational outcomes, such as higher dropout rates.¹³⁶ However, recent studies of efforts to pair retention policies with other interventions show increased rates of reading proficiency in the short-term.¹³⁷ Florida, for example, implemented retention in 2002, and researchers have observed benefits for retained students through as late as seventh grade.¹³⁸ However, because the policy was enacted as part of a package of significant reforms, it is difficult to conclude the extent to which retention per se caused the improvements in outcomes. Taken as a whole, the research literature does suggest that retention alone may not be sufficient.139

In the case of Florida, the retention policy is part of a multi-pronged strategy that reformed teacher preparation and certification requirements, professional development, intervention strategies, and education funding policies. For example, over the last decade, Florida retrained elementary school teachers on evidence-based strategies to teach reading and further reinforced the training through reading coaches in lowperforming schools. During a five-year period, with support from federal funds, the state provided professional development workshops based on the recommendations of the National Reading Panel to all 35,000 K-3 teachers. In 2005, the state legislature established a research-based reading instruction allocation as a permanent categorical aid in the state's school funding formula. These funds are allocated to districts each year to support development and implementation of districts' research-based reading plans and to pay for reading coaches, particularly for lowperforming schools.

State leaders considering a retention policy should use caution in selecting assessment instruments to ensure they are valid and reliable for the purpose of such decisions. Policymakers should also weigh the costs and benefits: While retention may reduce the costs of remediation later on, the policy incurs the immediate cost of an extra year of schooling for retained students. Finally, looking down the road, both the Partnership for Assessment of Readiness for College and Careers and Smarter Balanced Assessment Consortium are developing K-12 assessments that are aligned to the CCSS and have higher cut scores for reading proficiency. The implementation of these assessments, scheduled to begin in the fall of 2014, is likely to dramatically increase the number of third-graders deemed reading below grade level, and state policymakers should consider-and prepare for-the ramifications of a retention policy under these new assessments.

For all of these reasons, governors who are committed to advancing third-grade retention policies should consider doing so within the context of the five-point B-3rd action agenda described in this guide. The goal should be to minimize the need for retention by intervening throughout the B-3rd continuum and retaining students only as a last resort. Governors should also consider providing local flexibility and discretion for decisions about

¹³⁵ For more information, view Colorado House Bill 1238, Colorado Early Literacy Act, available at http://www.leg.state.co.us/clics/clics2012a/csl.nsf/fsbillcont3/BE80872E0CC93D2987 257981007DC105?open&file=1238_01.pdf.

¹³⁶ Rose, S. and Schimke, K., 2012.

¹³⁷ Rose, S. and Schimke, K., 2012.

¹³⁸ Greene, Jay P., and Winters, Marcus A. (2006) Getting Farther Ahead by Staying Behind: A Second-Year Evaluation of Florida's Policy to end Social Promotion (Civic Report No. 49) Manhattan Institute for Policy Research, 2006; Winters, Marcus A. (2012) The Benefits of Florida's Test-Based Promotion System (Civic Report No. 68) Manhattan Institute for Policy Research ¹³⁹ West, M. R., Is Retaining Students in the Early Grades Self-Defeating?. Brookings Institution. Center on Children and Families Brief #49, 2012. Accessed from http://www.brookings. edu/research/papers/2012/08/16-student-retention-west

individual students. In **Colorado**, for example, low reading test scores at the end of third grade trigger a meeting between parents and key school personnel in which retention must be considered. After the group makes a decision, it has to be approved by the district superintendent.

A responsible retention policy would also require schools and districts to monitor student progress after retention or promotion to assess the effectiveness of either decision as well as the variable impact a retention policy may have on students from different demographic backgrounds. Laws in both **Colorado** and **Oklahoma** include provisions to give their states such capacity.¹⁴⁰

5.4 Develop coordinated ECE and K-12 data systems to support quality improvement

To effectively monitor children's language and literacy development from birth through third grade, and to use such data to improve practice and policy, governors should focus attention on building the infrastructure necessary to capture and use ECE and K-12 data appropriately and effectively. Currently, ECE data systems tend to lack key data about children and early childhood educators, which hampers using data for continuous improvement or accountability purposes. Even when those data exist, most states lack sophisticated ECE data systems that can provide a comprehensive view of young children's learning and development across different programs (e.g., child care, pre-K, early childhood special education) or a longitudinal perspective that monitors their progress from early childhood through the early elementary years.¹⁴¹ To improve the quality and usefulness of ECE and K-3 data, states will need a system that can:

5.4a) Link data on teacher and program characteristics to data on children's language and literacy development. A 2011 survey of states' ECE data systems found that most state systems cannot link child-level data with workforce-level data, which makes it difficult for policymakers to assess relationships between the educational attainments or training and professional development experiences of ECE providers and children's outcomes.¹⁴²

5.4b) Link child-level data across statefunded ECE programs. Because ECE programs are often administered by multiple state agencies, data from these programs are often housed in different systems. If these data systems are not coordinated, it is difficult to monitor children's learning and development as they move from one ECE program to another or participate in multiple ECE programs simultaneously (e.g., child care and pre-K). Some states are considering creating a common ECE identifier (e.g., through immunization records or birth certificates) that would help provide a more unified perspective on children's growth. As of 2011, Pennsylvania was the only state whose ECE data system could link child-level data across all of its state-funded ECE programs.143

5.4c) Link ECE data systems to the K-12 longitudinal data system. Linking ECE data to K-12 data can help policymakers better understand the types of ECE experiences that are associated with third-grade reading success and the K-3 experiences that are more likely to sustain gains children make in ECE programs.¹⁴⁴ A number of states – including **Connecticut, Illinois, New York, Pennsylvania,** and **Rhode Island** – have plans to link ECE data to the K-12 system through matching algorithms or extending the K-12 unique identifier to ECE programs. Recent legislation

¹⁴⁰ Oklahoma House Bill 2516, available at http://webserver1.lsb.state.ok.us/2011-12bills/HB/HB2516_ENR.RTF

¹⁴¹ State Analysis of Early Care and Education, March 2011 Update. Early Childhood Data Collaborative, 2011. Accessed from http://ecedata.org/state-ece-analysis/.

¹⁴² Early Childhood Data Collaborative, 2011.

¹⁴³ Early Childhood Data Collaborative, 2011.

¹⁴⁴ For more information, view the individual state results of the Early Childhood Data Collaborative's Inaugural State ECE Analysis, available from http://ecedata.org/state-ece-analysis/ state-results/

has also required such linkage and data-sharing arrangements. For example, **Iowa** law requires state pre-K programs to collect assessment data in language and literacy and in other areas aligned to the state's early learning standards. These data are then integrated into the state's K-12 data system to allow examination of the relationships between ECE program participation, early literacy development, and subsequent reading proficiency.¹⁴⁵

5.5 Build the capacity of state agencies to support B-3rd quality improvement efforts at the program, school, and district levels

Finally, governors can seek to build the capacity of state agencies to support and monitor local implementation and improvement efforts. For example, governors can call for:

5.5a) Investment in a state-level support system for districts. When New Jersey leaders launched an ambitious effort in the early 2000s to improve third-grade reading proficiency and expand early learning opportunities in the state's poorest districts, the state department of education recruited a corps of reading coaches to provide professional development and ongoing support to all early elementary teachers. State agency staff also worked with district leaders to design and implement interventions that respond to specific needs in those communities. This support system has helped some of the poorest districts narrow the fourth-grade reading proficiency gap between their students and the state average.¹⁴⁶ Likewise, the state's pre-K expansion was accompanied by a group of early childhood supervisors,

intervention specialists, and parent involvement specialists to help providers and districts adhere to high-quality standards, review their practices and outcomes, and make improvements accordingly.¹⁴⁷ Longitudinal evaluations of the state pre-K program have shown that participants made gains in language and literacy and math skills that last through fifth grade.¹⁴⁸

5.5b) Research and dissemination of best practices across the state. States can play an important role in highlighting best practices and facilitating peer-to-peer learning across the state. **Iowa** established a research center to support these activities. In addition, legislation passed in **Kentucky** requires the state education agency to monitor local implementation, collect information about the interventions and their effectiveness, and report findings to the state legislature.

5.5c) Incentives to spur local innovations. Connecticut's early literacy legislation authorizes the Commissioner of Education to establish an incentive program to reward schools that increase the number of students meeting or exceeding the statewide goal for reading proficiency by at least 10 percent. The incentive can take the form of public recognition, financial awards, or enhanced flexibility for districts. Private donations may be accepted to support these incentives. Because rewarded schools must demonstrate the strategies that were instrumental in the improved results, the state can use this program to disseminate promising practices.¹⁴⁹

¹⁴⁵ Iowa Senate File 2284

¹⁴⁶ Mead, S., 2009.

¹⁴⁷ Mead, S., 2009

¹⁴⁸ Barnett, et al, 2013.

¹⁴⁹ Connecticut Public Act No, 12-116, Sec. 94

Part IV. What Governors Can Do: Leadership Actions for a Successful B-3rd Literacy Agenda

G overnors are uniquely suited to call for action, convene leaders at all levels to craft a response, and oversee implementation of a B-3rd agenda to increase third-grade reading proficiency. Success requires joint ownership among multiple public- and private-sector stakeholders. The challenge lies in bringing together individuals who often operate under different agencies, respond to different pressures and incentives, and approach teaching and learning from different perspectives. Governors can use the bully pulpit to shine a bright light on the issue and rally diverse stakeholders behind the same goal and strategies. They can also call on executive branch leaders to work in collaboration to bridge policy divides on issues such as learning standards, training and professional development, assessments, teacher and program evaluation, and data systems.¹⁵⁰ Finally, governors can urge all interested stakeholders to commit their support and fulfill their role in implementing the agenda with speed and fidelity to achieve the end result: all children reading at grade-level by the end of third grade.

Use the bully pulpit to promote a B-3rd agenda

High-profile support from the governor's office is necessary to move an ambitious B-3rd agenda. Governors can raise attention to the issue of reading by third grade through public addresses and can emphasize it as a priority

in their budgets. For example, 16 governors included reading proficiency as a priority issue in their 2013 State of the State Addresses. In **Wisconsin**, Governor Scott Walker chaired the state's Read to Lead task force, which included the state superintendent, legislators, educators, and reading experts. The governor also spoke at the release of the task force's report, which laid out the state's comprehensive plan for improving

¹⁵⁰ For a more detailed discussion about ECE and K-12 alignment, see Wat, A., Governor's Role in Aligning Early Education and K-12 Reforms: Challenges, Opportunities, and Benefits for Children. National Governors Association, 2012. Available at http://www.nga.org/cms/home/nga-center-for-best-practices/center-publications/page-edu-publications/col2-content/ main-content-list/governors-role-in-aligning-early.html



reading proficiency levels in the early elementary grades. Subsequently, legislators who served on the task force introduced a bill that was informed by the report's recommendations, and within two months, the bill was signed by the governor. Gov. Walker charged state agencies beyond the "usual suspects," including the departments of transportation, natural resources, veterans affairs, tourism, and corrections, with developing a reading initiative to support the goals of Read to Lead.¹⁵¹

Cultivate cross-agency leadership to implement the agenda and communicate results

Developing and implementing a B-3rd agenda requires cross-agency and interdisciplinary support, collaboration, and leadership. It also requires consideration of multiple perspectives and best practices from early learning and K-12 education. To encourage these actions, governors can ask existing collaborative policymaking and advisory groups to lead interagency policy planning. They can also consider consolidating governance and leadership structures to bridge the ECE – K-3 policy divides.¹⁵² In Massachusetts, 2012 law requires the Secretary of Education to collaborate with the commissioners of early care and education, elementary and secondary education, and higher education to identify eight members to serve on the state's Early Literacy Expert Panel.¹⁵³ In New Jersey, the Office of Early Childhood Education in the state education agency has been instrumental in making pre-K education a key part of the state's literacy effort since the early 2000s. In 2007, this office became the Division of Early Childhood Education, expanding its scope to ensuring high-quality educational experiences from pre-K through third grade. The division has since been working to integrate the state's well-tested approaches to instruction and assessments in pre-K into the early elementary grades.¹⁵⁴

Finally, governors can require the inclusion of multiple stakeholders beyond traditional K-12 representatives—such as early learning experts and practitioners, family support professionals, and experts on dual language learners—in any leadership bodies they appoint. Appointed leaders must take active responsibility for coordinating decisions and collaborating with stakeholders within and across programs, communities, and agencies. Governors and their executive leaders must set clear expectations for results and establish benchmarks to measure progress, inform continuous improvement, hold stakeholders accountable, and keep the public informed.

¹⁵⁴ Mead, S., 2009.

¹⁵¹For more information, visit http://read.wi.gov/Home.

¹⁵² For a more detailed discussion about ECE and K-12 alignment, see Wat, A., Governor's Role in Aligning Early Education and K-12 Reforms: Challenges, Opportunities, and Benefits for Children. National Governors Association, 2012. Available at http://www.nga.org/cms/home/nga-center-for-best-practices/center-publications/page-edu-publications/col2-content/main-content-list/governors-role-in-aligning-early.html

¹⁵³ An Act relative to third grade reading proficiency (Chapter 287 of the Acts of 2012), Commonwealth of Massachusetts. Accessed from http://www.malegislature.gov/Laws/SessionLaws/ Acts/2012/Chapter287

Conclusion: Moving Forward

Governors who embark on the ambitious task of developing a comprehensive B-3rd literacy agenda can use the above five actions as a framework to take stock of what their states have accomplished, what they still need to work on, and what resources they need and which stakeholders they need to engage to move forward. Gubernatorial leadership is critical to ensuring that policies and processes reflect the research on early language and literacy development; address literacy development from birth through early elementary grades; and equip parents, ECE providers, and teachers to cultivate strong readers. Equally important is ensuring that state agencies and practitioners have the resources and capabilities to carry out this new policy agenda and to measure progress toward continuous improvement. Governors do not have to do this work alone and, in fact, will find far greater success by engaging many public and private stakeholders from outside the usual education policy arena. In the end, sustained, focused commitment by all is the key to ensuring that all children are reading proficiently by the end of third grade.





NGA CENTER DIVISIONS

The NGA Center is organized into five divisions with some collaborative projects across all divisions. The NGA Center provides information, research, policy analysis, technical assistance and resource development for governors and their staff across a range of policy issues.

- Economic, Human Services & Workforce covers workforce development focused on industry-based strategies; pathways to employment and populations with special needs; and human services for children, youth, low-income families and people with disabilities.
- Education focuses on helping governors develop effective policy and support its implementation in the areas of early education, readiness, and quality; the Common Core State Standards, Science Technology Engineering and Math, and related assessments; teacher and leader effectiveness; competency-based learning; charter schools; data and accountability; and postsecondary (higher education and workforce training) access, success, productivity, accountability, and affordability. The division also works on policy issues related to bridging the system divides among the early childhood, K-12, postsecondary. and workforce systems.
- **Environment, Energy & Transportation** focuses on several issues, including improving energy efficiency, enhancing the use of both traditional and alternative fuels for electricity and transportation, developing a modern electricity grid, expanding economic development opportunities in the energy sector, protecting and cleaning up the environment, exploring innovative financing mechanisms for energy and infrastructure, and developing a transportation system that safely and efficiently moves people and goods.
- Health covers issues in the areas of health care service delivery and reform, including payment reform, health workforce planning, quality improvement, and public health and behavioral health integration within the medical delivery system. Other focus areas include Medicaid cost containment, state employee and retiree health benefits, maternal and child health, prescription drug abuse prevention, and health insurance exchange planning.
- Homeland Security & Public Safety focuses on emerging policy trends across a range of homeland security and public safety issues. Current issues include cybersecurity, prescription drug abuse, public safety broadband, sentencing and corrections reform, homeland security grant reform, justice information-sharing, and public health preparedness.



National Governors Association Center for Best Practices 444 N. Capitol Street, Suite 267 Washington, DC 20001 202-624-5300 www.nga.org/center