EARLY CHILDHOOD HIGHLIGHTS

Child TRENDS

A Review of School Readiness Practices in the States: Early Learning Guidelines and Assessments

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Every year, more than three million children enroll in a public kindergarten program.[1] A momentous time in their young lives, each child enters with different strengths, weaknesses, skills and needs. Some differences are to be expected as normal variations in development, but unfortunately, socioeconomic factors appear to contribute significantly to a school readiness divide. For example, research has shown a significant achievement gap already exists between low-income children and their more affluent peers at kindergarten entry.[2] Researchers have identified gaps in a number of critical areas, including cognitive development, social-emotional development, and health status.[3] One study found that the average cognitive scores of our nation's most affluent children are 60 percent higher than those of our poorest children before they enter kindergarten.[4] Furthermore, low-income children are more likely to attend lower-quality schools, making it unlikely that these gaps can be closed later through schooling alone.[5] In order to improve long-term academic outcomes, increased attention is being given to supporting and assessing school readiness and identifying successful, evidence-based programs in early childhood that can ensure a more even start at school entry.

The following review of state practices to support children's school readiness from birth to age five may be helpful for deliberations about public investments intended to foster academic success in later years. All states have identified the skills and abilities children need to develop during the preschool years, but few states are tracking children's readiness along those expectations statewide. A small but growing number of states have started collecting assessment information about young children's developmental progress in kindergarten to better understand statewide levels of school readiness. This brief provides an overview of state Early Learning Guidelines (ELGs) and statewide school readiness assessments administered in kindergarten, and outlines key considerations for thinking about readiness at the state level.

SUMMARY

Research on the importance of the early childhood years has compelled states to support children's school readiness. This brief provides an overview of states' Early Learning Guidelines (ELGs) and school readiness assessments, and outlines the following considerations:

SCHOOL READINESS IS MORE THAN ACADEMICS: Practices that also consider children's physical, social, and emotional progress will be most effective in supporting school readiness.

ALIGN STANDARDS IN APPROPRIATE WAYS: Care must be taken not to narrowly align ELGs in ways that fail to reflect what research tells us is important for child development.

CAREFULLY CONSIDER THE COMMON CHALLENGES ASSOCIATED WITH ASSESSING YOUNG CHILDREN: States must take specific precautions when assessing young children, including clearly defining the purpose and use of the results.

READINESS DEPENDS ON SUPPORTIVE FAMILIES, SCHOOLS, AND COMMUNITIES: High-quality comprehensive services are equally critical for at-risk children's overall well-being and academic success.

STATE EARLY LEARNING GUIDELINES focus on factors such as: language and literacy, early math and numeracy skills, early science and problem solving skills, the creative arts, social studies and technology, social and emotional development, approaches to learning, and physical health and development.

All 50 states and the District of Columbia have developed Early Learning Guidelines for preschool children (age three to five), which define what children should know and be able to do by the time they enter kindergarten.[39]

24 states have developed or are in the process of developing ELGs to support the development of infants and toddlers from birth to age three: AL, AK, AR, CT, DE, FL, GA, IN, IA, KS, KY, LA, ME, MD, MI, MN, NE, NH, OH, OR, PA, TN, WA, WI.[40]

LEARN MORE ABOUT STATE ELGS AND READINESS ASSESSMENTS IN THE APPENDIX, which includes links to state guidelines and a list of states' current school readiness assessment practices for children in kindergarten.

Closing the Gap: Why Focus on the Early Years?

A number of factors have contributed to growing state and national interest in promoting early learning and development as one way of preventing school readiness gaps. Groundbreaking research documents the importance of early experiences on brain development, and educators, policy makers, and the public now have a deeper understanding of how best to foster young children's learning.[6] In response, state and local leaders have initiated a variety of early childhood initiatives, such as encouraging high-quality care through Quality Rating and Improvement Systems (currently 20 statewide systems),[7] increasing access to programs for low-income children like Early Head Start and Head Start, and expanding access to state-funded preschool programs for three- and four-year-old children (38 states).[8]

The federal government has also demonstrated an interest in supporting school readiness. In 2002 the Bush Administration launched *Good Start, Grow Smart,* which urged states to develop voluntary early literacy and early math guidelines for children between the ages of three and five and align them with their K-12 standards.[9] The Obama Administration has maintained a focus on early childhood by including $5 billion of new funding for Child Care, Head Start, Early Head Start, and programs for young children with special needs in the American Recovery and Reinvestment Act.[10] This administration has prioritized the role and use of data in early childhood and K-12 education systems. Creating longitudinal data systems by linking educational data from birth through K-12 is now a primary focus of many states' education efforts. Further, several recent federal opportunities support states in tracking indicators of children's school readiness, such as in the Promise Neighborhoods Initiative, Race to the Top, and a new federal home visiting grant program.

Development of Early Learning Guidelines in the States

Over the last ten years, states have made great strides in defining the skills and abilities young children should develop for a successful start in kindergarten. Similar to K-12 curriculum standards, Early Learning Guidelines (ELGs) articulate these expectations to early care and education providers. All states and the District of Columbia have their own ELGs for preschool children (age three to five), and almost half have developed or are in the process of developing ELGs for infants and toddlers (birth to age three).[11]

QUICK FACTS

LANGUAGE AND LITERACY: All 50 states and the District of Columbia include guidelines for language and early literacy. Across states, early literacy expectations generally fall within the following 3 topics: language understanding and use, emergent literacy, and early writing. Many states include more detailed language and literacy guidelines, such as for speaking and communicating, phonological awareness, book knowledge and comprehension, print concepts, and alphabet knowledge.

EARLY MATH: All but 1 state includes guidelines for early math. Broad expectations for early math that are covered by most states include topics such as numbers and operations, patterns, geometry, measurement, and spatial sense.

EARLY SCIENCE: 46 states and the District of Columbia include guidelines for early science. Science expectations may include general topics such as scientific knowledge, reasoning, and sequential process skills.

ELGs are created by states, usually with input from a variety of key stakeholders in the early childhood community. Typically state ELGs are organized by developmental stages (e.g., birth to 18 months, or 48 to 60 months) and articulate a range of skills and abilities in areas such as literacy, numeracy, social-emotional and physical development that children should begin to demonstrate during these stages of development. (See Appendix A for a detailed chart of state ELGs by developmental area.) It is important to note that most early care and education providers are not required to use ELGs, with the exception of some state-funded preschool programs.[12] States encourage the voluntary use of ELGs across various settings by disseminating print and electronic copies of the guidelines, offering trainings, and incorporating ELGs into professional development systems.[13]

The majority of preschool ELGs are organized around areas of development similar to those outlined by the Head Start Child Outcomes Framework (HSCOF), that is, language development, literacy, mathematics, science, creative arts, social and emotional development, approaches to learning, and physical health and development.[14] However, there is variation across states with respect to the specific expectations of young children's skills and abilities in each of the developmental areas.[15] For example, some states apply equal weight to indicators of ability across developmental areas whereas other states include more indicators related to math and literacy in the ELGs than indicators of other developmental areas such as social-emotional development, physical health and development, and approaches to learning. Approaches to learning, one area of development that describes a child's attention and engagement in learning, is described by the National Education Goals Panel as "the least understood, the least researched, and perhaps the most important dimension of school readiness."[16]

States cite many purposes for ELGs, including: to improve teaching practices, curriculum, and professional development; to educate parents; and to guide decisions about child assessment practices.[17] States can also use ELGs to ensure there is continuity between the skills children are building in preschool and the expectations for their further development as they transition to kindergarten, first grade, and beyond.[18] For example, the stated purpose of the Wyoming Early Childhood Readiness Standards is to "provide early childhood educators with a framework to use in planning quality curriculum by identifying the skills needed to maximize the potential for school success and promote a smooth

CREATIVE ARTS: All but 8 states have guidelines for creative arts. States that specify learning expectations for the creative arts typically include art, music, movement, and dramatic play.

SOCIAL STUDIES: 32 states include social studies guidelines, which frequently cover subjects such as economics, history, geography, and government. Four states include a separate technology section.

SOCIAL-EMOTIONAL DEVELOPMENT: All but 2 states include guidelines for social-emotional development; however, most states provide very few guidelines in this area. Generally, social-emotional guidelines cover the following topics: self-concept, self-control, social relationships, cooperation, peer interactions, and knowledge of families and communities.

PHYSICAL HEALTH AND DEVELOPMENT: All but 2 states include at least some guidelines for physical health and development. Within this domain, states often include expectations for large and fine motor development, health status, and healthy practices (e.g., brushing teeth, washing hands).

transition to kindergarten."[19] With the June 2010 release of the Common Core State Standards, state leaders have made a bold step toward defining national career and college readiness standards for math and literacy in grades K-12.[20] While most states have aligned their ELGs to K-12 learning standards, states adopting the Common Core are likely to reassess how ELGs align with their expectations for young children's learning and development in the early elementary years.

Most states stress that their ELGs are not intended as a "readiness checklist" or an "assessment tool." Rather, states often recommend that ELGs be used to help early care and education providers select the instructional tools and assessment instruments that are appropriate for young children at different stages of their development. Many states also recommend a set of appropriate assessment instruments and/or provide online resources to support care providers in making decisions about how to assess young children's developmental progress. In these states, the results of the assessment are typically used on an individual, child-level basis, to inform instructional practices or to guide discussions with parents about their child's skills and abilities. They are not used to monitor statewide percentages of children "ready for school."

State School Readiness Assessments in Kindergarten

The 2008 National Research Council report on best practices in assessing young children asserts that the intended purpose of an early childhood assessment is fundamental to determining how the instrument is designed, which measure is selected, how it is implemented, and how results are reported and used.[21] There are many reasons for assessing young children, including to determine appropriate instruction on an individual child basis, to screen for developmental delays, to ensure program accountability, or - the focus of this brief - to monitor in aggregate the readiness of kindergarten children statewide to inform state-level decisions about policy and funding.

A review of publicly available information on all 50 states' 2009-2010 school readiness assessment practices finds that though more than half the states assess children in kindergarten, as few as seven states conduct a school readiness assessment for the purposes of tracking the aggregate percentage of children statewide who are, for example, "ready for school," "in progress," or "not ready for school."[22] Examples include: Alaska,[23] Connecticut,[24] Florida,[25] Hawaii,[26] Maryland,[27] Minnesota,[28] and Vermont.[29] Assessments in these states are generally based on teachers' observations of children's skills and abilities across

multiple domains of development at the start of the kindergarten year. Most of these states utilize a state-designed assessment instrument or one adapted from an existing measure.[30] (See Appendix B for a detailed chart of states' school readiness assessment practices in kindergarten.)

Some of these states use school readiness data to track trends in children's school readiness over time, and by subgroups of at-risk populations. For example, Maryland has tracked the school readiness level of kindergarteners statewide since 2001.[31] Data are collected across six developmental areas and reported annually by demographic subgroups such as race/ethnicity, free and reduced-priced lunch, English language proficiency, and gender. This information may be used by state policymakers to make decisions about the allocation of state resources.

Key Considerations for State School Readiness Practices

School Readiness is More than Academics. Research consistently demonstrates that children's positive well-being encompasses successful development in areas such their physical, social-emotional, cognitive, and language development. Though cognitive development and literacy skills are most frequently associated with school readiness, research suggests that physical, behavioral, and social-emotional factors are equally important.[32] Even aspects such as temperament, aggressive behaviors, and a child's ability to relate to others are associated with their readiness for school.[33] Early learning guidelines and school readiness assessments that take a comprehensive or holistic view of child development will be most effective in supporting and measuring children's school readiness.

Align ELGs with K-12 Standards while Maintaining a Developmentally Appropriate Focus. As states consider implementing the K-12 Common Core Standards, they can use the opportunity to examine relevant and critical school readiness issues. As discussed above, child development research on school readiness identifies multiple areas of development that are fundamental to a child's readiness for school. Efforts to align state ELGs to the Common Core should ensure that educational and developmental priorities are reflected appropriately for young children.

In addition, a national conversation is emerging about the variances and commonalities associated with what children should know and be able to do to be prepared for school success. Under discussion is the question of where, if at all, it may be beneficial for early learning guidelines to be consistent across states. As this conversation develops, within and apart from national K-12 reform efforts, it will be important for decision

makers to consider carefully the extent to which expectations set forth in states' ELGs are consistent with child development research.

Carefully Consider Common Challenges of Assessing Young Children.
The 2008 National Research Council report on early childhood assessment highlights a number of common challenges states face in assessing young children, including: a purpose that is ambiguous or not explicitly communicated, using assessments for multiple purposes, narrowly focusing assessments on language and mathematics to the exclusion of physical, social and emotional development; and difficulty in matching an assessment instrument to the specific purpose for which it was designed to be used.[34] States should be sure to address each of these concerns in order to ensure the purpose of the assessment is clearly articulated, and the assessment put in place is developmentally and linguistically appropriate as well as "reliable, valid, and fair for that purpose."[35]

School Readiness Depends on Supportive Families, Schools, and Communities. In addition to the developmental features of children's readiness that have been highlighted in this brief, school readiness goes beyond a measurement of children's competencies at any particular point in time. There are other key factors that contribute to children's readiness for school, such as the family context, the context and quality of their child care arrangements prior to school entry, and the resources available within the community to support at-risk children and families such as health, mental health, family support, and nutrition services.[36] In addition to considering the academic and developmental supports children need to be prepared for success in school, states should also consider what supports are needed to have "ready schools" and "ready communities."[37] Ready schools foster communication and continuity between early care and school settings and support successful transitions from preschool to kindergarten. Ready communities provide high-quality comprehensive programs and services to support at-risk families with young children and work with state leadership to communicate the needs of their community's young children.[38]

STATE EARLY LEARNING GUIDELINES

State	Age range	DEVELOPMENTAL DOMAIN							
		Language & Literacy	Early math	Early science	Creative arts	History and social sciences	Socio-emotional development	Physical well-being, health, and motor development	Approaches to learning
Alabama	Birth to 5 years	•	•	•	•		•	•	•
Alaska	Birth to 5 years	•	•	•	•	•	•	•	•
Arizona	3 to 5 years	•	•	•	•	•	•	•	•
Arkansas	3 to 5 years	•	•	•	•	•	•	•	
California	4 to 5 years	•	•				•		
Colorado	4 to 5 years	•	•	•	•		•	•	•
Connecticut	Birth to 5 years	•	•	•	•		•	•	
Delaware	Birth to 5 years	•	•	•	•		•	•	•
District of Columbia	3 to 5 years	•	•	•	•		•	•	•
Florida	Birth to 5 years	•	•	•	•	•	•	•	•
Georgia	Birth to 5 years	•	•	•	•	•	•	•	
Hawaii	4-year-olds	•	•	•	•	•	•	•	
Idaho	3 to 5 years	•	•	•	•	•	•	•	•
Illinois	Birth to 5 years	•	•	•	•	•	•	•	
Indiana	Birth to 5 years	•	•	•	•	•		•	
Iowa	Birth to 5 years	•	•	•	•		•	•	•
Kansas	Birth to 5 years	•	•	•	•	•	•	•	•
Kentucky	Birth to 5 years	•	•	•		•	•	•	•
Louisiana	Birth to 5 years	•	•	•	•	•	•	•	
Maine	Birth to 5 years	•	•	•	•	•	•	•	•
Maryland	Birth to 6 years	•	•	•	•	•	•	•	•
Massachusetts	3 to 5 years	•	•	•	•	•	•	•	
Michigan	Birth to 5 years	•	•	•	•	•	•	•	•
Minnesota	Birth to 5 years	•	•	•	•	•	•	•	•
Mississippi	4-year-olds	•	•	•			•	•	

STATE EARLY LEARNING GUIDELINES ...CONTINUED

State	Age range	Language & Literacy	Early math	Early science	Creative arts	History and social sciences	Socio-emotional development	Physical well-being, health, and motor development	Approaches to learning
Missouri	3 to 5 years	•	•	•			•	•	•
Montana	3 to 5 years	•	•	•	•	•	•	•	
Nebraska	Birth to 5 years	•	•	•	•		•	•	•
Nevada	3 to 5 years	•	•	•	•	•	•	•	
New Hampshire	Birth to 5 years	•			•		•	•	•
New Jersey	3 to 5 years	•	•	•	•	•	•	•	
New Mexico	3 to 5 years	•	•	•			•	•	•
New York	3 to 5 years	•	•	•	•	•	•	•	
North Carolina	3 to 5 years	•	•	•	•	•	•	•	•
North Dakota	3 to 5 years	•	•	•	•	•	•	•	•
Ohio	Birth to 5 years	•	•	•		•			
Oklahoma	3 to 5 years	•	•	•	•	•	•	•	•
Oregon	Birth to 5 years	•	•	•	•		•	•	•
Pennsylvania	Birth to 5 years	•	•	•	•	•	•	•	•
Rhode Island	3 to 5 years	•	•	•	•		•	•	•
South Carolina	3 to 5 years	•	•				•	•	•
South Dakota	3 to 5 years	•	•	•	•	•	•	•	•
Tennessee	Birth to 5 years	•	•	•	•	•	•	•	•
Texas	4 to 5 years	•	•	•	•	•	•	•	
Utah	4-year-olds	•	•				•	•	•
Vermont	3 to 5 years	•	•	•	•	•	•	•	•
Virginia	4-year-olds	•	•	•		•	•	•	•
Washington	Birth to 5 years	•	•	•	•	•	•	•	•
West Virginia	3 to 5 years	•	•	•	•		•	•	•
Wisconsin	Birth to 5 years	•	•	•			•	•	•
Wyoming	3 to 5 years	•	•	•	•		•	•	•

NOTE: Hyperlinks to states' early learning guidelines are embedded in the list of state names. In the event that a state had separate links to multiple ELGs for different developmental ranges, the link to guidelines for older children was included in this table.

Data in this table was obtained from a 50-state scan of publicly available information regarding early learning guidelines conducted by Child Trends. Data was also collected from the following reports:

Egertson, H., & Hebbler, K. (2009). State early childhood standards and assessments: Five years of development. Washington, DC: Council of Chief State School Officers.

Scott-Little, C., Kagan, S.L., & Frelow, V.S. (2006). Conceptualization of readiness and the content of early learning standards: The intersection of policy and research? *Early Childhood Research Quarterly, 21*, 153-173.

STATE SCHOOL READINESS ASSESSMENT PRACTICES

State	PURPOSE To monitor % children school-ready statewide	To screen or inform instruction for individual children	Common assessment Statewide (S) or Locally selected (L) assessment	Data reported to the State	Published report of % children school-ready statewide	Readiness reported by at-risk populations	Multi-domain (MD), Mathematics (M) or Literacy (L)
Alabama		•	S				L
Alaska	•		S	•	TBD		MD
Arizona		•	L				L
Arkansas		•	S	•			MD
California*							
Colorado		•	L	•			MD
Connecticut	•		S	•			MD
Delaware*							
District of Columbia*							
Florida	•		S	•	•		MD
Georgia		•	S	•			MD
Hawaii	•		S	•	•		MD
Idaho		•	S	•			L
Illinois*							
Indiana*							
Iowa		•	L	•			L
Kansas		•	L	•			L, M
Kentucky*							
Louisiana		•	L	•			MD
Maine		•	L	•			MD
Maryland	•	•	S	•	•	•	MD
Massachusetts*							
Michigan*							
Minnesota	•		S	•	•	•	MD
Mississippi*							
Missouri*							
Montana*							

See notes at end of table.

STATE SCHOOL READINESS ASSESSMENT PRACTICES … CONTINUED

State	PURPOSE						Multi-domain (MD), Mathematics (M) or Literacy (L)
	To monitor % children school-ready statewide	To screen or inform instruction for individual children	Common assessment Statewide (S) or Locally selected (L) assessment	Data reported to the State	Published report of % children school-ready statewide	Readiness reported by at-risk populations	
Nebraska		•	L	•			MD
Nevada*							
New Hampshire							
New Jersey		•	S	Some programs			L
New Mexico		•	S	Only Full Day K			L
New York		•	L				
North Carolina		•	S				M, L
North Dakota*							
Ohio		•	S	•			L
Oklahoma		•	L	•			L**
Oregon*							
Pennsylvania		•	L				MD
Rhode Island		•	S				L
South Carolina*							
South Dakota*							
Tennessee		•	L				NA
Texas		•	S	•			L
Utah*							
Vermont	•		S	•	•		MD
Virginia		•	S	•			L
Washington*							
West Virginia*							
Wisconsin*							
Wyoming*							

NOTE: Data in this table was obtained from a 50-state scan of publicly available information regarding school readiness assessment practices conducted by Child Trends. The search examined states' 2009-2010 school readiness assessment practices of children in kindergarten, but not pre-kindergarten. There may be more states currently pursuing statewide assessment and monitoring practices than identified in this brief. Data was also collected from the following reports:

Stedron, J. (2009). Technical report: State approaches to school readiness assessment. Denver, CO: National Conference of State Legislators.

Egertson, H., & Hebbler, K. (2009). State early childhood standards and assessments: Five years of development. Washington, DC: Council of Chief State School Officers.

* No statewide school readiness assessment system identified in this state for the 2009-2010 school year.

**Oklahoma has also developed an optional multi-domain Kindergarten Developmental Checklist.

ENDNOTES

[1] U.S. Department of Education: Institute of Education Sciences, National Center for Education Statistics. (2009). Digest of education statistics: 2009. Washington, DC: U.S. Department of Education. Available at: http://nces.ed.gov/programs/digest/d09/tables/dt09_037.asp?referrer=report

[2] Halle, T., Forry, N., Hair, E., Perper, K., Wandner, L., & Vick, J. (2009). Disparities in early learning and development: Lessons from the early childhood longitudinal study – birth cohort (ECLS-B). Washington, DC: Child Trends. Available at: http://www.childtrends.org/Files/Child_Trends-2009_07_10_ES_DisparitiesEL.pdf

Brooks-Gunn, J., & Duncan, G. (1997). The effects of poverty on children. *The future of children, 7*(2).

Smith, J., Brooks-Gunn, J., & Klebanov, P. (1997). Consequences of living in poverty for young children's cognitive and verbal ability and early school achievement. In G. Duncan & J. Brooks-Gunn (Eds.), Consequences of growing up poor (pp. 132-189). New York: Russel Sage Foundation.

Denton, K., & West, J. (2002). Children's reading and mathematics achievement in kindergarten and first grade (NCES 2002-125). Washington, DC: US Department of Education, National Center for Education Statistics. Available at: http://nces.ed.gov/pubs2002/2002125.pdf

Duncan, G. J., Brooks-Gunn, J., & Klebanov, P. (1994). Economic deprivation and early childhood development. *Child Development*, *65*, 296-318.

Fryer, R., & Levitt, S. (2004). Understanding the black-white test score gap in the first two years of school. *The Review of Economics and Statistics*, *86*, 447-464.

Lee, V., & Burkham, D. (2002). Inequality at the starting gate: Social background differences in achievement as children begin school. Washington, DC: Economic Policy Institute.

[3] Halle et al., 2009.

Brooks-Gunn & Duncan, 1997.

Shonkoff, J. & Phillips, D., Eds. (2002). From neurons to neighborhoods: The science of early childhood development. Washington, DC: National Academies Press.

[4] Lee & Burkham, 2002.

[5] Ibid.

[6] Shonkoff & Phillips, 2002

Scott-Little, C., Lesko, J., Martella, J., & Milbum, P. (2007). Early learning standards: Results from a national survey to document trends in state-level policies and practices. *Early Childhood Research & Practice, 9*(1).

[7] For more information about Quality Rating and Improvement Systems, see Child Trends Early Childhood Highlights: Quality Rating and Improvement Systems for Early Care and Education. Available at: http://www.childtrends.org/Files//Child_Trends-2010_05_10_HL_QRIS.pdf

[8] For more information about state-funded preschool programs see: Barnett, W. S., Epstein, D. J., Friedman, A. H., Sansanelli, R., Hustedt, J. T. (2009). The state of preschool: 2009. Rutgers, NJ: The National Institute for Early Education Research. Available at: http://nieer.org/yearbook/

[9] Good Start, Grow Smart Interagency Workgroup. (2006). *Good Start, Grow Smart: A guide to Good Start, Grow Smart and other federal early learning initiatives*. Washington, DC: U.S. Department of Education.

[10] For more information on ARRA funding visit: Child Care and Development Block Grant: http://www.hhs.gov/recovery/programs/acf/childcare.html; Early Head Start and Head Start: http://www.hhs.gov/recovery/programs/acf/hs-ehs.html; Individuals with Disabilities Education Act (IDEA) visit: http://www2.ed.gov/policy/gen/leg/recovery/factsheet/idea.html and http://www2.ed.gov/policy/gen/leg/recovery/factsheet/idea-c.html

[11] Both Colorado and New Mexico indicate that their early learning guidelines are still draft versions. Additionally, California has only published Volume 1 of their Preschool Learning Foundations.

Scott-Little, C., Kagan, S. L., Frelow, V. S., & Reid, J. (2008). *Inside the content of infant-toddler early learning guidelines: Results from analyses, issues to consider, and recommendations.* Greensboro, NC: University of North Carolina at Greensboro. Available at: http://ccf.tc.columbia.edu/pdf/Inside%20the%20Content%20of%20Infant-Toddler%20ELGs-Full%20Report.pdf

[12] Ibid.

[13] Egertson, H., & Hebbler, K. (2009). State early childhood standards and assessments: Five years of development. Washington, DC: Council of Chief State School Officers

[14] U.S. Department of Health and Human Services: Administration on Children Youth and Families/Head Start Bureau. (2003). The Head Start path to positive child outcomes. Washington, DC: U.S. Department of Health and Human Services.

[15] Ibid.

Scott-Little, C., Kagan, S.L., & Frelow, V.S. (2006). Conceptualization of readiness and the content of early learning standards: The intersection of policy and research? *Early Childhood Research Quarterly, 21*, 153-173.

[16] Kagan, S. L., Moore, E., & Bradekamp, S. (Eds.). (1995). Reconsidering children's early learning and development: Toward common views and vocabulary. Report of the National Education Goals Panel, Goal 1 Technical Planning Group, pg. 28. No. ED 391 576. Washington, DC: U.S. Government Printing Office.

[17] Good Start, Grow Smart Interagency Workgroup, 2006.

[18] Kagan, S. L., & Kauerz, K. (2007). Reaching for the whole: Integration and alignment in early education policy. In R. C. Pianta, M. J. Cox, & K. Snow (Eds.), School readiness and the transition to kindergarten in the era of accountability (pp. 11- 30). Baltimore, MD: Paul H. Brookes.

[19] Wyoming Department of Education. (2002). Early Childhood Readiness Standards. Available at: http://www.k12.wy.us/SA/standards/Standards%202003%20Early%20Childhood%20Readiness.pdf

[20] Joint Press Release from the Council of Chief State School Officers and the National Governors Association. (2010). Draft K-12 common core state standards available for comment. Available at: http://www.ccsso.org/whats_new/press_releases/14088.cfm

[21] National Research Council. (2008). *Early childhood assessment: Why, what, and how?* Committee on Developmental Outcomes and Assessments for Young Children, C. E. Snow and S. B. Van Hemel (Eds). Board on Children, Youth and Families, Board on Testing and Assessment, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press.

[22] Data in this brief were obtained from a 50-state scan conducted by Child Trends of publicly available information regarding early learning guidelines and assessment practices. Because there could be incomplete information available through websites or other publicly available information sources, more states may be currently pursuing such practices than those identified in this brief. The search examined states' 2009-2010 school readiness assessment practices of children in kindergarten, but not in pre-kindergarten. Data were also collected from the following reports:
Stedron, J. (2009). Technical report: State approaches to school readiness assessment. Denver, CO: National Conference of State Legislators. Available at: http://www.ncsl.org/documents/Educ/KindergartenAssessment.pdf
Egertson, H., & Hebbler, K. (2009). State early childhood standards and assessments: Five years of development. Washington, DC: Council of Chief State School Officers.

[23] Revised Alaska Developmental Profile. For more information visit: http://www.eed.state.ak.us/tls/assessment/developmental.html

[24] Connecticut Fall Kindergarten Entrance Inventory. For more information, visit:
http://www.csde.state.ct.us/public/cedar/assessment/kindergarten/fall.htm

[25] Florida Kindergarten Readiness Screener. For more information visit: http://www.fldoe.org/earlylearning/

[26] Hawaii State School Readiness Assessment Classroom Profile. For more information visit: http://arch.k12.hi.us/school/hssra/hssra.html

[27] Maryland Model for School Readiness. For more information visit: http://mdk12.org/instruction/ensure/MMSR/index.html

[28] Minnesota School Readiness Study. For more information, visit:
http://education.state.mn.us/MDE/Learning_Support/Early_Learning_Services/Kindergarten/Minnesota_School_Readiness_Studies/index.html

[29] Vermont Kindergarten Readiness Assessment Survey. For more information, visit: http://humanservices.vermont.gov/publications/school-readiness-report/
Stedron, 2009.
Egertson & Hebbler, 2009.

[30] Revised Alaska Developmental Profile.
Maryland State Department of Education. (2009). Children entering school ready to learn: 2008-2009 Maryland model for school readiness. Available at:
http://www.marylandpublicschools.org/NR/rdonlyres/BCFF0F0E-33E5-48DA-8F11-28CF333816C2/19575/School_Readiness_Report_2008_09.pdf

[31] Maryland State Department of Education, 2009.

[32] Kagan, Moore, & Bradekamp, 1995.

[33] Hyson, M. (2008). *Enthusiastic and engaged learners: Approaches to learning in the early childhood classroom*. New York: Teachers College Press.

[34] The National Research Council, 2008.

[35] Zaslow & Halle, 2003.
Kagan, S. L., Scott-Little, C., & Clifford, R.M. (2003). Assessing young children: What policy makers need to know and do. In C. Scott-Little, S.L. Kagan, & R.M. Clifford (Eds). Assessing the state of state assessments; perspectives on assessing young children (pp. 5-11). Greensboro, NC: SERVE.

[36] Ibid.

[37] Halle, T., Reidy, M., Moorehouse, M., Zaslow, M., Walsh, C., Calkins, J., Margie, N. G., & Dent, A. (2008). Progress in the development of indicators of school readiness. In B. Brown (Ed.) *Key indicators of child and youth well-being: Completing the picture* (pp. 65-102). New York: Erlbaum.

[38] Ibid.

[39] Scott-Little, Kagan, Frelow, & Reid, 2008.

[40] Petersen, S., Jones, L., & McGinley, K. A. (2008). Early learning guidelines for infants and toddlers: Recommendations for states. Washington, DC: ZERO TO THREE. Available at: http://main.zerotothree.org/site/DocServer/Early_Learning_Guidelines_for_Infants_and_Toddlers.pdf