Early Childhood Assessments: Focus on the Child
In laying the foundation for success in school and beyond, birth through age 8 are the most critical years in a child’s development. Ensuring young children have access to high-quality early learning environments, regardless of race, income, or geography, provides many proven individual and societal benefits. Helios Education Foundation (Helios) is committed to strengthening early childhood systems to promote language acquisition and emergent literacy for children, birth through age 8, to help ensure more children in Arizona and Florida enter kindergarten prepared to succeed, which we believe lays the foundation for them to read proficiently by the end of third grade.

Ensuring that children enter kindergarten ready to succeed is one of the most pressing issues for early childhood educators. It is a complex issue, and there is significant research on the definition of school readiness and how to provide the supports necessary to address the needs of children who develop at different rates and in different ways. However, the lack of consistent, coordinated assessment tools is challenging for early childhood educators, policy makers, and funders.

As Helios works toward strengthening early childhood systems, the foundation recognizes the importance of aligned and coordinated assessments and has convened thought leaders and experts in early childhood education to examine issues surrounding building comprehensive statewide assessment systems.

The following is the first in a set of education briefs focused on early childhood assessments. The brief describes how states can make continued efforts toward ensuring children enter kindergarten ready to succeed and on track to read at grade level by the end of third grade. The brief was developed as an outgrowth of a set of convenings sponsored by Helios in partnership with the Early Learning Coalition of Hillsborough County, Florida, and the University of South Florida, which brought together a diverse group of national experts and local practitioners to share information and discuss early childhood assessment issues.
Introduction
In the context of the growing investment in early childhood programs and calls for accountability of these programs, issues surrounding early childhood assessment have grown in importance. For example, the Preschool Development Grants Program and the Race-to-the-Top Early Learning Challenge (RTT-ELC)\(^1\), two major federal funding initiatives providing incentives to states to build high-quality, coordinated early childhood systems, emphasize the importance of coherent early childhood data systems, and affirm the importance of measuring children’s progress as a way to document the quality of programs. The RTT-ELC requires participating states to develop a comprehensive statewide assessment system. The assessment system components described in RTT-ELC include assessments of children for screening and instruction, assessments of classroom quality, and assessments of teacher-child interactions. In addition, RTT-ELC provides a competitive funding priority to states who choose to establish a kindergarten entry assessment (Scott-Little, Bruner, & Schultz, 2013). In other words, the term early childhood assessment is used to describe a variety of assessment foci and purposes; and in a well-functioning and coherent early childhood system, the expectation is that the methods and approaches to assessment across various purposes are integrated in a comprehensive fashion.

Based on a recent analysis of state data collected in the National Institute for Early Education Research State of Preschool Yearbook, Schilder and Carolan (2014) concluded that no state in the nation has a complete comprehensive assessment system: they noted, however, that many states are trying to develop such a system. States face numerous challenges in their attempts (Ellingsen, Ortiz, Norwood, & Cohen, 2014). At the program level, challenges include (a) the limitations of existing measures, especially for diverse populations of children (e.g., children with disabilities or with developing language and literacy skills); (b) uncertainty on the part of program administrators about the merits of different measures and approaches to assessment, and (c) lack of training for personnel in how to use measures in the way that they were intended. A significant system-level challenge relates to the multiple early childhood agencies and initiatives (e.g., Head Start, Individuals with Disabilities Education Act [IDEA], and state Quality Rating and Improvement Systems [QRIS]) with either interests in or requirements related to assessment. The impact on teachers and programs of competing assessment demands that are rarely aligned may inadvertently deter rather than support efforts to build high-quality programs.

Purpose of Brief
The purpose of this brief is to provide guidance to states as they build comprehensive statewide assessment systems. The brief specifically focuses on child assessment within the context of an overall birth to age 8 early childhood assessment system. Other reports\(^2\) have focused on assessment as it relates to classroom and program quality (e.g., National Research Council, 2008). The brief begins with a set of guiding principles related to assessment of young children birth through grade 3. Next, it describes four types of child assessments, including their purposes, recommended assessment procedures, and commonly used assessment tools and resources. The brief concludes with recommendations for states as they develop their comprehensive assessment systems.

Assessment Principles
The National Research Council (2008) identified two key principles for early childhood assessment in a congressionally commissioned study. The first principle is that the purpose of an assessment should be clearly identified and should guide all subsequent assessment decisions. These decisions include (a) selecting a valid and reliable assessment tool to be used for the desired purpose of the assessment; (b) collecting information with the tool in a valid and reliable fashion with any necessary accommodations to the extent possible for children’s cognitive, sensory, physical, communication, cultural, linguistic, and social-emotional characteristics; (c) ensuring that appropriate assessment partners, such as families, are meaningfully included in gathering and interpreting assessment information; and (d) ensuring that assessment efforts are streamlined to reduce the burden on children and teachers. In other words, states benefit from a comprehensive framework across agencies and initiatives to ensure a unified approach to assessment.

Early Childhood Assessment Principles (National Research Council, 2008)
- Select a valid, reliable, and age-appropriate tool for the purpose selected of the assessment and for the children being assessed.
- Ensure that data is collected, analyzed, and used in valid and reliable ways, including making necessary accommodations for individual children (e.g., ethnic, racial, language, developmental diversity) and that the individuals engaged in assessment roles have received adequate professional development.
- Ensure that essential partners, such as parents, are meaningfully included in assessment efforts.
- Share assessment information with key stakeholders efficiently and effectively, and in ways that ensure data is used appropriately to make decisions.
- Minimize the burdens on children, families, and teachers that might result from assessment.
- Ensure that the assessments are systematically and intentionally planned and aligned across all sectors and initiatives.

Recommended assessment procedures
1. Child outcome assessment for use in evaluating program effectiveness should always be administered to children by trained professionals who are external to the program, rather than program staff, generally conduct these assessments.

\(1\)To learn more about the Preschool Development Grants and RTT-ELC see the following websites: www2.ed.gov/programs/racetothetop-earlylearningchallenge/resources.html and www2.ed.gov/blog/wp-content/uploads/2014/05/DEVELOPMENT-grants-Executive-Summary-REVISED-05-14-14.pdf

\(2\)A second complementary brief that addresses assessment of classroom and program quality will be published Winter 2016.
2. A wide variety of assessment instruments are available for use in child outcome assessment. The selection of specific assessment tools will depend on a variety of factors such as program goals, children’s ages and other characteristics, and the purpose for program evaluation.

3. To minimize the burden on programs, systematic sampling of subsets of children should be used rather than assessing every child enrolled in a program or classroom.

4. The results of child outcome assessment should be used in conjunction with other measures of program/classroom characteristics and quality, and should never be used to make decisions about individual children.

5. Child outcome assessment tools should be standardized and have adequate reliability and validity, and have norming samples that reflect the characteristics of the children being evaluated. Child outcome assessment also should include necessary accommodations to ensure that assessments appropriately measure the knowledge and skills of dual language learners and students with disabilities.

**Tools and resources**

**Early Childhood Measures Profiles** (Child Trends, 2004) is a compendium of assessment tools, sponsored by the Office of the Assistant Secretary for Planning and Evaluation (ASPE) of the U.S. Department of Health and Human Services, commonly used to measure domains of development, including early academic learning (literacy and mathematics), language, cognition, social-emotional development, and approaches to learning. A profile of each tool includes the purpose, domains, administration, and technical soundness. Available at: aspe.hhs.gov/basic-report/early-childhood-measures-profiles


**A Guide to Assessment in Early Childhood: Infancy to Age Eight** (Washington State Office of the Superintendent of Public Instruction, 2008). This report provides a compendium of assessment tools, including those for assessing child outcomes, along with information about the intended age range, administration, domains assessed, and information on norming and technical soundness. Available at: www.k12.wa.us/EarlyLearning/GuideAssess.aspx

**Developmental Screening, Assessment, and Evaluation: Key Elements for Individualizing Curricula in Early Head Start Programs** (Zero to Three, 2011). This report provides an overview of assessment related to Early Head Start and provides a compendium of assessment tools, some of which are appropriate for use in assessing child outcomes. Available at: www.zerotothree.org/childevelopment/mental-health-screening-assessment/thewearofplay-1.pdf

**Screening and Assessment of Young English Language Learners** (National Association for the Education of Young Children [NAEYC], 2005) is a position statement that presents assessment guidelines for dual language learners. Available at: www.naeyc.org/files/naeyc/files/positions/ELL_Supplement_Shorter_Version.pdf

**Assessment Considerations for Young English Language Learners** (Espinosa & López, 2007). This paper, prepared for the national Early Childhood Accountability Task Force and First 5 LA, presents recommended assessment practices for use with dual language learners. Available at: www.first5la.org/files/AssessmentConsiderationsEnglishLearners.pdf

**Tools and Resources for Identifying All English Language Learners** (U.S. Department of Education, 2015). This source is intended to help state and local education agencies meet their legal obligations in identifying potential English language learners, including descriptions of home language surveys and assessment guidelines. Available at: www.ed.gov/about/offices/list/oea/english-learner-toolkit/chap1.pdf

**Developmental Screening**

**Purpose.** Ensuring timely, appropriate developmental screening for all children from birth to age 8 is an important part of a comprehensive statewide assessment system. Regular screening throughout the early childhood period, followed by an evaluation and diagnostic assessment if warranted, helps children and their families access needed interventions to ameliorate problems or prevent them from worsening. Regular pediatric screenings throughout the early childhood period are essential in the early identification of developmental delays, autism, vision and hearing problems, exposure to toxic substances, and social-emotional or mental health problems. Preschool-age children generally have access to free annual hearing, vision, and developmental screenings through public schools and early childhood programs. However, many states currently fall short of meeting the frequency for well-child visits and screenings as recommended by the American Academy of Pediatrics (Johnson-Staub, 2014).

**Recommended assessment procedures**

1. Developmental screening should rely on valid and reliable tools that are age appropriate for assessing key domains, and are administered by trained professionals, with family input, in settings where children feel comfortable demonstrating their knowledge and skills (e.g., homes, early childhood classrooms, pediatric clinics).

2. Developmental screening should include needed accommodations to ensure that assessments appropriately measure a child’s knowledge and skills. For dual language learners and English language learners, developmental screening should use culturally and linguistically appropriate instruments and procedures, and assessors should be fluent in the child’s home language as well as English. Developmental screening also should follow state guidelines related to assessment accommodations for students with disabilities under IDEA (2004; National Center on Educational Outcomes [NCEO], 2014).

3. The results of developmental screening should be communicated clearly to children’s parents and caregivers and used to help make decisions regarding ways to support children’s development, referrals for further assessment, and the need for possible services or treatment.

4. Early educators require information, resources, and professional development to help them effectively connect families to developmental screening and preventive health-care services.

5. An integrated developmental screening program relies on cross-sector collaboration among child care, early education, early intervention, home visiting, health-care, mental health, and other community agencies (Johnson–Staub, 2014). The Child Find requirement of IDEA (2004) relies on close partnerships among early intervention, preschool special education, and other agencies administering early childhood programs. Data systems can be used to identify ways of reaching more children with developmental screening and creating strategies for sharing information across sectors.

**Tools and resources**

**Birth to 5: Watch Me Thrive! Compendium** (U.S. Department of Health and Human Services, 2014) reviews the implementation, reliability, and validity properties of screening tools, and provides user guides that describe how to select and use tools in various early childhood settings. Available at: www.acf.hhs.gov/programs/ecd/child-health-development/watch-me-thrive

A Guide to Assessment in Early Childhood: Infancy to Age Eight (Washington State Office of the Superintendent of Public Instruction, 2008). This report provides a compendium of assessment tools, including those for developmental screening, along with information about the intended age range, administration, domains assessed, and information on norming and technical soundness. Available at: www.k12.wa.us/EarlyLearning/GuideAssess.aspx


Benchmarks in Early Screening and Testing (Project BEST), funded by the Centers for Disease Control and Prevention, has developed benchmark indicators for states to promote the timely identification, referral, and provision of early intervention and preschool special education services to infants and young children from birth to age 5. Available at: www.cdc.gov/ncbddd/actearly/about-research.html

Learn the Signs. Act Early is a website sponsored by the Centers for Disease Control and Prevention that identifies developmental milestones and helps parents and caregivers track children’s developmental progress and identify their concerns about children’s development. It provides training materials, video clips, and guidelines about what to do if you have a concern about a child’s developmental progress. Available at: www.cdc.gov/ncbddd/actearly

Understanding and Choosing Assessments and Developmental Screeners for Young Children Ages 3–5: Profiles of Selected Measures (Administration for Children and Families, 2011). This resource provides a general overview and a compendium of developmental screening tools appropriate for children ages 3–5. Available at: www.acf.hhs.gov/sites/default/files/assets/screeners_final.pdf


The Assuring Better Child Health and Development (ABCD) initiative, funded by the Commonwealth Fund and administered by the National Academy for State Health Policy, provides a list of recommended developmental screening tools and other screening resources. Available at: www.nashp.org/abcd–12-years–promoting–healthy–child–development

The Save Babies Through Screening Foundation supports efforts to identify and treat disorders detectable through newborn screening. Available at: savesbabies.org/

The American Academy of Pediatrics provides guidance on the implementation of developmental screening and surveillance. Available at: pediatrics.aappublications.org/content/118/1/405/F1.full

Screening and Assessment of Young English Language Learners (NAEYC, 2005) is a position statement that presents assessment guidelines for dual language learners. Available at: www.naeyc.org/files/naeyc/file/positions/ELL_Supplement_Shorter_Version.pdf

Assessment Considerations for Young English Language Learners (Espinoza & López, 2007) is a paper, prepared for the national Early Childhood Accountability Task Force and First 5 LA, that presents recommended assessment practices for use with dual language learners. Available at: www.first5la.org/files/AssessmentConsiderationsEnglishLearners.pdf

Diagnostic Assessment

Purpose: Diagnostic assessment is used to identify significant concerns about children’s development that may require targeted interventions (Division for Early Childhood [DEC], 2003, 2007; NAEYC, 2003). Assessment methods related to diagnosis and eligibility determination for special services are tailored to the needs of individual children and families, guided by provisions within Part C (children birth through age 3) and Part B (preschool and beyond) of IDEA (2004), and used to support decision-making and create individual service plans. Families are considered key partners and contribute to the assessment process in multiple ways—by (a) identifying family resources, priorities, and concerns; (b) describing children’s performance in other settings (e.g., their strengths and weaknesses, their interests); (c) facilitating their children’s participation in assessment; and (d) validating or identifying discrepancies in the assessment results (DEC, 2007).

Recommended assessment procedures

1. Multiple methods and sources are required for use in diagnostic assessment, with special attention to family input as part of a team-based process in gathering information and interpreting the results. A single test score is inadequate for determining children’s eligibility for special services.

2. Eligibility decisions are based in part on scores from norm-referenced assessments that are age appropriate, have adequate reliability and validity, and have large norming samples that reflect the characteristics of the children being evaluated.

3. Trained professionals, such as school psychologists or other specialists, should administer and interpret norm-referenced assessments.

4. Diagnostic assessment should include necessary accommodations to ensure that assessments appropriately measure children’s knowledge and skills. For dual language learners and English language learners, diagnostic assessment tools and procedures must be culturally and linguistically appropriate, and assessors should be proficient in the child’s home language as well as English.

Tools and resources

Early Childhood Measures Profiles (Child Trends, 2004) is a compendium of assessment tools, sponsored by the Office of the ASPE of the U.S. Department of Health and Human Services, commonly used to measure domains of development, including early academic learning (literacy and mathematics), language, cognition, social-emotional development services to infants and young children from birth to age 5. Available at: www.cdc.gov/ncbddd/actearly/about-research.html
development, and approaches to learning. A profile of each tool includes the purpose, domains, administration, and technical soundness. Available at: aspe.hhs.gov/basic-report/early-childhood-measures-profiles


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**Moving Forward With Kindergarten Readiness Assessment Efforts: A Position Paper of the Early Childhood Education State Collaborative on Assessment and Student Standards** by the Council of Chief State School Officers (CCSSO; 2011) discusses the rationale for their position on kindergarten readiness assessment and provides important cautions for parents, teachers, administrators, and policy makers to consider when planning kindergarten assessment initiatives. Available at: www.buildinitiative.org/Portals/0/Uploads/Documents/CCSSO_K-Assessment_Final_7-12-11.pdf

**Formative Assessment**

**Purpose.** As one aspect of a comprehensive assessment system, formative assessment is used to help teachers plan and evaluate instruction that is linked to learning standards and the curriculum goals. As part of the everyday process of teaching and learning, early educators periodically gather information about what young children know and are able to do, how they process information and solve problems, and how they relate to other children and adults. Teachers use this information to monitor children’s progress in learning, determine which children might benefit from additional instructional or behavioral supports, and differentiate instruction to accommodate individual learning needs. Although the use of formative assessment is now commonplace in kindergarten to third grade classrooms, formative assessment practices with infants and preschool-age children are less widely established and require more attention from early childhood policy makers.

Formative assessment has been studied most often in the context of multi-tiered instruction in reading and math for struggling learners in grades k–12 (Gersten et al., 2008). Further research is needed to evaluate the effectiveness of formative assessment for differentiating instruction in early education as it relates to infants and preschoolers (Akers et al., 2015). More broadly, the early childhood field needs to incorporate formative assessment tools addressing all domains of learning that are age appropriate and psychometrically sound for use with children across the birth to age 8 continuum, along with clear guidelines and professional development to support formative assessment practices in early care and education.

**Recommended assessment procedures**

1. **Decisions about formative assessments should be made at a system-wide rather than individual-classroom level to ensure that assessment methods and results (a) address key domains of learning and development, (b) are culturally and linguistically relevant, (c) include accommodations for students with disabilities, and (d) provide links between standards, curriculum, and instruction both within and across grades.**

2. **Educators should administer formative assessment periodically throughout the school year as part of the instructional context to capture children’s ongoing progress in learning key skills and to determine if instructional or behavioral interventions are needed at any point for any children.**

3. **Formative assessment should rely on information gathered from multiple sources (e.g., parents, teachers, caregivers, specialists) and multiple methods (e.g., direct child assessments that are age appropriate, valid, and reliable; structured observations and anecdotal records; developmental checklists; and work sampling).**

4. **Formative assessment should be linked to learning standards and the sequence of key concepts and skills reflected in the goals of the curriculum.**

5. **Formative assessment should be viewed as an ongoing process of gathering information and interpreting it to plan effective foundational instruction for all children and to differentiate instruction for those who need additional instructional or behavioral supports to learn.**

**Tools and resources**

What Do We Know About How Early Childhood Teachers Use Ongoing Assessment? (Akers et al., 2015). This brief presents recommended practices on the use of formative assessment in early childhood based on cumulative knowledge. Available at: mathematica-mpr.com/our-publications-and-findings/publications/brief-what-do-we-know-about-how-early-childhood-teachers-use-ongoing-assessment

Recommendations for State Agency Personnel and Policy Makers

The emphasis on accountability and comprehensive statewide assessment systems has the potential for building high-quality early childhood education programs that, in turn, provide increased educational opportunities for young children to learn and develop to their fullest potential. Assessing children is an essential way of knowing if programs are achieving these desired outcomes. The recommendations below are designed to maximize the potential and minimize any unforeseen negative consequences for children, teachers, programs, and states as they move forward with developing and refining comprehensive statewide assessment systems.

1. Integrated: A comprehensive statewide assessment system—including an essential focus on child assessment—should be integrated and coordinated across all sectors of early childhood, namely, early intervention, early childhood special education, pre-kindergarten, Head Start, child care, elementary, and special education, to ensure efficiency and continuity across the age/grade span from infancy through third grade.

2. Inclusive: A comprehensive assessment system should include considerations for children who require assessment accommodations (e.g., children with disabilities, children with special health-care needs, dual language learners/English language learners, children from diverse socio-economic and cultural groups).

3. Supportive infrastructure: Building a comprehensive statewide assessment system requires a corresponding coordinated infrastructure of resources and supports for teachers, families, and programs. Such a system must ensure that trained assessors or teachers who have received adequate professional development and ongoing supports in the interpretation and use of assessment results administer child assessments. Families will require information and support to participate meaningfully in the assessment process. Careful planning and the allocation of resources is needed to address the initial and ongoing costs of (a) building assessment systems that include purchasing standardized assessment tools and materials, (b) providing necessary adaptations for dual language learners/English language learners and children with special needs, and (c) creating web-based resources such as compendia of assessment tools and integrated data systems for managing and sharing assessment results.

4. Evaluated and continuously improved: Developing, maintaining, and sustaining a comprehensive statewide assessment system requires establishing methods for evaluation and continuous improvement. This includes methods for gathering feedback from stakeholders (e.g., parents, teachers, assessors, specialists, administrators) about the need for additional professional development, resources, guidance, or support in administering and using all four types of child assessment—developmental screening, diagnostic assessment, formative assessment, and child outcome assessment—to inform decision-making about individual children, and to evaluate the effectiveness of early education services for children more broadly.

5. Non-punitive: Minimize the burdens on children, families, and teachers by being clear about the purposes of assessment and embedding assessments within a comprehensive coordinated assessment system.

6. Linked to interventions: Identify and create access to interventions to meet the needs identified through assessments.
REFERENCES


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