



# GUIDING PRINCIPLES ON EARLY CHILDHOOD ASSESSMENTS FOR EDUCATORS AND PROFESSIONALS

BIRTH TO AGE 8 (GRADE 3)

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*“A teacher affects eternity;  
he can never tell where his influence stops.”* Henry Brooks Adams

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## I N T R O D U C T I O N

### PENNSYLVANIA'S OFFICE OF CHILD DEVELOPMENT AND EARLY LEARNING (OCDEL)

Since its inception in 2007, the Office of Child Development and Early Learning (OCDEL) has focused on creating opportunities for the Commonwealth's youngest children to develop and learn to their fullest potential. This goal is accomplished through a framework of supports and systems to help ensure children and their families have access to high quality services.

OCDEL works with many partners to create opportunities for the Commonwealth's children. Families, schools, child care providers, early intervention facilities, Head Start, libraries, home visitation programs, community organizations, and other stakeholders have joined with the Office of Child Development and Early Learning to provide high-quality early childhood programs and effective prevention strategies to offset challenges faced by families that affect school readiness and academic success.

Starting in infancy, OCDEL strives to build a strong foundation for children through the establishment of a statewide standard for excellence in early care and education and the creation of financial and technical supports to achieve that goal. The success of the Commonwealth's efforts today will be seen in the development of Pennsylvania citizens who are strong, independent, and well prepared for the future.

### PENNSYLVANIA'S POINT OF VIEW

There has been much more attention in recent years to the importance of high-quality early childhood programs that provide children with experiences that nurture their development and prepare them for success in school and beyond. While much attention is paid to ensuring the quality of early childhood programs, there is an increasing focus on the role of assessment within early childhood systems, especially on the use of assessment by programs for improving teaching strategies and services in the classroom. There is a broad consensus that early childhood assessment plays a vital role in improving instruction within the classroom; however, how assessment of young children can and should (or should not) be used to determine program and teacher effectiveness is more debatable.

Pennsylvania has developed and implemented a Comprehensive Assessment System (as described in the pages to follow) to safeguard that its early education and care programs meet the quality expectations defined in program performance standards. This system is in place to ensure and educate about the importance for information from child assessment in large-scale system improvement efforts. The development, implementation, and use of assessments reflect research on child development, taking into consideration other indicators that impact children's development and learning, the importance of effective training and ongoing supports for early childhood educators to conduct assessments and use the outcomes well, and adherence to best practices in the field, as well as assessment science.

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## HOW TO USE THIS RESOURCE

This resource has been designed primarily to support programs that are in the process of selecting or changing their assessment or screening tools. However, programs should not interpret this resource as recommending or requiring the use of any particular tools. For instance, if a program is satisfied with its existing tool, and knows that tool is a good complement for its curriculum and population, the information in this resource about particular tools may not be of interest. Likewise, a program that has recently changed its tool may want to give staff time to become familiar with and implement that tool before switching to another. It is anticipated that this resource can be helpful even to those programs not currently considering changing their assessment or screening tools by highlighting the types of information on reliability and validity the program managers should examine to determine the effectiveness of their assessment tools. This resource underscores that assessments as children enter kindergarten exists within the larger framework of efforts to improve both the birth-to-kindergarten span and the early elementary grades experiences of children. Viewing assessments in the context of the birth through third grade continuum and in the context of a comprehensive assessment system underscores how decisions made at one juncture, influence the assessment system and the education system elsewhere.

Ask yourself:  
Why are you reading  
this resource?

### 1. OUTREACH AND ADVOCACY

- Reach more readers of different audiences with this information, such as families, children, teachers, principals, and district administrators and leaders.
- To advocate for and promote the responsible and accurate use of assessments.

### 2. GUIDANCE

- Provide guidance to different types of early childhood programs and to school districts for the alignment of assessment and curriculum to the Pennsylvania standards for learning for children birth to age 8.

### 3. AWARENESS OF AVAILABLE MATERIALS

- Help make program personnel and those responsible for selecting and evaluating assessment or screening tools aware of available materials. These materials link directly to program content and goals, as well as Pennsylvania's standards for learning. These materials sample skills in natural, active learning environments rather than contrived circumstances.

### 4. INFORM

- Give information regarding the reliability and validity of commonly used assessment and developmental screening tools to better help select appropriate tools for the populations they serve.

Four purposes  
for this resource

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## Resource

**PURPOSE:** The Resource reviews the importance of reliability and validity of assessments, developmental screeners, and the organization.

**AUDIENCE:** For those looking to learn more about assessments and would like to start with the basics.

## BASICS Sheets

**PURPOSE:** The **BASICS (Basics on Assessments Systems Informs and Cultivates Success)** Sheets summarize key points and fundamentals on assessments, mentioned in the main resource.

**AUDIENCE:** For those looking for compact informational one-pagers to educate; for educators and professionals within the early childhood field; and for staff, families, children, and anyone looking to be informed and learn about assessments.

## Infographics

**PURPOSE:** The Infographics provide a graphic visual representation of large amounts of information related to Pennsylvania's comprehensive assessment system.

**AUDIENCE:** For those looking for a visually stimulating overview to make the data more easily understood at a glance, and those looking to start conversations or trainings on Pennsylvania's comprehensive assessment system.

## Summary Tables

**PURPOSE:** The Summary Tables summarize common information from each assessment and screening tool examined.

**AUDIENCE:** For those looking for specific information regarding the reliability and validity of commonly used assessment and developmental screening tools to better help select appropriate tools for the populations they serve.

## Glossary

**PURPOSE:** The Glossary defines key terms used throughout this resource.

**AUDIENCE:** For those looking for explanations or more information of newly introduced, uncommon, or specialized terms used in this resource.

It must be noted that it is not OCDEL's intention to make specific recommendations with regard to assessment tools. Rather, OCDEL wishes to provide guidelines for decision-making that would best adhere to the Pennsylvania standards for learning (birth to age 8). Given the many resources available on the market, there is a limited list of assessment tools in the accompanying document, which are evidence-based and have demonstrated technological adequacy for the 0–5 and elementary school-age groups, and are available at the time of this publication.

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## GETTING BACK TO BASICS

The information provided in this document emphasizes the importance of viewing assessment and curriculum development as a continuous process from birth to age eight. For children age birth to eight, physical, cognitive, linguistic, and social-emotional growth and development occur at a rapid rate. Presenting this document in three different tiers allows for the information to reach each individual on their level and needs. This resource provides comprehensive information about the importance of assessment, curriculum, and classroom observation to provide quality classrooms that enable children to succeed in school.

Pennsylvania has transformed how child outcomes are reported through the Early Learning Network (ELN), a system that collects demographics as well as outcomes (data). The current strategy (implemented in 2012) allows early childhood providers to choose from a list of approved child assessment tools. Within these tools, providers will be able to list and identify their own classrooms, enter staff and children demographics, and generate teacher and family reports by fully utilizing the assessment company's online products. The information collected through outcomes reporting can then be used to guide instruction at the child level, target professional development and quality enhancements at the classroom and program levels, and target services at the community level.

### WHAT IS ASSESSMENT?

Assessment is defined as “A systematic process to measure or evaluate the characteristics or performance of individuals, programs, or other entities, for purposes of drawing inferences.” [American Educational Research Association, American Psychological Association, and the National Council on Measurement in Education (2014). *Standards for educational and psychological testing*. Washington, DC: American Educational Research Association] Assessment is a process which allows for understanding a child's competencies and designing learning experiences and environments which will help a child grow to his or her developmental potential whether this is from birth to age eight or third grade. The principles and philosophy of assessment that is applied to young children are part of a continuum that begins at birth and extends through kindergarten to third grade.

Effective programs assess individual children, the classroom as a group, instructional practices, and the experiences that are provided to determine how children are learning or making progress in skill development. Measurement (both assessment and evaluation) of the skills learned by young children must rely upon practices that fit expected learning skills and behavior, and then change as appropriate to support children as they grow and develop. Assessments that are implemented in the classroom and aligned with Pennsylvania Learning Standards for Early Childhood (birth to age 8 or third grade) will help inform teachers. By determining adaptations or revisions that may need to occur to enhance learning, teachers adapt a curriculum that provides multiple learning opportunities that best suit how each child learns. Assessment should not be viewed as separate from instruction. That is, good instruction includes strategies that assess the extent to which children understood the

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content or achieved a certain level of proficiency—and being able to use the results to inform and improve future practice. As such, assessment does not have to be a “test” or a tool. It can be an activity or a set of activities the teacher organizes as opportunities to observe and document children’s responses and behaviors.

## WHAT IS CURRICULUM?

Curriculum is a description of the content or information to be taught and the methods that are going to be used to teach the content. This content method and information is based on scientifically researched information and reflects age, culture, and linguistically appropriate skills and developmental stages of the children in a program. While curricula provide teachers the guidance and tools to help children reach learning standards, the adaptations each teacher makes to accommodate the uniqueness of that classroom’s children makes curriculum fluid and individualized.

## WHAT IS MEANT BY COMPREHENSIVE?

A comprehensive assessment system is defined as “a coordinated and all-inclusive system of multiple assessments—each of which is valid and reliable for its specified purpose and for the population with which it will be used—that organizes information about the process and context of young children’s learning and development to help early childhood educators make informed instructional and programmatic decisions.” [U.S. Department of Education, Race to the Top–Early Learning Challenge (RTT–ELC) Program/Definitions] A comprehensive assessment system addresses a full range of knowledge and skills expected by standards. This provides different users at different levels in the system (district, school, and classroom) the right kind of outcomes at the appropriate level of detail to assist with decision-making. A system that is continuous provides ongoing streams of information about children’s learning throughout the year. Assessment outcomes from a coherent, comprehensive, and continuous system help educators monitor children’s learning by establishing a rich and productive foundation for understanding children’s achievements.

## FRAMING AN EARLY CHILDHOOD ASSESSMENT SYSTEM/ PENNSYLVANIA’S COMPREHENSIVE ASSESSMENT SYSTEM

Pennsylvania’s comprehensive system of early childhood assessment includes screening tools, diagnostic assessments, formative assessments, and summative assessments. This system of comprehensive assessment includes assessments that allow linkages between developmental and curricular benchmarks across birth to grade 3.

The end results of these assessments (outcomes) are integrated into the state’s unified early childhood data system with the purpose of:

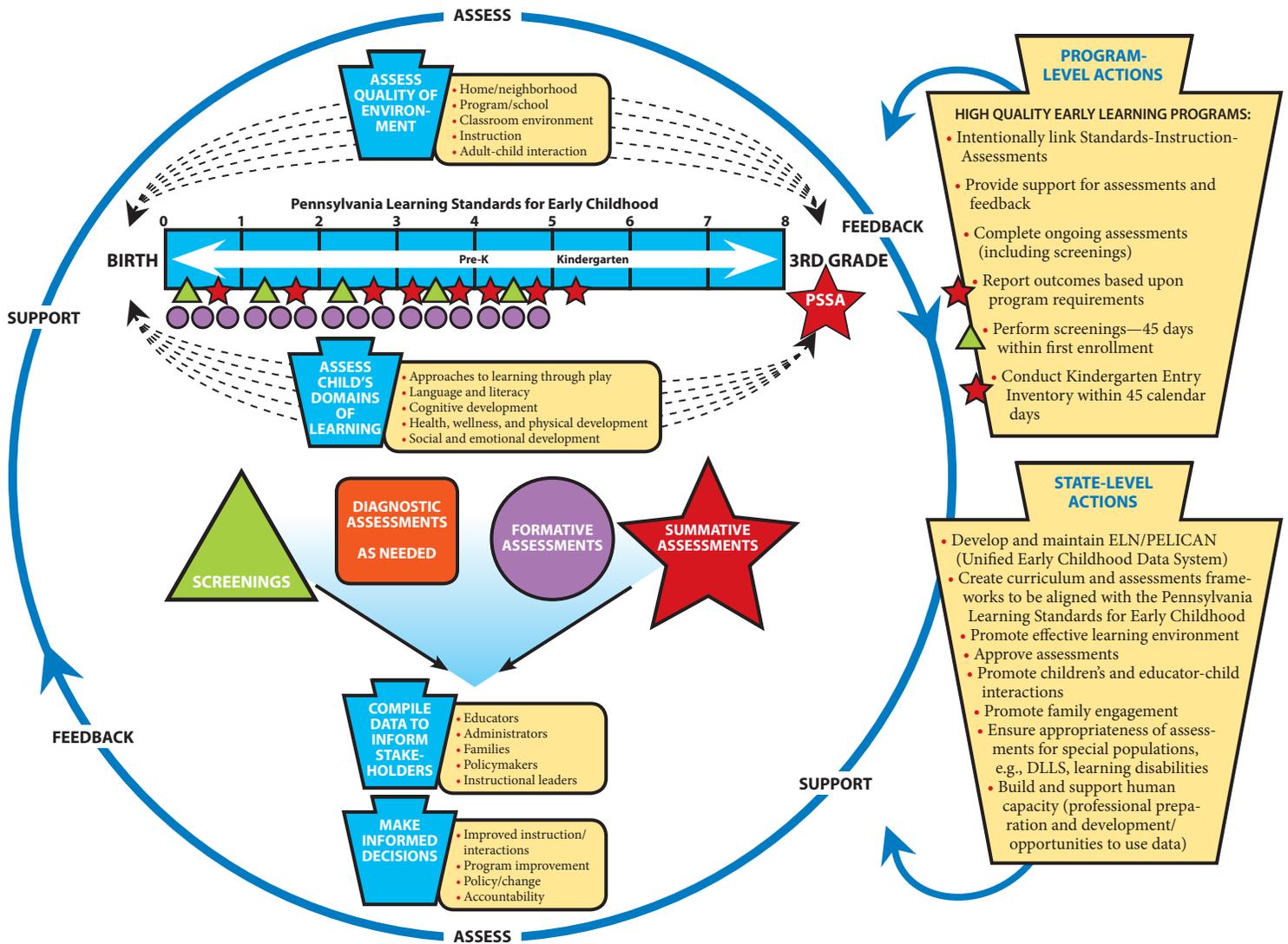
1. providing reliable and comparable outcomes for the purposes of decision-making at multiple tiers (families, educators and caregivers, program administrators, and policymakers);
2. allowing flexibility in choice of assessment measures so the unique needs of users and consumers can be met;

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## FRAMEWORK FOR A COMPREHENSIVE AND ALIGNED ASSESSMENT SYSTEM FOR PENNSYLVANIA



- collecting outcomes that are standards-based against a set of aligned, developmentally-appropriate standards from infancy through grade 3; and
- using appropriate unburdensome and non-duplicative measures for assessing young children, teachers, and programs.

High-quality early childhood education is supported by assessments aligned with instructional goals and approaches. Assessment, however, does not refer simply to the tool being used; it refers to an interconnected system of decisions and activity. In addition to selecting an assessment tool or tools, the system requires

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supports and procedures to effectively and appropriately administer the assessment, as well as the outcomes management and analysis system that captures the results of the assessments and allows the outcomes to be used appropriately. These three components—selection, administration, and utilization—collectively comprise the assessment system as it is defined.

Choices made relative to one component will have implications in each of the others. Understanding these implications allows for a purposeful and intentional design assessment systems that align with early childhood programs. Failure to do so creates the risk for misalignment with potentially unintended consequences. For example, a specific assessment may be selected because of its ease of administration, but result in outcomes too limited to inform instruction or evaluate a program's effectiveness. Likewise, an assessment may be administered to a sample of children served, rather than all children, to reduce costs or allow for more in-depth assessment, but these outcomes then cannot be used to inform instruction for all children or for any individual child.

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## A S S E S S M E N T S

### WHAT IS THE PURPOSE OF THE ASSESSMENT?

One critical feature of an effective assessment is a clear match between the purpose of the assessment and the intended use of the assessment. There are several types of assessments available and each type has a specific purpose.

A comprehensive assessment system addresses several purposes, each with implications for outcomes use. The National Education Goals Panel identified four purposes for assessment. These purposes include:

1. Assessments used to support learning and instruction (screening, diagnostic, and formative);
2. Assessments used to identify children who may need additional services (screening, diagnostic)
3. Assessments used for program evaluation and to monitor trends (summative); and
4. Assessments used for high-stakes accountability (summative).

Write down the names of the assessments used per each purpose. Does each purpose have a specific assessment?

### Use of assessment outcomes to ensure developmentally appropriate early education

The first two purposes for assessment articulated by the Education Goals Panel (1995) focus on individual children—using assessment to guide instruction and using instruction to identify children who may be in need of special services. Assessments to inform instruction provide outcomes that can guide teachers toward instructional approaches to reach children's learning needs. Using assessments this way provides teachers with valuable feedback on their instruction and allows for a tailored their instruction to more effectively support children's development. Likewise, assessments used to screen for a possible special services need should lead directly to a response; in this case, a more thorough assessment

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to move toward diagnostics. Assessments used to inform instruction or screen for potential challenges are invaluable for improving early education for children, but are not well suited for other purposes.

## Use of assessment outcomes for evaluation and accountability purposes

The third and fourth purposes for assessment outlined by the National Education Goals Panel focus on the use of assessments to evaluate program effectiveness and program accountability. While there is agreement that early childhood programs require evaluation, there is growing concern about the appropriateness of some early childhood assessment measures when used to evaluate programs and in the context of high-stakes assessment. As the National Academy's report, *Eager to Learn* (Bowman, Donovan, & Burns 2001), noted, "uses of assessment data for purposes external to the classroom, rather than to improve educational practice directly, place a particularly heavy burden both on the assessment instruments and on the responsible adults." One consequence of this is assessments used for other purposes, such as to inform instruction, are adapted, modified, or even misused for evaluation and accountability purposes. High-stakes decisions about program or teacher quality, effectiveness, or accountability (of either the kindergarten or previous preschool experiences) should NOT be made. This includes judging program quality and program effectiveness (of either the kindergarten or previous preschool experiences), evaluating

teacher effectiveness, and funding decisions. Snow and Van Hemel (2008) underscore this in concluding that "there are not many tools designed for large-scale program evaluation, so tools designed for other purposes often are adapted (e.g., shortened or administered differently) out of necessity, without sufficiently investigating the validity of the adapted tools in their new form and for their new purpose."

Not only is it essential to use outcomes for the correct purpose(s), but the collection procedures and the content also must be appropriate for the children for whom the assessment is administered. The first step is to look at the developmental appropriateness for the children's age level.

Review the tables in the appendix to determine how closely aligned your materials are to Pennsylvania's Standards. If your investigation demonstrates that your curriculum resources are not comprehensive (or do not address all or most of the Standards' Key Learning Areas), you may need to supplement your current materials with additional resources. You may also choose to explore alternate curriculum resources that are more fully aligned with the whole of children's development and with Pennsylvania Learning Standards for Early Childhood.

For example, when assessing children of a specific age range, consider the assessment's content alignment with what is expected of children of this age. Also ask whether the assessment provides an extensive enough range of development to reach children developing at expectation, above expectation, and below expectation. Next, examine the procedures used to collect outcomes to assure they are age-appropriate and sensitive to children's developmental stages.

The sensitivity to children's individual backgrounds (such as ethnic, racial, language, and functional status) is also a critical consideration in determining an appropriate assessment for young children. If a population has a high percentage of children whose first language is

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not English, then the tool or approach must be sensitive to this distinction. If the assessment will be used with children who have special needs, then the administrator must be aware of the level of increments of development that are shown on the assessment to assure its appropriateness. Of course, the tool should be clear of any bias or discrimination against any group of individuals.

## FOUR TYPES OF ASSESSMENTS

These assessments can further be classified into four types:

1. Screening tools/Screeners
2. Diagnostic assessments
3. Formative assessments
4. Summative assessments

### 1. SCREENING TOOLS

While all children may not reach developmental milestones at the same time, development that does not happen within an expected time frame can raise concerns about developmental disorders, health conditions, or other factors that may negatively impact the child's development. Early frequent screening of young children for healthy growth and development is recommended to help identify potential problems or areas needing further evaluation. By recognizing developmental issues early, children can be provided with treatment or intervention more effectively, and additional developmental delays may be prevented. For developmental screening to be effective, it should begin early in a child's life; be repeated throughout early childhood (3rd grade); and use reliable, valid screening tools appropriate to the age, culture, and language of the child that are focused on predictive validity. One particular purpose of assessment often causes confusion: the use of screening tools or "screeners." The criteria for developmental screening tools are generically defined by the characteristic of being brief, cursory, objectively scored, reliable, and valid (Meisels, with Atkins-Burnett, 1994). Brief tools, for reasons of feasibility, are often used when large groups of children need to be evaluated. The results generated from this type of procedure tend to be used for purposes that are beyond the classroom level or for informing teaching. Although it may be useful to teachers to view and be aware of results from a screening procedure, most commonly results are used by schools/programs to identify those few children who may need to receive more extensive (diagnostic) assessment for determining developmental delays or special needs. A screener, though brief, is usually effective in catching the most severe cases of children who would need follow-up evaluation. More recently, screening tools are used to assess whether a child is developmentally ready to attend an educational program, or to determine a child's school readiness. Screeners are often inappropriately used as readiness tests for children. School districts are not permitted to deny children entry to kindergarten based on the results of a readiness test. Screenings should be used briefly and simply to identify potential health, developmental, or social-emotional problems in infants and young children in the context of family, community, and culture who may need a health assessment, diagnostic assessment, or educational evaluation.

The screening process provides an opportunity for young children and their families to

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access a wide variety of services and early childhood programs and promotes and supports families' understanding of their child's health, development, and learning. Developmental screening is the early identification of children at risk for cognitive, motor, communication, or social-emotional delays that may interfere with expected growth, learning, and development, and may warrant further diagnosis, assessment, and evaluation.

- a. **Developmental screening** tools include (at least) the domains of cognition, fine and gross motor skills, speech and language, and social-emotional development.
- b. **Social-emotional screening** is a component of developmental screening of young children that focuses on the early identification of possible delays in the expected development of a child's ability to express and regulate emotions, form close and secure relationships, and explore his/her environment and learn.
- c. **Mental health screening** is the early identification of children at risk for possible mental health disorders that may interfere with expected growth, learning, or development that warrant further diagnosis, assessment, or evaluation.

## 2. DIAGNOSTIC ASSESSMENT

A process that looks at areas of specific concern or looks at a broad range of development. Diagnostic assessment tools are typically standardized for a large number of children. A score is given that reflects a child's performance related to other children of the same age (and less common gender and ethnic origin). A diagnostic assessment typically results in a diagnosis for a child. Some common diagnoses are related to intelligence, intellectual disability, autism, learning disabilities, sensory impairment (deaf, blind), or neurologic disorders. Persons administering diagnostic assessment tools must meet state and national standards, certification, or licensing requirements. Some diagnostic assessment tools used for determining or identifying developmental issues are The Wechsler Preschool and Primary Scale of Intelligence (WPPSI), the Bayley Scales of Infant Development (BSID), electroencephalogram (EEG), Kaufman Assessment Battery for Children (K-ABC), the Battelle Developmental Inventory (BDI), and the Pre-Language Assessment Survey (Pre-LAS). Many other diagnostic assessment tools are available for early childhood. The Buros Institute of Mental Measurements at the University of Nebraska publishes the *Buros Mental Maturity Yearbook* which helps educators and other child care professionals choose a tool that is reliable and highly regarded in the diagnostic assessment community.

## 3. FORMATIVE ASSESSMENT (ASSESSMENT FOR LEARNING)

Used by teachers and children during instruction to provide feedback to adjust ongoing teaching and learning to improve children's achievement of intended instructional outcomes. The Council of Chief State School Officers (CCSSO) (2008) contextualizes formative assessment as follows: "Formative assessment is a process used by teachers and children during instruction that provides feedback to adjust ongoing teaching and learning to improve children's achievement of intended instructional outcomes." The primary purpose of the formative assessment process, as conceived in this definition, is to provide evidence that is used by teachers and children to inform instruction and learning during the teaching/learning process. Effective formative assessment involves collecting evidence about how children's learning is progressing during the course of instruction so that necessary instructional adjustments can be made to close the gap between children's current

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understanding and the desired goals. Formative assessment with very young children has an emphasis that during assessments the children are actively involved in the process and/or are monitoring their own progress. Formative assessment is not a supplement to teaching, but rather integrated into instruction and learning with teachers and children receiving frequent feedback.

- a. One key feature of this definition is its requirement that formative assessment be regarded as a process rather than a particular kind of assessment. In other words, there is no such thing as “a formative test.” Instead, there are a number of formative assessment strategies that can be implemented during classroom instruction. These range from informal observations and conversations to purposefully-planned, instructionally-embedded techniques designed to elicit evidence of children’s learning to inform and adjust instruction.
- b. A second important part of the definition is its unequivocal requirement that the formative assessment process involve both teachers and children. The children must be actively involved in the systematic process intended to improve their learning. The process requires the teacher to share learning goals with children and provide opportunities for children to monitor their ongoing progress.

Pennsylvania defines formative assessment as classroom-based assessment that allows teachers to monitor and adjust their instructional practice to meet the individual needs of their children. **Formative assessment can consist of formal assessments or informal assessments.**

- a. Formal assessments are defined as highly valid and reliable (0.8 or above), standardized (administered similarly each time), and have standards of comparison (norm-referenced, standards-referenced, and criterion-referenced) to make sense of the results (see definitions). These tools usually emerge from research studies published by a national company.
- b. Informal assessments, on the other hand, usually do not follow standard conditions or use standard materials, they often do not have documented reliability (0.5 to 0.6 are acceptable) and validity, and they may be published, but they can also be teacher- or program-developed (i.e., classroom checklist). Ongoing authentic assessments could fall under the definition of informal assessments and are usually considered to be criterion-referenced. (The comparison is based on a child’s own knowledge and skill rather than a norm group.)

*“Tell me and I forget. Teach me and I remember. Involve me and I learn.”*

Benjamin Franklin

What are different ways of collecting evidence?

Formal formative assessments may or may not have high reliability; with a formative assessment the key to success is to ensure validity. An informal assessment probably doesn’t have established reliability but should be valid (that is, assessment approach/item should be a good match to content/standard being assessed). The ideal method of assessing children is through authentic, naturalistic observations that occur on an ongoing basis. The observations should occur during daily activities, teaching, and care routines to describe the development and learning of children. The assessment is not a one-time event since it is difficult to gather valid and reliable indicators of development from this type of information. Methods

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of engaging in ongoing assessment include selecting response tools like portfolios, observations, anecdotal notes, and checklists, to name a few. These are conducted over time to document progress and growth during the child's participation in high quality care and education programs, including both preschool and elementary school. It is not primarily comparative, but rather individualized so that each child's previous performance is viewed as the reference point to make individual comparisons about progress and gains due to the program and/or curriculum being implemented (i.e., criterion-referenced).

The key to success is how the results are used. Results should be used to shape teaching and learning. Black and Wiliam (1998) define formative assessment broadly to include instructional formats that teachers utilize to get information that, when used, alter instructional practices and have a direct impact on children's learning and achievement. Under this definition, formative assessment encompasses questioning strategies, active engagement check-ins (such as response cards, white boards, random selection, think-pair-share, popsicle sticks for open-ended questions, and numbered heads), and analysis of children's work based on set rubrics and standards (for older children including homework and tests).

Assessments are formative when the information is used to adapt instructional practices to meet individual children's needs as well as providing individual children's corrective feedback that allows them to "reach" set goals and targets. Ongoing formative assessment is an integral part of effective instructional routines that provide teachers with the information they need to differentiate and make adjustments to instructional practice to meet the needs of individual children.

When teachers know how children are progressing and where they are having trouble, they can use this information to make necessary instructional adjustments, such as re-teaching, trying alternative instructional approaches, or offering more opportunities for practice.

## 4. SUMMATIVE ASSESSMENT (ASSESSMENT OF LEARNING)

Seeks to make an overall **finding (or result)** of progress made at the end of a defined period of instruction. These assessments occur at the end of a school level, grade, or course, or are administered at certain grades for purposes of state or local accountability. These are often considered high-stakes assessments. Summative assessments may or may not be high stakes—it depends on how decisions are made—while summative outcomes essentially

look back to see how effective was the instruction, a part of the curriculum, or intervention. These assessments are designed to produce clear outcomes on the child's accomplishments at key points in his or her academic career. Scores on these assessments usually become part of the child's permanent record and are statements as to whether or not the child has fallen short of, met, or exceeded the expected standards. Whereas the results of formative assessments are primarily of interest to children and teachers, the results of summative assessments are of great interest to families, the faculty as a whole, the central administration, the press, and the public at large. It is the outcomes from summative assessments on which public accountability systems are based. If the results of

*"If an assessment asks students to evaluate and create but our instruction asks only that they remember and comprehend, then we've taken a wrong turn."*

Mike Fisher

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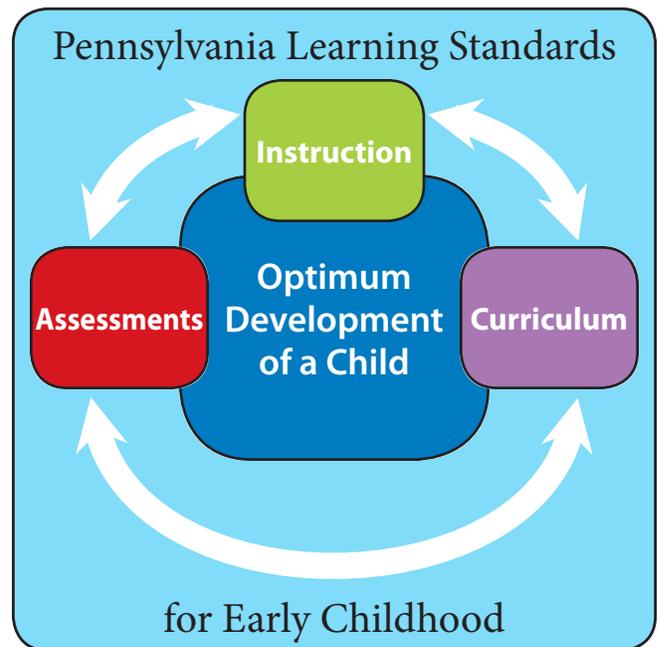
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these assessments are reported with reference to standards and individual children, they can be used as diagnostic tools by teachers to plan instruction and guide the leadership team in developing strategies that help improve children's achievement. Thus, a summative assessment tends to have the least impact on improving an individual child's understanding or performance. Children/families can use the results of summative assessments to see where the child's performance lies compared to either a standard or to a group of children [usually a grade-level group, such as all 6th graders nationally, like the Pennsylvania System of School Assessment (PSSA)]. Teachers and schools can use these assessments to identify strengths and challenges of curriculum and instruction, with improvements affecting the next year's/term's children.

## LINKING ASSESSMENT AND CURRICULUM

Assessment for children is a critical piece of the puzzle. Curriculum, instruction, and assessments join together to help educators provide the best learning experiences for children. Educators should assess children's progress on the curriculum content that is presented to the children, as well as use assessment results to understand the effectiveness of the instructional techniques being used.

The Pennsylvania Learning Standards for Early Childhood are the foundation of the assessment-curriculum-instruction cycle. Linking child outcomes to Pennsylvania Learning Standards for Early Childhood is important because such linkages provide information about the extent to which children across Pennsylvania are meeting the standards. Standards serve as the guide for what children should know and do as they prepare for entrance into formal schooling. The information collected through outcomes reporting can then be used to guide instruction at the child level, target professional development and quality enhancements at the classroom and program levels, and target services at the community level.



The National Association for the Education of Young Children and the National Association of Early Childhood Specialists in State Departments of Education's (NAECS/SDE) (2003) position statement on curriculum, instruction, and assessment underscores the need for a systemic, integrated approach for linking assessments with curriculum and instruction. This approach was reiterated and furthered by the National Academy of Science (NAS) panel

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on early childhood assessment (Snow & Van Hemel 2008), which stated explicitly "... that a primary purpose of assessing children or classrooms is to improve the quality of early childhood care and education by identifying where more support, professional development or funding is needed and by providing classroom personnel tools to track children's growth and adjust instruction." As such, aligning assessments with curriculum and instruction ensures that the intended outcomes are addressed and monitored, while misaligned systems cannot ensure that intentions (through standards, curriculum, and instruction) are being met (Martone & Sireci 2009).

Visit the PAKeys website to find professional development training on Curriculum, Assessment, Standards, and Instructional Practices.

[www.pakeys.org](http://www.pakeys.org)

Within Pennsylvania there is variation in the curricula used by programs. These variations mean that aligning an assessment system with Pennsylvania Learning Standards for Early Childhood may or may not also mean the assessment is aligned with a locally implemented curriculum.

It is recommended that educators use curriculum content resources and assessment measures that work together to provide rich opportunities for learning. Both the curriculum content resources and the assessments should be aligned with Pennsylvania Learning Standards for Early Childhood.

The Office of Child Development and Early Learning continues to develop professional development events that focus on assessment, curriculum, and standards.

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## O U T C O M E S

Outcomes are the recorded results of children's skill development based on teachers' assessments. The purpose of the child assessment outcomes (data) collection and the audience(s) should be considered in determining who collects the outcomes. For example, if a funder wants to know whether their investment is improving child outcomes, then evaluations might independently collect outcomes from a sample of children. By contrast, if teachers want to screen children, plan instruction, or identify professional development needs, it is important that teachers (with input from families) assess all children.

Teachers use reliable and valid assessment tools to guide their collection and documentation of children's progress for reporting. Assessments can often yield numerous amounts of outcomes. It is the **quality** of the outcomes, not the quantity of outcomes, that is important to make meaningful changes to instruction for individual children. It is important to note that using outcomes is a key characteristic of assessments. Outcomes can and should be used by various stakeholders: teachers, administrators, families, policymakers, and instructional leaders.

Outcomes targeted by the assessments and used by teachers, administrators, and families should represent the full breadth of developmental domains that are critical to academic and long-term success. The outcomes are used to support learning, developmental and instructional (or content or learning) domains (i.e., math, literacy, etc.), target specific goals,

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check for progress, identify learning gains, notice strengths and challenges, and transform curricula.

Outcomes targeted by the assessments and used by policymakers and instructional leaders are used appropriately to inform decision-making in different settings (e.g., homes, classrooms) and for different purposes (e.g., improving instruction, changing policies, and investments).

## **The quality of education, learning outcomes, and economic growth from a state level perspective**

Pennsylvania's educational system is based on the principle that education quality is defined by its contribution to the development of cognitive skills and behavioral traits, attitudes, and values that are necessary for good citizenship and productive life in the community. Over the last 10 years, growth research has been able to demonstrate that the quality of education has a statistically significant and important positive economic effect and that ignoring the quality of education limits economic growth. With proper resources and informed leadership, Pennsylvania can implement best practices and policy decisions as key resources in a state and nationwide effort to support healthy development, early learning, and school success for all young children.

Administrators' and legislators' attention should move increasingly from inputs to outcomes; i.e., what children should ultimately have learned at the end of their educational experience. While it is important to know how much money is being spent on such issues as teacher education and physical facilities, legislators recognize that it is equally important to know what children are learning in the classroom: What kind of knowledge, skills, and attitudes does the education system develop? How do assessed learning outcomes reflect the stated goals and objectives of states' educational systems? What factors are associated with children's achievements? Do particular groups in the population perform poorly? How well are children being prepared to succeed in an increasingly knowledge-based economy? Legislators dispute that children will need higher levels of knowledge and skills, particularly in the areas of Science, Technology, Engineering, and Mathematics if they are to participate meaningfully in the world of work.

Ultimately, information on learning outcomes assists us making informed decisions about interventions to improve educational quality and help policymakers monitor trends in the nature and quality of children's learning over time. In the context of the state development assistance, focus on learning outcomes increases stakeholder attention on deliverables and results, and may increase accountability based on performance.

Pennsylvania has been focusing on the delivery of professional development which assists providers in utilizing all available information from the Early Learning Network (child outcomes, reports from the ELN including state longitudinal outcomes system reports) to improve program quality, improve classroom instruction, and target the needs for additional professional development. The main focus is on continuous quality improvement, which will strengthen early childhood educators' understanding of the purposes and uses of each type of assessment included in the comprehensive assessment systems. Continuous quality improvements will train early childhood educators to appropriately administer assessments and interpret and use assessment outcomes to inform and improve instruction, programs, and services.

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## TEACHER EVALUATION

There is a growing awareness that having an effective teacher in every classroom (including early childhood education) is critical to ensuring that every child learns. Assessment is a component of teacher evaluation; however, child-based assessment should not be used as a solitary measure of teacher effectiveness. Measures of teacher effectiveness are important to quality and there are assessments designed to specifically measure teacher effectiveness, performance, classroom environment, and (child) interactions.

An effective evaluation system must inform and provide a foundation for the ongoing professional development of teachers and administrators. The cornerstone of a teacher evaluation system is to improve teacher practice, increasing teachers' effectiveness and increasing children's achievements.

Pennsylvania supports Charlotte Danielson's Framework for Teaching for effective instruction by certified teachers in the Commonwealth. The model focuses the complex activity of teaching by defining four domains of teaching responsibility: 1. Planning and preparation; 2. Classroom environment; 3. Instruction; and 4. Professional responsibilities

Early childhood and school-age professionals come from diverse backgrounds including many different degrees, experiences, and types and amount of professional development. The research about outcomes for children when teachers have high quality professional development in early childhood content is compelling. Working with young children is a profession that requires knowledge of how children grow and develop, as well as the skills to communicate effectively with children and families. Educator preparation (both pre-service and in-service) significantly predicts program quality. The education and specialized professional development opportunities of educators are critical to sustaining high quality early learning experiences for children.

Knowledge expectations of early childhood professionals are identified in **Pennsylvania's Core Knowledge Competencies for Early Childhood and School-Age Professionals (CKCs)**. It identifies a set of content areas that help define the knowledge expectations for professionals in settings within the early childhood education and school-age field. These core competencies, linked to Pennsylvania Learning Standards for Early Childhood, specify the scope of skills and knowledge that guides those who work with children to facilitate child learning and development and support strong partnerships with families. It supports children's preparation for entry into the field of early childhood and school-age care as well as professionals' commitment to lifelong learning through ongoing professional growth. The CKC is an essential component of Pennsylvania's professional development system, which professionals can also use to self-assess their professional development needs.

For more information please use the following link: [http://www.pakeys.org/pages/get.aspx?page=Career\\_CBK](http://www.pakeys.org/pages/get.aspx?page=Career_CBK)

Professional development consists of facilitated teaching and learning experiences that are transactional, collaborative, and designed to support the acquisition of professional knowledge, skills, ethics/values, and dispositions, as well as the application of this knowledge in practice to benefit all children and families.

(PA Professional Development System Framework)

# C L A S S R O O M O B S E R V A T I O N T O O L S

Classroom observation refers to occasions when learning and teaching activities are observed for a specific purpose by someone other than the daily class teacher and support staff. Complementing child assessment outcomes with classroom quality outcomes can make the outcomes more useful. Effective classroom observation is proven to improve teaching and raise levels of attainment. For example, if children (from the same classroom) are not performing and the Early Childhood Environment Rating Scale (ECERS) and Classroom Assessment Scoring System (CLASS) scores are very high, the implications are very different than if they are not performing and ECERS and CLASS scores are very low. Findings indicate the following classroom observation tools produced reliable scores, and meaningful, predictable associations were found between scores on the observation measure on the one hand and teachers' self-reported practices, teaching goals, relationships with children, and perceptions of children's ability to be self-directed learners on the other.

### **Classroom observation measures: CLASS, ELLCO, and ECERS-R**

- The Classroom Assessment Scoring System (CLASS) measure, the Early Language and Literacy Classroom Observation tool (ELLCO), and the Early Childhood Environment Rating Scale-Three (ECERS-3) are all validated and reliable measures of classroom effectiveness. Although there is some overlap, each assessment tool was designed to measure different aspects of effectiveness.
- The CLASS observation tool is a measure of the effectiveness of teacher-child interactions in the classroom. Teacher-child interactions fall into three domains: emotional support, instructional support, and organizational support.
- The ELLCO tool is a measure of the effectiveness of literacy instruction that takes into account the physical classroom environment and teacher-child interactions that facilitate language learning and literacy.
- The ECERS-3 is a rating system that incorporates physical space, provisions for indoor and outdoor activities, scheduling, hygiene, opportunities for professional development, and teacher-child interactions into a broad definition of effectiveness.

Each classroom observation tool provides a unique perspective on classroom quality. Multiple tools could be implemented in the same classroom to provide a more global assessment of quality. Alternatively, one assessment tool may be most appropriate, depending on the goals of the observation.

### **Eight questions to ask when choosing an assessment tool**

1. What type of assessment(s) is the tool?
2. What does the tool assess? And which ages?
3. What are the technical dimensions?
  - a. Aligned with Pennsylvania Learning Standards for Early Childhood?
  - b. Reliability, validity, and technical adequacy?
  - c. Sensitivity to children's individual backgrounds (ethnic, racial, language, and functional status)?
4. What online tools/reports are available?
5. How is training offered?
6. What supports are offered?
7. Can the assessment be used with any curriculum?
8. What is the cost of the tool?

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## C O N C L U S I O N

Well-planned and effective assessment can inform teaching and program improvement and contribute to better outcomes for children. Current assessment practices do not universally reflect the available information about how to do assessment well. This resource affirms that assessments can make crucial contributions to the improvement of children's well-being, but only if they are well designed, implemented effectively, developed in the context of systematic planning, and interpreted and used appropriately. Otherwise, assessment of children and programs can have negative consequences for both. The value of assessments, therefore, requires fundamental attention to their purpose and the design of the larger systems in which they are used. The focus on the need for purposefulness and systematicity is particularly important at this time because young children are currently being assessed for a wide array of purposes across a wide array of domains and in multiple service settings. The increase in the amount of assessment raises understandable worries about whether assessments are selected, implemented, and interpreted correctly. Assessments of children may be used for purposes as diverse as determining the level of functioning of individual children, guiding instruction, or measuring functioning at the program, community, or state level.

Different purposes require different types of assessments, and the similarity base that supports the use of an assessment for one purpose may not be suitable for another. As the consequences of assessment findings become weightier, the accuracy and quality of the tools used to provide findings must be more certain. Decisions based on an assessment that is used to monitor the progress of one child can be important to that child and her family and thus must be taken with caution, but they can also be challenged and revisited more easily than assessments used to determine the fate or funding for groups of children such as those attending a local child care center, an early education program, or a nationwide program like Head Start. When used for purposes of program evaluation and accountability, often called high stakes<sup>1</sup>, assessments can have major consequences for large numbers of children and families, for the community served by the program, and for policy.

### Seven assessment skills educators need

1. How to define clear learning goals, which are the basis of developing or choosing ways to assess children's learning.
2. How to make use of a variety of assessment methods to gather evidence of children's learning.
3. How to analyze achievement data (both quantitative and qualitative) and make good inferences from the data gathered.
4. How to provide appropriate feedback to children and families.
5. How to make appropriate instructional modifications to help children improve.
6. How to involve children in the assessment process (e.g., self and peer assessment) and effectively communicate results.
7. And, most important, how to engineer an effective classroom assessment environment that boosts children's motivation to learn.

*Adapted from SERVE Center, University of North Carolina at Greensboro, 2004.*

<sup>1</sup> The following definition of high stakes assessment has been adopted: Tests and/or assessment processes for which the results lead to significant sanctions or rewards for children, their teachers, administrators, schools/programs, and/or school systems. Sanctions may be direct (e.g., retention in grade for children, reassignment for teachers, reorganization for schools) or unintended (e.g., narrowing of the curriculum, increased dropping out) ~ Snow & Van Hemel (2008)

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*“Teachers are reservoirs from which, through the process of education, students draw the water of life.”*

Sathya Baba

It is critical to incorporate the information attained from assessments into the curriculum and classroom activities. The guidelines about assessment are not recommendations for specific actions, measures, methods, or products. Thoughtful planning based upon the principles in these guidelines and the accompanying documents can lead to assessment systems and curriculum plans that meet schools’ needs; comply with the Pennsylvania standards for learning; and benefit children, teachers, and families in the process.

If decisions about individual children or programs are to be defended, the system of assessment must reflect the highest standards of evidence in three domains: the psychometric properties of the tools used in the assessment system; the evidence supporting the appropriateness of the assessment tools for different ethnic, racial, language, functional status, and age group populations; and the domains that serve as the focus of the assessment. In addition, resources need to be directed to the training of assessors, the analysis and reporting of results, and the interpretation of those results.

The purpose and system principles apply as well to the interpretation, use, and communication of assessment outcomes. Collecting outcomes should be preceded by planning how the outcomes will be used, who should have access to it, in what decisions they will play a role, and what stakeholders need to know about them. Ideally, any assessment activity benefits children by providing information that can be used to inform their caregivers and teachers, to improve the quality of their care and educational environments, and to identify child risk factors that can be remedied.

It is important to ensure that the value of the information gathered through assessments outweighs any negative effects on children or adults and that it merits the investment of resources.

Pennsylvania’s Office of Child Development and Early Learning is committed to the use of early childhood assessment systems, properly developed and implemented, that contribute greatly to the success of early childhood programs. Systems that effectively screen for follow-up children at risk for developmental delays can identify young and very young children for intervention services. Systems that inform a teacher’s instruction better allow for targeted instruction and support to further children’s learning and development. Systems that provide a portrait of skills children have as they enter public school systems can inform curriculum decisions, and assessments that can provide evidence of growth tied to participation in programs can guide implementation and policy decisions. Effective early childhood assessment systems exist within a larger early childhood system that provides programs to young children and supports teachers’ professional growth. In designing early childhood assessment systems, fundamental decisions made about tool selection, administration, and outcomes utilization are interconnected, and decisions made about one aspect of an assessment system can drive other options. Using an approved (by the Office of Child Development and Early Learning) assessments vendor, the professional development system, and the intentionally designed comprehensive assessment system for assessing young children are necessary components of Pennsylvania’s effective early childhood programs.

*“All Pennsylvania families will have access to high-quality care and education for their children, fostering successful futures in school and in life.”*

Pennsylvania’s Educational  
System Vision

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## REFERENCES

Multiple sources of information were used to identify screening and assessments tools for inclusion and to create this resource. As is typical when many sources are consulted, considerable contradictory information became available. Best judgment was used and OCDEL takes responsibility for any errors that may have resulted. In addition to the sources cited below, information was used from test publishers and distributors, test reviews in Buros Mental Measurement Yearbooks, and articles describing specific tests' psychometric properties published in peer-reviewed journals, to the extent they were available.

The following sources were consulted and are recommended to those who would like more detailed information about these screening tools and other screening and assessment tools:

### BIBLIOGRAPHY

*Adequate Yearly Progress* [http://en.wikipedia.org/wiki/Adequate\\_Yearly\\_Progress](http://en.wikipedia.org/wiki/Adequate_Yearly_Progress)

American Educational Research Association, American Psychological Association, and National Council on Measurement in Education (2014) *Standards for educational and psychological testing*. Washington, DC: American Educational Research Association.

Black P, Wiliam, D. (2001) *Inside the Black Box: Raising Standards through Classroom Assessment*

Bowman, B., Donovan, M., and Burns, M. (2001) *Eager to learn: Educating our preschoolers*. Washington, DC: National Academy Press.

Buros Institute of Mental Measurements at the University of Nebraska/publishes the Buros Mental Maturity Yearbook <http://buros.org/mental-measurements-yearbook>

Carol Copple and Sue Bredekamp (2009) *Developmentally Appropriate Practice in Early Childhood Programs Serving Children from Birth through Age 8* (3rd ed.)

Children's Health Fund (2010) *Developmental and Social-Emotional Screening Instruments for Use in Pediatric Primary Care in Infants and Young Children*.

Child Trends and Office of Planning, Research and Evaluation, Administration for Children and Families (2010) *Quality in Early Childhood Care and Education Settings: A Compendium of Measures*. Second Edition.

Dickinson, D.K. and Sprague, K.E. (2001) "The nature and impact of early childhood care environments on the language and early literacy development of children from low-income families." In S.B. Neuman and D.K. Dickinson (Eds.), *Handbook of Early Literacy Research*, New York: The Guilford Press.

Drotar, D., Stancin, T., Dworkin, P.H., Sices, L., Wood, S. (2008) "Selecting developmental surveillance and screening tools." *Pediatrics in Review*.

Hagan, J.F., Shaw, J.S., Duncan, P.M., Bright Futures (2008) *Guidelines for Health Supervision of Infants, Children, and Adolescents*. Third Edition. American Academy of Pediatrics.

Halle, T., Vick Whittaker, J.E., and Anderson, R. (2010) *Quality in Early Childhood Care and Education Settings: A Resource of Measures*, Second Edition. Washington, DC: Child Trends. Prepared by Child Trends for the Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

Harms, T., and Clifford, R.M. (2014) *Early Childhood Environment Rating Scale, Third Edition (ECERS-3)*. New York, N.Y. Teachers College Press.

Harms, T., and Clifford, R.M. (2007) *Family Child Care Environment Rating Scale, Revised Edition (FCCERS-R)*. New York, N.Y.: Teachers College Press.

Harms, T., Cryer, D., and Clifford, R.M. (2006) *Infant/Toddler Environment Rating Scale, Revised Edition (ITERS-R)*. New York, N.Y.: Teachers College Press.

Harms, T., Jacobs, E., and White, D. (2013) *School-Age Care Environment Rating Scale, Updated Edition—SACERS*. New York, N.Y.: Teachers College Press.

# GUIDING PRINCIPLES ON EARLY CHILDHOOD ASSESSMENTS FOR EDUCATORS AND PROFESSIONALS

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- Hix-Small, H., Marks, K., Nickel, R. (2007)  *Impact of Implementing Developmental Screening at 12 and 24 Months in a Pediatric Practice.*
- La Paro, K.M., Pianta, R.C., and Stuhlman, M. (2004)  “The Classroom Assessment Scoring System: Findings from the pre-kindergarten year,” *The Elementary School Journal.*
- A. Martone, S.G. Sireci (2009)  *Evaluating Alignment Between Curriculum, Assessment, and Instruction*, review of educational research.
- Meisels, S.J., Atkins-Burnett, S., Xue, Y., Bickel, D., and Son, S. (2003)  “Creating a system of accountability: The impact of instructional assessment on elementary children’s achievement test scores,” *American Educational Research Journal* 39.
- Meisels, S.J. with Atkins-Burnett (1994)  *Developmental screening in early childhood: A guide* (4th ed.).
- Meisels, S.J., Bickel, D., Nicholson J., Xue, Y., and Atkins-Burnett, S. (2001)  “Trusting teacher judgments: A validity study of a curriculum-embedded performance assessment in kindergarten to grade 3,” *American Educational Research Journal* 38.
- National Academy of Sciences, (2002)  *NAS/NRC Report on minority students in special education.* Washington, DC: National Research Council/National Academy of Sciences, National Association for the Education of Young Children (NAEYC), and the National Association of Early Childhood Specialists in State Departments of Education.  <http://www.naeyc.org/>
- National Education Goals Panel  <http://govinfo.library.unt.edu/negp/datasystemlinks.html>
- Neisworth, J.T., Bagnato, S.J. (2004)  *The MisMeasure of Young Children, Infants and Young Children.*
- No Child Left Behind  [http://en.wikipedia.org/wiki/No\\_Child\\_Left\\_Behind\\_Act](http://en.wikipedia.org/wiki/No_Child_Left_Behind_Act)
- Office of Childhood Development and Early Learning  [http://www.education.state.pa.us/portal/server.pt/community/departamental\\_offices/7235/office\\_of\\_child\\_development\\_and\\_early\\_learning\\_%28ocdel%29/1123142](http://www.education.state.pa.us/portal/server.pt/community/departamental_offices/7235/office_of_child_development_and_early_learning_%28ocdel%29/1123142)
- Office of Child Development and Early Learning Pennsylvania (2005)  *Early Childhood Assessment for children from birth to age 8 (Grade 3).*
- Office of Child Development and Early Learning Pennsylvania (2007)  *Review of Early Childhood Classroom Observation Measures.*
- Office of Child Development and Early Learning Pennsylvania (2007)  *Revised Report and Guidelines on Early Childhood Assessment for children from birth to age 8 (grade 3).*
- Office of Child Development and Early Learning Pennsylvania (2007)  *Summary of Assessment Measures.*
- Office of Childhood Development and Early Learning Research  <http://www.ocdelresearch.org/default.aspx>
- Office of Planning, Research and Evaluation, Administration for Children and Families (2014)  *Early Childhood Developmental Screening: A compendium of measures for children ages birth to five.*
- Pennsylvania Early Learning Keys to Quality  <http://www.pakeys.org/pages/get.aspx?page=home>
- Pennsylvania Learning Standards for Early Childhood  [http://www.pakeys.org/pages/get.aspx?page=Career\\_Standards](http://www.pakeys.org/pages/get.aspx?page=Career_Standards)
- Pennsylvania Standards Aligned System  <http://pdesas.org/>
- Pennsylvania System of School Assessment  [http://www.portal.state.pa.us/portal/server.pt/community/state\\_assessment\\_system/20965/pennsylvania\\_system\\_of\\_school\\_assessment\\_%28pssa%29/1190526](http://www.portal.state.pa.us/portal/server.pt/community/state_assessment_system/20965/pennsylvania_system_of_school_assessment_%28pssa%29/1190526)
- Pianta and La Paro, (2003)  *Classroom Assessment Scoring System (CLASS).*
- Pianta, R.C., Howes, C., Burchinal, M., Bryant, D., Clifford, R., Early, D., and Barbarin, O. (2005)  “Features of pre-kindergarten programs, classrooms, and teachers: Do they predict observed classroom quality and child-teacher interactions?” *Applied Developmental Science.*
- Pianta, R.C., La Paro, K.M., Payne, C., Cox, M.J., Bradley, R. (2002)  “The relation of kindergarten classroom environment to teacher, family, and school characteristics and child outcomes.” *The Elementary School Journal.*
- Ringwalt, S. (2008)  *Developmental Screening and Assessment Instruments with an Emphasis on Social and Emotional Development for Young Children Ages Birth through Five.* The National Early Childhood Technical Assistance Center (NECTAC)
- Romanczyk, R.G., Gillis, J.M., Noyes-Grosser, D.M., Holland, J.P., Holland, C.L., Lyons, D. (2005)  *Clinical Clues, Developmental Milestones, and Early Identification/Assessment of Children with Disabilities, Infants and Young Children.*

# GUIDING PRINCIPLES ON EARLY CHILDHOOD ASSESSMENTS FOR EDUCATORS AND PROFESSIONALS

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SERVE Center(2004) University of North Carolina at Greensboro <http://www.serve.org/>

Smith, Dickinson, Sangeorge and Anastasopoulos, (2002)  *The Early Language and Literacy Classroom Observation Tool (ELLCO)*.

Catherine E. Snow and Susan B. Van Hemel, National Research Council of the National Academies (2008)  *Early Childhood Assessment: Why, What and How?*

State Collaborative on Assessment and Student Standards (SCASS) A glossary of terms for Early Childhood Education Standards and Assessments [http://www.ccsso.org/projects/SCASS/projects/early\\_childhood\\_education\\_assessment\\_consortium/publications\\_and\\_products/2838.cfm](http://www.ccsso.org/projects/SCASS/projects/early_childhood_education_assessment_consortium/publications_and_products/2838.cfm)

Stipek, D. (1996)  *Early Childhood Classroom Observation Measure (ECCOM)*.

U.S. Department of Education, Office of Special Education Programs, Early Learning Standards Task Force (2005)  *Final report and guidelines on assessment and curriculum*.

U.S. Department of Health and Human Services (2014)  *Birth to 5; Watch me thrive! A compendium of screening measures for young children*.

World Bank Learning Outcomes <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTEDUCATION/0,,contentMDK:21911176~menuPK:5495844~pagePK:148956~piPK:216618~theSitePK:282386,00.html>

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## ALPHABETICAL LIST OF ASSESSMENT TOOLS

(mentioned within this resource or appendix)

The current state of the field in early childhood assessment is captured by the National Academy report (Snow & Van Hemel 2008). While there are hundreds of assessment products for young children on the market today, there is unevenness in the degree to which they cover important domains of school readiness, as well as the degree to which they are appropriate for diverse populations, primarily those children who are English language learners (ELLs) or children with disabilities. Available assessments also vary in their quality as measures (reliability and validity). The variation in assessments along these multiple characteristics needs to be carefully considered when selecting specific assessments.

<b>A</b>		APFCCH..... Assessment Profile for Family Child Care Homes	
AAB-5 .....	Academic Achievement Battery-Screener	ATI..... Assessment Technology Incorporated (Galileo)	
ASEBA .....	Achenbach System of Empirically Based Assessment	<b>B</b>	
ABAS-2 .....	Adaptive Behavior Assessment System II (III released in 2015)	BSSI-3 .....	Basic School Skills Inventory
ASQ-3 .....	Ages and Stages Questionnaire-3rd Edition	BDI-2.....	Battelle Developmental Inventory-2nd Edition
ASQ-SE.....	Ages and Stages Questionnaire Social/Emotional	BSID-3 .....	Bayley Scales of Infant Development-3rd Edition
APEEC.....	Assessment of Practices in Early Elementary	BESS.....	Behavioral and Emotional Screening System
APECP .....	Assessment Profile for Early Childhood Programs	BRIEF .....	Behavior Rating Inventory of Executive Function

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BRIEF-P.....	Behavior Rating Inventory of Executive Function-Preschool version	CIRCLE.....	Classroom Code for Interactive Recording of Children’s Learning Environments
Boehm-3.....	Boehm Test of Basic Concepts-3rd Edition	CLEO.....	Classroom Language and Literacy Environment Observation
BBCS-3 .....	Bracken Basic Concept Scale-3rd Edition	COEMET .....	Classroom Observation of Early Mathematics Environment and Teaching
BITSEA.....	Brief Infant Toddler Social Emotional Assessment	CPI.....	Classroom Practices Inventory
BECDI-III.....	Brigance Early Childhood Developmental Inventory-3rd Edition	CIBS-K.....	Comprehensive Inventory of Basic Skills (Brigance)
BECS-III.....	Brigance Early Childhood Screens-3rd Edition	CTOPP-2.....	Comprehensive Test of Phonological and Print Processing-2nd Edition
BHSDI.....	Brigance Head Start Developmental Inventory	CTF.....	Coaching to Fidelity
BAS .....	Business Administration Scale for Family Child Care	<b>D</b>	
<b>C</b>		DAYC-2.....	Developmental Assessment of Young Children 2nd Edition
CIS.....	Caregiver Interaction Scale	DIAL-4 .....	Developmental Indicators for the Assessment of Learning-4th Edition
CCPSN .....	Carolina Curriculum for Preschoolers with Special Needs	DRDP-2015.....	Desired Result Developmental School Readiness (California) full continuum
ChAMP .....	Child and Adolescent Memory Profile	DRDP (K) 2015	Desired Result Developmental Kindergarten
CCATR.....	Child Care Assessment Tool for Relatives	DOCS.....	Development Observation Checklist System
CCIS .....	Child Caregiver Interaction Scale	DECA .....	Devereux Early Childhood Assessment Program
C-COS.....	Child-Caregiver Observation System	DELV .....	Diagnostic Evaluation of Language Variation
CC-HOME.....	Child Care Home Inventories	DIBELS-6 .....	Dynamic Indicators of Basic Emergent Literacy Skills-6th Edition
CDPES .....	Child Development Program Evaluation Scale	<b>E</b>	
CDR-PQ.....	Child Development Review-Parent Questionnaire	ECCOM.....	Early Childhood Classroom Observation Measure
COFAS .....	Child Observation Form and Scale	ECERS-E.....	Early Childhood Environmental Rating Scale Extension
COR.....	Child Observation Record (High/Scope)	ECERS-R .....	Early Childhood Environmental Rating Scale-Revised Edition
CHELLO.....	Child/Home Early Language & Literacy Observation	ECERS-3.....	Early Childhood Environmental Rating Scale-3rd Edition
CIRCLE-A.....	Circle Assessment	ELLCO.....	Early Language & Literacy Classroom Observation
CASEBA.....	Classroom Assessment of Supports for Emergent Bilingual Acquisition	ELLCO-ELL .....	Early Language & Literacy Classroom Observation-Addendum for English Language Learners
CLASS.....	Classroom Assessment Scoring System	ELLCO-Pre-K....	Early Language and Literacy Classroom Observation-Pre-Kindergarten
CLASS-PreK .....	Classroom Assessment Scoring System for Pre-K		
CLASS-T.....	Classroom Assessment Scoring System for Toddlers		

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ELN .....	Pennsylvania Early Learning Network	LISn-EVR .....	Language Interaction Snapshot End of Visit Rating
ELOR .....	Early Learning Outcomes Reporting	LAP-3 .....	Learning Accomplishment Profile-3rd Edition
ELS .....	Early Learning Scale (Lakeshore-NIEER)		
E-LOT .....	Early Literacy Observation Tool	<b>O</b>	
ELSA .....	Early Literacy Skills Assessment	OMLIT.....	Observation Measure of Language and Literacy Instruction
ESI-R .....	Early Screening Inventory-Revised	ORCE .....	Observation Record of the Caregiving Environment
ESP-R .....	Early Screening Profiles-Revised	OS .....	Ounce Scale (Pearson)
EAS.....	Emerging Academics Snapshot	OWLS.....	Oral Written and Language Scales
ES .....	Emlen Scales: A Packet of Scales for Measuring the Quality of Child Care from a Parent's Point of View	OPPC-BVI-6 .....	The Oregon Project for Preschool Children Who Are Blind or Visually Impaired-6th Edition
EDDT-PF .....	Emotional Disturbance Decision Tree-Parent Form		
EPAO.....	Environment and Policy Assessment and Observation	<b>P</b>	
ERS.....	Environment Rating Scale (University of North Carolina: ECERS, ITERS, FCCERS, SACERS)	PEDS.....	Parents Evaluation of Developmental Status
EMC .....	Every Move Counts	PEDS-DM .....	Parents Evaluations of Developmental Status and Developmental Milestones
<b>F</b>		PDDBI.....	PDD Behavior Inventory
FCCERS-R.....	Family Child Care Environment Rating Scale-Revised Edition	PDDBI-SV .....	PDD Behavior Inventory Screening Version
FAR.....	Feifer Assessment of Reading	PBRs .....	Pediatric Behavior Rating Scale
FAR-S .....	Feifer Assessment of Reading-Screener	PEDI-CAT.....	Pediatric Evaluation of Disability Inventory-Computer Adaptive Test
FirstSTEP .....	First Screening Test for Evaluating Preschoolers	PPVT-4.....	Peabody Picture Vocabulary Test-4th Edition
<b>G</b>		PSC-35.....	Pediatric Symptom Checklist
GRTR.....	Get Ready To Read!	PELICAN.....	Pennsylvania's Enterprise to Link Information for Children Across Networks
<b>I</b>		PALS-1-3.....	Phonological Awareness Literacy Screening 1st-3rd Grade
inCLASS .....	Individualized Classroom Assessment Scoring System	PALS-K.....	Phonological Awareness Literacy Screening Kindergarten
IDI.....	Infant Development Inventory	PALS-PreK.....	Phonological Awareness Literacy Screening Preschool
ITERS-R.....	Infant-Toddler Environment Rating Scale-Revised Edition	PreLAS.....	Pre-Language Assessment Survey
<b>K</b>		PKBS-2.....	Preschool and Kindergarten Behavior Scales-2nd Edition
K-ABC .....	Kaufman Assessment Battery for Children, Expressive Vocabulary Subtest	PCI.....	Preschool Classroom Implementation Rating Scale
K-SEALS.....	Kaufman Survey of Early Academic and Language Skills	PLS-5 .....	Preschool Language Scale-5th Edition
<b>L</b>		PMHCS .....	Preschool Mental Health Climate Scale
LISn.....	Language Interaction Snapshot		

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- PQA-2..... Preschool Program Quality Assessment-2nd Edition
- PRISM..... Preschool Rating Instrument for Science and Math
- PAS..... Program Administration Scale
- PITC-PARS..... Program for Infant/Toddler Care Program Assessment Rating Scale
- PQA-HighScope High-Scope's Program Quality Assessment Tool
- Q**
- QELI..... Qualls Early Learning Inventory
- Q-CCIIT..... Measuring the Quality of Caregiver-Child Interactions for Infants and Toddlers
- QUEST..... Quality of Early Childhood Care Settings: Caregiver Rating Scale
- R**
- ROLE..... Ramey's Observation of the Learning Environment
- RSA..... Ready School Assessment
- RCDS-2:SF..... Reynolds Child Depression Scale-2nd Edition: Short Form
- RIAS..... Reynolds Intellectual Assessment Scales
- REAL-HS..... Riverside Early Assessments of Learning Head Start (Houghton Mifflin Harcourt)
- REAL-KR..... Riverside Early Assessments of Learning Kindergarten Readiness
- S**
- SACERS..... School Age Care Environment Rating Scale
- SCBE..... Social Competence and Behavior Evaluation
- SEARS..... Social Emotional Assests and Resilience Scales
- SEARS-SF..... Social Emotional Assests and Resilience Scales-Short Form
- SSIS..... Social Skills Improvement Program
- SCAS..... Spence Anxiety Scales
- SSEGA..... Supports for Social-Emotional Growth Assessment
- SELA..... Supports for the Early Literacy Assessment
- SWBYC..... Survey of Well Being of Young Children
- T**
- TBRS..... Teacher Behavior Rating Scale
- TKA..... Teacher Knowledge Assessment
- TPOT..... Teaching Pyramid Observation Tool for Preschool Classrooms
- TSG..... Gold (Teaching Strategies LLC)
- TABS..... Temperament and Atypical Behavior Scales
- TEMA-3..... Test of Early Mathematics Ability-3rd Edition
- TERA-3..... Test of Early Reading Ability-3rd Edition
- TEAM..... Tools for Early Assessment in Mathematics
- V**
- V-II-ABS..... Vineland Adaptive Behavior Scales
- V-SEEC..... Vineland Social Emotional Early Childhood Scales
- VAS-E/VAS-R... Vocabulary Assessment Scales Expressive and Receptive
- W**
- WPPSI-III..... Wechsler Preschool and Primary Scale of Intelligence-3rd Edition
- WSS-4..... Work Sampling System-4th Edition (Pearson)
- WSS-HS..... Work Sampling System for Head Start
- Y**
- YCAT..... Young Children's Achievement Test

*"The purpose of education  
is to replace an empty  
mind with an open one."*

Malcolm Forbes

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## G L O S S A R Y   O F   T E R M S

Many of the measures included in this resource assess features of quality within early care and education environments that reflect administrative structures and practices as well as supports for staff development. There are several areas related to structure, including business practices, family involvement, activities/scheduling, classroom organization, and classroom materials. There are also several areas related to administration, including internal communications and leadership/management. Finally, quality features related to monitoring/improvement include professional development, assessment/monitoring of children, and program/staff assessments. Examples of each of these aspects of quality are offered below:

**Accommodations** • Adaptations in assessment tools and standards to permit children with disabilities or English language learners to show what they know and can do. Adjustments may be made, for example, in the way a test is administered or presented, in the timing, in the language, or in how the child responds. The nature of the adjustment determines whether or not what is being measured or the comparability of scores is affected (Council of Chief State School Officers, 2008).

**Activities/scheduling** • The condition in which things are happening or being done (i.e., circle time, outdoors time) and/or general schedule planning and facilitation (i.e., a schedule, schedule flows and good transitions, procedures for hand-washing, snack time, etc.).

**Achievement test** • Tests that examine skills that the child has already acquired; a testing tool, typically standardized and norm-referenced, used to measure how much a child has learned in relation to educational objectives (Council of Chief State School Officers, 2008).

**Adaptation or accommodation** • A convenient arrangement; a settlement or compromise; a change in the way screeners are presented or in how the child is allowed to respond so that children with disabilities or limited English proficiency can be assessed or screened. For example,

one might include Braille forms for blind children (adaptation) or allow more time for children whose primary language is not English (accommodation). This term generally refers to changes that do not substantially alter what is being measured.

**Administration** • The process or activity of running a business, organization; the day-to-day administration of the company; the people responsible for this, regarded collectively as the management team/leader.

**Alignment** • The proper positioning or state of adjustment of parts in relation to each other; the process of linking content and performance standards to assessment, instruction, and learning in classrooms.

**Alternative** • A term sometimes used loosely to refer to one or more things available as another possibility. In a narrower sense, assessment refers to information from multiple indicators and sources of evidence that is organized and interpreted and then evaluated.

**Assessment** • An ongoing process of observing a child's current competencies (including knowledge, skills, dispositions, and attitudes) and using the information to help the child develop further in the context of family and caregiving and learning environments. Not a "test," but rather a systematic procedure/process for obtaining information from observation, interviews,

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portfolios, projects, tests, and other sources that can be used to make judgments about children's characteristics. There are many purposes of assessment. Tools designed for one purpose are in most cases inappropriate to use for a purpose other than that which they were intended. It is used to measure skills and abilities, which could help to determine progress over time.

**Authentic assessment** • A type of performance assessment that uses tasks that are as close as possible to real-life practical and intellectual challenges and the child completes the desired behavior in a context as close to real life as possible.

**Battery** • An array of similar tools intended for use together, such as “a battery of assessments” for different developmental areas.

**Business practices** • Program has a method for keeping business records (financial or programmatic) or has sound, consistent business practices, policies, and procedures.

**Classroom materials** • Classroom has either specific materials (i.e. blocks, books), a variety of materials, and/or materials that are developmentally appropriate.

**Classroom organization** • Refers to the physical layout of the program (i.e., well-defined spaces for different activities, specific areas are present—dramatic play area, outdoor playground—or materials or facilities are in good condition).

**Competencies** • The concepts and facts that a professional must learn to become competent in each area of practice. This knowledge becomes the cognitive foundation for the skills and behaviors implemented in the professional's work with children.

**Concurrent validity** • This term describes the relationship between two separate

measures of similar constructs which, when administered at the same time, provide results that are consistent with one another. Note: Sometimes manuals refer to this as convergent criterion validity, which could be interpreted to mean that the two tools concur or agree in the measurement of a particular construct.

**Construct** • An idea or theory containing various conceptual elements, typically one considered to be subjective and not based on empirical evidence.

**Construct validity** • The extent to which a tool measures a clearly defined theoretical concept. The tool should be based on a theory, and scores from the tool should reflect what would be expected based on that theory.

**Content validity** • The extent to which a tool reflects the range of possible skills or behaviors that make up the domain or construct being assessed. This is often determined through expert review.

**Convergent validity** • A subtype of criterion-related validity. This term indicates the degree to which a tool correlates with other tools assessing the same construct.

**Criterion-referenced** • Children's response(s) is compared to a level of performance in an area of knowledge or skill, rather than to a group of children or normative group.

**Criterion-referenced assessments** • An assessment tool in which the test-taker's performance (i.e., score) is interpreted by comparing it with a pre-specified standard. Specific content or skills are designed to measure a child's performance against a fixed set of predetermined criteria or learning standards—i.e., concise, written descriptions of what children are expected to know and be able to do at a specific stage of their education. Results are typically

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reported as levels of proficiency, such as emerging skill or mastery.

**Criterion-related validity** • A criterion-related validation study can be either predictive of later behavior or a concurrent measure of behavior or knowledge. The degree to which the scores of one tool are related to the scores of another existing tool which measures the same construct. The comparison between the tool and the criterion can be done either concurrently (i.e., concurrent validity), or later in time (i.e., predictive validity).

**Curriculum** • A body of material that defines the content to be taught and the methods to be used. Information organized on a specific topic; a set of topic specific information created for a defined group.

**Curriculum-based assessment** • Form of criterion-referenced measurement wherein curricular objectives act as the criteria for the identification of instructional targets and for the assessment of status and progress. The term curriculum-based assessment (CBA) means simply measurement that uses “direct observation and recording of a child’s performance in the local curriculum as a basis for gathering information to make instructional decisions. The process of CBA has also been referred to as direct assessment of academic skills, and many different models all have in common the basic assumption that one should test what one teaches. Typically, these approaches have emphasized direct, repeated assessment of academic target behaviors. In each academic area, probes are developed and are used to collect data on a child’s performance. These probes are developed from the books or materials that make up the child’s curriculum.

**Data** • Data are facts, outcomes, and statistics collected together for reference or analysis. Data can be individual facts,

a body of facts, statistics, or items of information.

**Developmentally appropriate** • Decisions about the well-being and education of children based on at least three important kinds of information or knowledge: that are age-appropriate, culturally-appropriate, and individually-appropriate for each child. What is known about child development and learning; what is known about the strengths, interests, and needs of each individual child in the group; and knowledge of the social and cultural context in which children live.

**Developmental delay** • A delay in the appearance of some steps or phases of growth and development. Note: Programs serving at-risk populations may expect to find higher rates of children being identified as at risk for developmental delay than typically found when looking at the total population of both at-risk and not-at-risk children.

**Developmental norms** • Standards by which the progress of a child’s development can be measured relative to the development of a representative cross section of children, i.e., the norm. For example, the average age at which a child walks, learns to talk, or achieves toileting independence would be a standard used to judge whether the child is progressing normally. While norms are usually thought of as age-related, norms can also be tied to other developmental variables such as race, ethnicity, and gender. Norms can inform teachers, families, and others in judging the appropriateness of certain types of activities for different children.

**Diagnostic** • A tool to provide information on a child’s development or health status.

**Discriminant or divergent validity** • A subtype of criterion-related validity that indicates the degree to which the tool is less

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closely related to measures of theoretically different constructs.

**Documentation** • The process of keeping track of and preserving children’s work as evidence of their progress.

**Domain** • A set of related skills, behaviors, or information that is classified as a single area of study or development. Domains typically cover multiple related constructs within a broad area of study or development, such as fine motor development or approaches toward learning.

**Early Learning Standards** • Statements that describe expectations for the learning and development of young children birth to five years of age. Pennsylvania Learning Standards for Early Childhood are research-based according to age and development, and form the foundation for curriculum, assessment, instruction, and intervention within early care and education programs.

**Early Learning Outcomes Reporting (ELOR)** • Early Learning Outcomes Reporting links high quality learning standards with assessment and instruction for children birth through transition to kindergarten. Child outcomes reported to the state consist of outcomes that align to specific Pennsylvania Learning Standards. The specific standards chosen within the outcomes framework represent those standards which most directly predict later school success and align with Pennsylvania Learning Standards for Early Childhood. Within the framework of outcomes reporting, early learning programs select an OCDEL-approved vendor assessment instrument. Outcomes from the selected tool are translated into age-specific Early Learning Outcomes reporting frameworks within the PELICAN system.

For additional information, please visit <http://www.pakeys.org/pages/get.aspx?page=ELOR>

**Educator** • A person or thing that educates, especially a teacher, principal, or other person involved in planning or directing education/an educationist.

**Electroencephalography (EEG)** • The recording of electrical activity along the scalp. EEG measures voltage fluctuations resulting from ionic current flows within the neurons of the brain. In clinical contexts, EEG refers to the recording of the brain’s spontaneous electrical activity over a short period of time, usually 20–40 minutes, as recorded from multiple electrodes placed on the scalp. Diagnostic applications generally focus on the spectral content of EEG, that is, the type of neural oscillations that can be observed in EEG signals. EEG is most often used to diagnose epilepsy, which causes abnormalities in EEG readings

**Factor analysis** • A procedure used to examine the relationships among items or questions to see whether the items group together, or are distinct, in expected ways. Researchers sometimes describe this as how well items being measured “hang together,” a process in which the values of observed data are expressed as functions of a number of possible causes to find which are the most important.

**Faithful administration** • Individuals demonstrate consistency in the skill and accuracy with which they administer a screening tool to children. Such accuracy is verified through regular checks on faithful administration, using training materials or guidance from the developer of that tool.

**Family involvement** • There are specific practices in place to ensure communication with and/or involvement of families. Family involvement is viewed as important. “Family involvement” is defined as the participation of families in every facet of children’s education and development from birth to adulthood, recognizing

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that families are the primary influence in children's lives. The purpose of the family involvement component is to engage families as partners in the educational process.

**Formal assessment** • A procedure for obtaining information that can be used to make judgments about characteristics of children or programs using standardized tools. Formal assessments are tests that systematically measure how well a child has mastered learning outcomes.

**Formative assessments** • Formative assessment, also referred to as “educative assessment,” is used to aid learning. Assessments that examine children's learning for the purpose of improving the quality of teaching and children's learning and not for evaluating individual children. The formative assessments aim to see if the children understand the instruction before doing a summative assessment. An assessment designed to monitor progress toward an objective and used to guide curricular and instructional decisions. Formative assessments can take the form of diagnostic, standardized tests; quizzes; oral questions; or draft work.

**Funder** • A person or organization that provides money for a particular purpose: can include legislators/grants/etc.

**Guidelines** • A description of suggested elements aimed to accomplish a defined activity.

**High-stakes testing** • A high-stakes test is any test whose results are used to make important decisions about children, educators, schools, or districts, most commonly for the purpose of accountability.

**High-stakes assessment** • Tests or assessment processes for which the results lead to significant sanctions or rewards for children, their teachers, administrators,

schools, programs, or school systems. Sanctions may be direct (e.g., retention in grade for children, reassignment for teachers, reorganization for schools) or unintended (e.g., narrowing of the curriculum, increased dropping out).

**Implementation** • The process of putting a decision or plan into effect; execution; taking a planned curriculum, assessment system, or evaluation design and making it happen in ways that are consistent with the plan and desired results.

**Indicators** • A thing, especially a trend or fact, that indicates the state or level of something; questions included in the tool that are related to the developmental skill or ability being measured.

**Informal assessment** • A procedure for obtaining information that can be used to make judgments about characteristics of children or programs using means other than standardized tools.

**Internal communication** • Leadership communicates well with staff and/or staff communicate well with each other.

**Internal consistency reliability** • How closely items or indicators within a construct are interrelated.

**Knowledge areas** • Define the depth and breadth of information that a professional must learn to be a competent early childhood or school-age professional. Eight knowledge areas identify specialized knowledge that shapes early childhood and school-age educators' and administrators' professional practice.

**Leadership/management** • The action of leading a group of people or an organization. Program director or principal plays an active, positive role in the functioning of the program, there is strong internal leadership, or teachers manage the program well.

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**Legislator** • A person who makes laws; a member of a legislature, on a state or national level.

**Monitoring** • Observe and check the progress or quality of (something) over a period of time; keep under systematic review. Progress is measured on a regular basis (e.g., weekly or monthly) by comparing expected and actual rates of learning. Assessment conducted to examine children's academic performance and evaluate the effectiveness of instruction. Based on these measurements, teaching is adjusted as needed.

**Naturalistic observation** • Refers to the collection of data without manipulation of the environment. The goal of naturalistic observation is to study/observe the behavior of a human (including an organism) in natural settings.

**Norm-referenced assessment** • A standardized testing tool by which the test-taker's performance is interpreted in relation to the performance of a group of peers who have previously taken the same test. The group of peers is known as the "norming" group. Norm-referenced refers to standardized tests that are designed to compare and rank test-takers in relation to one another. Norm-referenced tests report whether test-takers performed better or worse than a hypothetical average child, which is determined by comparing scores against the performance results of statistically selected group of test-takers, typically of the same age or grade level, who have already taken the exam.

**Outcomes** • Desired results for young children's learning and development across multiple domains.

**Pennsylvania Early Learning Network (ELN)** • A comprehensive, unified data system for assessing individual-level child

outcomes across multiple programs. It links existing data systems by child identifier and will collect additional information on child and family services across a program area. When fully implemented, the data will be used to inform state policy decisions, investments, and improvement efforts for early educational programs from birth to third grade.

For additional information, please visit <https://www.pakeys.org/uploadedcontent/docs/elN/ELN%20Parent%20Flyer.pdf>

**Pennsylvania's Enterprise to Link Information for Children Across Networks (PELICAN)** • PELICAN is the Departments of Human Services and Education's initiative to combine the state's early learning programs under a single management information system. All early learning services information is managed in PELICAN. The PELICAN system includes the following: Certification, Child Care Works, Keys to Quality, PA Pre-K Counts, Early Learning Network, Early Intervention, and Provider Management.

For additional information, please visit <http://www.pakeys.org/pages/get.aspx?page=PELICAN>

**Performance** • Behaviors exhibited while putting into the action or process of carrying out or accomplishing an action, task, or function.

**Performance assessment** • Measures children's skills based on authentic tasks such as activities, exercises, or problems that require children to show what they can do. In some cases performance tasks are used to have children demonstrate their understanding of a concept or topic by applying their knowledge to a particular situation. Finding out what children know and can do by observing how they perform certain tasks. Usually

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uses tasks as close as possible to real-life practical and intellectual challenges. Because performance assessments require children to actively demonstrate what they know, they can be a more valid indicator of children's knowledge and abilities than other assessment methods.

**Policy** • The definite course of action adopted for a program, business, facility, political party, or government.

**Policymaker** • A person responsible for making policy; can be on a program or state level.

**Population** • The total number of all possible subjects or elements which could be included in a study. If the data are valid, the results of research on a sample of individuals drawn from a much larger population can then be generalized to the population.

**Portfolio assessment** • A collection of work, usually drawn from children's classroom work, which, when subjected to objective analysis, becomes an assessment tool.

**Practitioners** • A person engaged in the practice of a profession, occupation, etc. within education.

**Professional development** • In education, the term professional development may be used in reference to a wide variety of specialized training, formal education, or advanced professional learning intended to help administrators, teachers, and other educators improve their professional knowledge, competence, skill, and effectiveness. Professional development is supported and/or specific professional development opportunities (internal or external) are made available to staff.

**Professionals** • A person who belongs to one of the professions, especially one of the

learned professions within education.

**Program/staff assessments** • Program completes assessments or monitoring of the program and/or the staff (can refer to specific published assessment tools or to program-specific techniques).

**Readiness** • The state of being fully prepared for something.

**Readiness test** • A testing tool designed to measure skills believed to be related to school learning tasks and to be predictive of school success.

**Reliability** • The consistency of measurements, gauged by any of several methods, including when the testing procedure is repeated on a population of individuals or groups (test-retest reliability), or is administered by different raters (inter-rater reliability). There is no single, preferred approach to quantification of reliability. The consistency of an assessment tool (being free of error); important for generalizing about children's learning and development. A term which describes whether a tool produces consistent information across different circumstances. Scores will be stable regardless of *when* the tool is administered, *where* it is administered, and *who* is administering it. Reliability is represented by a figure between .00 and 1.0, such that values closer to 1.0 indicate better reliability.

**Sample** • A subset of a population. Samples are collected and statistics are calculated from the samples so that one can draw conclusions about the total population. A *representative sample* refers to a carefully chosen number of representatives of a specific group, such as children of a certain age, race/ethnicity, or income status, whose characteristics represent as accurately as possible the entire population of children with these characteristics.

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**Screening** • The use of a brief procedure or tool designed to evaluate whether a child may be at risk for a developmental delay and who may need further assessment to verify developmental and/or health risks.

**Sensitivity** • Valuing and respecting diversity and being sensitive to cultural and/or developmental differences.

**Skills** • The particular ability to do something well; the ability of children to use knowledge effectively and readily in performance; the ability to transform knowledge into action.

**Specific** • Clearly defined or identified.

**Standardized** • An assessment with clearly specified administration and scoring procedures and normative data.

**Standardized test** • A testing tool that is administered, scored, and interpreted in a standard manner. It may be either norm-referenced or criterion-referenced. A standardized test is any form of test that (1) requires all test-takers to answer the same questions, or a selection of questions from common bank of questions, in the same way, and that (2) is scored in a “standard” or consistent manner, which makes it possible to compare the relative performance of individual children or groups of children.

**Standards-based assessment** • An assessment using criteria that are derived directly from content or performance standards.

**Standards-based instruction** • Instructional practices designed to help every child achieve the standards.

**Summative** • A tool that documents how much learning has occurred at a point of time.

**Summative assessment** • Assessment that summarizes children’s learning to

gauge if children have met program goals and objectives. Most standardized tests are summative and are not designed to provide feedback during the learning process. These types of assessments are usually conducted at the end of the school year.

**Summative assessment** • An assessment that typically documents how much learning has occurred at a point in time; its purpose is to measure the level of child, school, or program success. Summative assessments are used to evaluate children’s learning, skill acquisition, and academic achievement at the conclusion of a defined instructional period—typically at the end of a project, unit, course, semester, program, or school year. Generally speaking, summative assessments are defined by three major criteria: the way they are used—i.e., to determine whether and to what degree children have learned the material they have been taught; given at the conclusion of a specific instructional period, and therefore they are generally evaluative, rather than diagnostic; and results are often recorded as scores or grades that are then factored into a child’s permanent academic record.

**Typically** • The essential characteristics, forming a specific type, in a typical manner, on a typical occasion in typical circumstances. Children who pass a set of predictable milestones at expected times as they grow and develop, conforming to a particular type.

**Validity** • Producing the desired result. A term which describes whether a tool assesses what it is supposed to assess and indicates that scores are accurately capturing what the tool is meant to measure in terms of content. For example, if a child performs well on a vocabulary test, a valid measure would mean there is confidence that the child is good at word comprehension. An assessment or screener cannot be valid if it is not reliable. The

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extent to which a measure or assessment tool measures what it was designed to measure. This is represented by a figure between .00 and 1.0, such that values closer to 1.0 indicate better validity.

**Validity (of an assessment or tool)** • The extent to which a tool measures what it purports to measure; the extent to which

an assessment's results support meaningful inferences for certain intended purposes.

**Variable** • A quality, characteristic, or attribute that may change depending on the sample being studied. For example, commonly used variables include age, gender, race/ethnicity, poverty status, or levels of education.

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## A P P E N D I X

### A. Summary on Basics on Assessment Systems, Informs and Cultivates Success (BASICS)

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4. Choosing Assessments
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### B. Infographics

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3. Screeners: Evidence of Reliability and Validity for Different Languages and Different Populations
4. Examples of Child Screeners
5. Program Measures
6. Domains, Structure, Administration, and Staff of Program Measures
7. Authentic, Curriculum-Consistent Measures
8. Quick Glance of Coverage of Pennsylvania Learning Standards for Early Childhood for Curriculum-Consistent Measures
9. Assessment Resources for Early Childhood Standards for Pre-K and K
10. Overview of Classroom Environment Tools/Classroom Observation Measures