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Suggested citation: Lyons, A. & Pretti-Frontczak, K. (2019). *Early Childhood Assessment Terms Primer* (2nd ed.). Brooklyn, NY: B2K Solutions™, Ltd.

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Early Childhood Assessment Terms Primer

Assessment Term	Definitions
Accommodation	Environmental or physical changes and/or supports that are intended to provide a child with a more equitable method to access the curriculum or complete a test. Children who are entitled to accommodations on an Individualized Education Plan (IEP) are usually the only children able to utilize this approach in testing situations.
Accountability	In public education, this refers to the, "systematic collection, analysis, and use of information to hold schools, educators, and others responsible for student performance" (Armstrong, 1998, p. 3). Accountability is one of six primary purposes of assessment. Examples include State Performance Plans (SPPs), Annual Performance Reports (APRs), and State Systemic Improvement Plans (SSIPs) as part of the Results Driven Accountability (RDA) initiative.
Achievement test	Measures the extent to which a child has learned, either across all developmental domains or in a specific area.
Adequate Yearly Progress (AYP)	The process used by the U.S. Department of Education to determine whether states (as well as individual districts and schools) are making progress toward the achievement standards set forth under Title I of the No Child Left Behind Act of 2001 (NCLB). AYP mandates that each state use one accountability system to measure this progress across all public schools, and although there is some flexibility in how states implement this, they must rely primarily on standardized tests selected by the state in addition to at least one other academic indicator. Schools that do not meet AYP are held accountable through a number of specific consequences.
Age equivalent score	A score that expresses a child's performance in relation to other children who perform similarly at a given age. For example, if a child's score was expressed as an age-equivalency of 3 years, this would mean that the child obtained a score that is average or typical for children who are 3 years old, regardless of how old the child actually is.

Alignment

The state of two or more things being connected or related in some way. In this age of accountability, we often look for alignment between assessment items, standards, and the curriculum. When there is alignment between standards and assessment items, teams can assume that there is some consistency between the standards that are being taught, the assessment, and comparisons being made regarding children's growth and learning over time.

Alternate assessment

Assessments provided to a small proportion of children with disabilities who are served under IDEA (2004), usually those with the most significant cognitive disabilities, instead of state-mandated standardized tests. Alternate assessments are aligned, but are a modification of, the standards all children of a given age are expected to achieve.

Analyzing information

The fourth step in the data-driven decision-making process. It is the step where we examine the data that has been summarized and examine it for patterns and trends, sorting needs and strengths into priorities.

Anecdotal notes

Brief, written accounts of behaviors, events, or activities that record a child's skill level and are written after the behavior or event takes place (Ratcliff, 2010). The notes should be detailed, precise, and non-subjective (McNair, Thomson, & Williams, 1998).

Annual Performance Report (APR)

Required by the Individuals with Disabilities Education Act (IDEA, 2004), this report is prepared by each state annually and provides data on the state's performance in regard to the indicators identified by the Office of Special Education Programs (OSEP) at the U.S. Department of Education.

Applied behavior analysis

The application of behavioral approaches and/or interventions in order shape or modify behavior combined with the continued analysis of a child's performance in order to determine whether an approach or intervention is effective.

Aptitude test

Measures the likelihood that a child will be able to learn, usually in regard to specific area of development or skill.

Assessment

The "process of gathering information for the purpose of making decisions" (McLean, Wolery, & Bailey, 2004, p. 13). Broadly speaking, assessment encompasses at least six different purposes; screening, evaluation, planning learning opportunities, revising learning opportunities, program evaluation, and accountability.

• In Part C of IDEA, assessment is often interchangeably used with the term "child assessment", which refers to assessment processes designed to identify a child's unique strengths and needs to determine whether there is a need for services as well as to plan intervention. Measuring a child against set criteria (vs. against the performance of other same-aged peers) is often used to achieve this purpose. This contrasts with "evaluation" which is used to determine eligibility (but not need) for services.

Authentic assessment

"The systematic recording of developmental observations overtime about the naturally occurring behaviors and functional competencies of young children in daily routines by familiar and knowledgeable caregivers in the child's life" (Bagnato & Yeh Ho, 2006, p. 29).

Baseline phase

The phase in a graph or period of data collection that represents the period before instruction or support is provided or changed.

Between phase comparison

Examination of data between two separate phases of a graph. To perform this type of visual analysis, we examine the data across each phase with the phases placed directly next to one another. In other words, we compare the within phase information from one phase with the within phase information for the next phase. Specifically, we examine whether there is a change in the general level of the behavior or skill as well as whether an immediacy of change is present between the last day of one phase and the first day of the next.

Bias

Systematic differences that result just because of a child's membership to a particular group. All assessments are subject to being bias; however, when a child's performance is compared to a normative sample, the chances for bias are increased and providers must ensure the sample to which the child will be compared is representative. In other words, providers must ensure that the normative sample includes children of the same socio-economic status (SES), gender, language, and ability as the child being screened.

Causation

The definitive reason for a given effect. In performance monitoring, applied behavior analysis, and accountability systems for assessment, causation cannot be implied unless there is 100% certainty that a specific variable caused a change in another variable.

Checklists

A means of indicating which behaviors were demonstrated or which behaviors the child possesses and those he or she does not. Checklists can be developed by teachers or purchased commercially. Often, checklists not only indicate the presence or absence of a target behavior, but also can incorporate a coding system that allows the observer to rate the degree to which the child is able to perform the skill. Checklists are an efficient strategy for documenting multiple children's performance across the same set of behaviors.

Child find

A mandate from the Individuals with Disabilities Education Act (IDEA) that refers to a set of activities that are used to locate, identify, screen, and if appropriate, evaluate children who may be in need of special services.

Child Outcomes Summary (COS) process

The measurement and federal reporting of child outcomes in three priority areas as required under Parts C and B (preschool) of the Individuals with Disabilities Education Act.

Chronological age (CA)

The exact age of a child. In assessment, this is often measured by subtracting the child's specific birth date and year from the date and year an assessment is given. **Collecting data**

See also Gathering information.

Concurrent validity

A form of criterion validity that refers to whether two different tests or two different procedures relate in some way- it evaluates whether there is a relationship between the tests or procedures.

Construct validity

The extent to which a test measures what it intended to measure, *specifically as it relates to a construct*. In other words, it demonstrates the extent to which the test accurately evaluates test-takers on a specific construct or phenomenon. It can be divided into two types, convergent validity and discriminant validity.

Content validity

The extent to which a test measures what it intended to measure, specifically as it relates to the content of items on a test. In other words, it demonstrates the extent to which test items are integral to a developmental domain or skill set.

Conventional testing

"The administration of a highly structured array of testing tasks by an examiner in a contrived situation through the use of scripted examiner behaviors and scripted child behaviors in order to determine a normative score for purposes of diagnosis" (Bagnato, Neisworth, & Pretti-Frontczak, 2010).

Convergent validity

A form of construct validity that is similar to concurrent validity in that it is also examining the extent of a relationship, but in this case instead of examining the relationship between two different tests, it examines whether two different forms or two different versions of the same test have a relationship.

Correlation

The degree of relationship between two or more variables. In performance monitoring, applied behavior analysis, and accountability systems for assessment, analyses and/or statistical methods can be used to measure the extent that variables seem to correlate with one another, but without strong controls on other variables, it is difficult to prove whether one variable causes another.

Counts and tallies

Used to track whether or not something has occurred, the number of times something occurs, and the extent to which a criterion or standard has been met.

Criterion-referenced assessment

Compares the child's performance to a criterion or expected standard. For example, a criterion might read, "walks 15 feet independently", "uses scissors to cut", "uses 5 descriptive words", "uses simple strategies to resolve conflicts." Criterion-referenced assessments are typically used to establish current skill level of individual children as compared to a criterion of mastery in order to measure progress over time.

Examples of criterion-referenced assessments include the *Behavioral Characteristics Progression [BCP]* (Vort Corporation, 1997); *the Assessment of Basic Language and Learning Skills- Revised [ABLLS®-R]* (Partington, 2006); and *the School Function Assessment [SFA]* (Coster, Deeney, Haltiwanger, & Haley, 1998).

Criterion validity

The extent to which variables predict outcomes based on other variables, and can be further broken down into predictive validity and concurrent validity.

Curriculum-based assessment

A form of criterion-referenced assessment where curricular objectives serve as the criteria. Curriculumbased assessments (CBAs) may be used during the eligibility process and are also used to plan and revise instruction, develop IFSPs/IEPs, and provide a direct link to the curriculum.

Examples of curriculum-based assessments again include the Assessment, Evaluation, and Programming System for Infants and Children, Second Edition [AEPS® 2nd ed.] (Bricker, 2002); the Carolina Curriculum for Infants and Toddlers with Special Needs, Third Edition [CCITSN] (Johnson-Martin, Attermeier, & Hacker, 2004) and the Carolina Curriculum for Preschoolers with Special Needs, Second Edition [CCPSN] (Johnson-Martin, Hacker, & Attermeier, 2004); Teaching Strategies GOLD™ (Heroman, Burts, Berke, & Bickart, 2010); the High/Scope Child Observation Record [COR] for Infants and Toddlers (High/Scope Educational Research Foundation, 2002a) and the High/Scope Preschool Child Observation Record [COR], Second Edition (High/Scope Educational Research Foundation, 2003b); the Work Sampling System, 5th Edition (Meisels, Marsden, Jablon, & Dichtelmiller, 2004); Hawaii Early Learning Profile® Birth to Three (Vort Corporation, 2003) and the Hawaii Early Learning Profile [HELP®] Three to Six, Second Edition (Vort Corporation, 2010) ; the Ounce Scale (Meisels, 2003); and the Transdisciplinary Play-Based Assessment, Second Edition [TBA-2] (Linder, et al., 2008).

Curriculum-based

measure

A brief measure, typically completed in five minutes or less, that is aligned with the curriculum and is used to

systematically monitor a child's performance.

Commercial CBMs often utilize a standardized sample

and have demonstrated technical adequacy.

Cutoff score A score that can be used to differentiate between what

is considered typical and atypical.

Data-driven decisionmaking (DDDM) A process that involves gathering, documenting, summarizing, analyzing, and interpreting data to see how a child is progressing and uses various "rules" to identify what children should be learning, how best to support their growth and development, what type of instructional strategies would help the child be most successful, and when learning opportunities should be

revised (Wolery, 2004).

Data quality The extent to which data provides accurate

information. While different federal and state agencies may provide guidelines on data quality specific to the nature of the information the given agency oversees, most agencies consider whether data reported provides a valid and reliable picture of the situation

being assessed.

Decision rules See also *Guidelines*.

Dependent variable A variable that changes or performs as a direct result of

an independent variable. In education and/or applied

behavior analysis, it usually refers to a child's

performance or scores on a test.

Developmental age (DA) Index of development stated as the age in years as

determined by a measure.

Developmental and behavioral screening

The use of a brief procedure or instrument designed to identify, from within a large population of children, those who may need further assessment to verify developmental and/or health risks" (Maretella & the Council of Chief State School Officers [CCSSO], 2004, p. 44). Brief, inexpensive, and easy to make comparisons between a child's current performance and what is considered as typical in development. Key part of the child find process, where concerns or red flags regarding children's development can be identified, and is designed to identify those children whose development is suspect and should be referred for further evaluation; it is NOT a process of making diagnostic or treatment or instructional decisions. Is a primary assessment purpose in early childhood.

Examples of common developmental and behavioral screening tools include the *Ages and Stages Questionnaire 3* [ASQ-3] (Squires & Bricker, 2009); Child Development Inventory (Ireton, 1992); Parents Evaluation of Developmental Status [PEDS] (Glascoe, 2010); Temperament and Atypical Behaviors [TABS] (Neisworth, Bagnato, Salvia, & Hunt, 1999); Early Screening Inventory- Revised, 2008 Edition [ESI-R™] (Meisels, Marsden, Wiske, & Henderson, 2008); Denver II Developmental Screening Test (Frankenburg, et al., 1992; 1996); the Brigance® Early Childhood Screens III (Curriculum Associates LLC, 2013); and the Battelle Developmental Inventory II screening test [BDIST] (Newborg, 2005c).

Diagnostic test

Any test that is designed to diagnose a medical or mental condition.

Discriminant validity

A form of construct validity that examines the extent to which two different forms or versions of a measure that are not designed to be alike differ and do not show a relationship (the opposite of convergent validity).

Documenting information

The second step in the data-driven decision-making process. It is the step where we record the information that we previously gathered.

Early Childhood Outcomes (ECO) The three outcomes required to be reported in Parts C and B 619 (PreK) under IDEA. These are: 1) Positive social-emotional skills (including social relationships); 2) Acquisition and use of knowledge and skills (including early language/communication [and early

literacy]); and 3) Use of appropriate behaviors to meet their needs. Also known as Indicator 7. For more information early childhood outcomes, see http://ectacenter.org/eco/.

Eligibility determination

The process by which a child meets the federal and state definitions of a child with a disability. When the child is determined to be eligible, he or she is entitled to receive appropriate special education services (relative to the areas of disability) under IDEA 2004 funding (PL 108-446, 20 U.S.C. §§ 1400 et seq).

Evaluation

An assessment process designed to make a judgment about a situation by comparing it to things that are similar or against a given standard. Evaluation is one of six primary purposes of assessment. High stakes testing and eligibility determinations are two examples of evaluations.

 In Part C of IDEA, evaluation is used to determine eligibility (but not need) for services.
 An evaluation in this context measures children against the performance of same-aged peers is most often used to achieve this purpose.

Evaluation Team Report (ETR)

See also Multi-factored evaluation.

False negative

Children who passed a screening and are not referred for evaluation are later identified as needing special services.

False positive

Children referred for evaluation based on the results of the screening and were later found not to be in need of special services.

Five-zero-four (504) Plan

A plan designed for students in general education that is developed by school officials that describes accommodations and /or modifications that a student needs in order to fully participate at school. Students who receive a 504 must have a disability that limits one or more major life functions as specified in Section 504 of the Rehabilitation Act of 1973 but not qualify for services under the Individuals with Disabilities Education Act (IDEA). Schools usually determine what process to use to develop the 504 plan. While a 504 provides some protection, particularly against discrimination, it does not provide the same level of protections as an IEP.

Formal assessment

"Tools that are used to report information to others, such as families and program administrators. Formal assessments must follow a standardized procedure for all children, and they must use a specific standardized tool or instrument" (Ohio Department of Education & Ohio Department of Job and Family Services, p. 12).

Formative assessment

Designed to provide feedback to teachers/providers while instruction is being delivered in order to make revisions and draw conclusions about the nature of the instruction. Formative assessment should help identify areas in need of improvement - meaning what changes are needed to the instruction being delivered to support improvement regarding a child's performance. Formative assessment allows for adjustments to instruction and helps to determine next steps.

Functional behavioral assessment (FBA)

A comprehensive form of assessment involving examining the child's environment, feelings, behaviors, triggers, and responses in order to determine the function of behavior. FBAs often utilize an antecedent, behavior, consequence (ABC) approach to analyze the purpose a given behavior serves for a child.

Gathering information

The first step in the data-driven decision-making process. It involves gathering meaningful information regarding children's development, learning, and interests using a variety of techniques, including observation, testing, and interviewing.

Grade Equivalent

A score that expresses a child's performance in relation to other children who perform similarly at a given grade. For example, if a child's score was expressed as a grade-equivalency of 3rd grade, this would mean that the child obtained a score that is average or typical for children who are in the 3rd grade, regardless of the grade the child actually is in.

Growth

The extent to which a student's performance, as measured by assessments or evaluations, improves over time.

Guidelines

A critical part of effective screening and performance monitoring that should be applied systematically to children. In other words, program personnel need to have a set of criteria for when they will make a referral vs. which children will be monitored/tracked. Also known as decision rules.

High-stakes testing

Any test that has significant consequences (such as punishments or rewards) for children and/or teachers (usually administered for the purpose of accountability).

Individualized Education Plan (IEP)

A formal, written plan developed by school officials (including teachers and other specialists) and in conjunction with families or caregivers that describes in full detail the services and supports a student will receive in order to access the general education curriculum. An IEP is written after an evaluation finds the student eligible for services under the Individuals with Disabilities Education Act (IDEA) and after multiple assessments and observations are completed that affirm the student is in need of services. IEPs are provided for students 3-21, though in a handful of states families have the option to extend an Individualized Family Service Plan (IFSP) through the age of 5 if the child continues to be eligible and in need of services.

Individualized Family Service Plan (IFSP)

A formal written plan developed by a group of professionals/specialists and in conjunction with families or caregivers that describes the services and supports a young child will receive in order to work toward child and family outcomes. An IFSP is written after an evaluation finds the child eligible (or if the child has an approved disability) and after child and family assessments and observations are completed that affirm the child is in need of services. IFSPs are provided for children/families of children birth to three, though in a handful of states families have the option to extend the IFSP through the age of 5 if the child continues to be eligible and in need of services.

Identifying patterns

Analyzing assessment information to identify key attributes of a behavior or skill that occurs across different behaviors, skills, or developmental domains. When we are looking for patterns in children's behaviors, we are looking for recurring events, or those that repeat in a predictable manner. Recurring or predictable means that an event will occur at the same time, under the same conditions, and in the similar way. The patterns we most often look for include those

of strength, unexpected performance, lack of quality, assistance, behavior interfering, and/or time toward task.

Immediacy A significant or noticeable rise in level between two

phases in a graph.

Independent variable A variable that can be controlled or changed. In

education and/or applied behavior analysis, it usually refers to an intervention or instructional approach.

Indicator 7 See also *Early Childhood Outcomes*.

Informal assessment "Conducted by observing and recording children's

behavior and progress. To make informal assessments, teachers can use such tools as developmental checklists, anecdotal records, work sampling, and portfolios" (Ohio Department of Education & Ohio

Department of Job and Family Services, p. 12).

Intelligence test Measures the aptitude, or general intelligence, of a

child or individual across all domains of development

using one score.

Interpreting information The fifth step in the data-driven decision-making

process. It involves making decisions based on the

analysis of assessment information.

Interrater reliability Two or more observers who have agreement regarding

the child's performance when observed at the same

time using the same test.

Intervention phase The phase in a graph or period of data collection that

represents the period when instruction or support is

provided or changed.

Interviewing A method of collecting important pieces of information

about young children from people familiar to the child across different settings, such as families, caregivers, medical professionals, or community leaders, usually

through verbal or written conversations.

Jottings Provide a single statement regarding a specific incident

or occurrence while leaving out some words and/or contextual information. Combining jottings from across

several days or activities tends to convey more meaning and can be used in combination with other data to guide intervention efforts and decisions. Kindergarten-Readiness

Some states (but not all) require children to take this assessment prior to entering kindergarten in order to evaluate the extent to which the child is "ready" to

participate in a kindergarten setting.

The position of the data on a graph during a given phase. We can look at the general level across the phase (e.g., whether it is low or high) or the level of the

data on the last day of one phase compared to the first day (or first few days) of the next phase to determine if

an immediacy of change is present.

The average performance observed during a phase on

a graph. It can be calculated by taking the data on the Y axis and dividing by the number of data points in the

phase.

Measurable The quality of information such that we can determine

if there are changes in performance over time.

Modification Changes to what is expected of children in regard to

> instruction and assessment. Only those children permitted to take alternative assessments are able to

receive a modification during state testing. Modifications to formative assessments (usually teacher developed) may also be made by teachers or other professionals if a child's Individualized Education

Plan (IEP) requires it.

Monitoring As it relates to screening, it is defined as a process that

> is "useful for children whose scores on the screening instrument are borderline or who may be experiencing extenuating circumstances that currently affect their developmental status and progress, but which may be short in duration" (Rous & Townley, 2006, Screening, p.

2). Also known as tracking.

Multi-factored evaluation An evaluation that includes several measures of

> assessment, usually a norm-referenced assessment, observations, and other tools as determined by the team, in order to determine the eligibility of a child for special education services. Also referred to as an

Evaluation Team Report (ETR).

Narrative Types of written descriptions include running records,

anecdotal notes, and jottings. Narratives can vary in

terms of focus and amount of detail provided.

Level

Mean

Narrative summary

A way of documenting children's performance using written narratives. These written narratives can be combined into a single report or single set of statements about individual or groups of children. We typically use words to summarize when writing reports, when completing required paperwork, and/or when communicating with families.

Negative predictive value

The proportion of children who pass a screening and were not later identified as needing special services (i.e., proportion of children who were correctly identified as not needing further evaluation due to not needing special services). A true negative would be associated with a high proportion of children that passed a screener not needing special services, while a false negative would be associated with a large proportion of children that passed a screener later being found to be in need of special services.

Normal curve

The shape of the distribution where the score received most often falls at the highest point of the arc (i.e., in the middle), and then in decreasing numbers, scores for children fall to the left and right of center but in equal amounts. For example, if 1000 children were included in the normative sample, the standardization process would determine the score that occurred most for the group of children (known as the mode) and place that score directly in the middle of the curve. Subsequent scores would then be placed in equal amounts to the left and right. Scores higher than the mode would fall to the right and scores lower than the mode would fall to the left, indicating that children who received a score to the right did better than the average and children who received scores to the left performed below average.

Normal distribution

See also Normal curve.

Normative sample

A measurement strategy that takes a group of children who represent the whole population and administers a test to them. Through a process of standardization, a normal distribution of scores is created (i.e., a normal curve). This normal distribution includes a mean where 50% of the children will obtain a score that is higher and 50% of the children will obtain a score that is lower. Cutoff scores are then established to determine when a child's performance has deviated too far from the mean of children at a given age.

Norm-referenced assessment

Most often used to compare a child's performance with that of a group of children of the same age who were also assessed. Normative assessments (including screening instruments) contain a normative sample to which a child's performance can be compared or referenced.

Examples of norm-referenced assessment tools include (but are not limited to): *The Bayley Scales of Infant and Toddler Development®, Third Edition* [Bayley-III®] (Bayley, 2006); *Battelle Developmental Inventory II [BDI-II]* (Newborg, 2005a; 2005b); *the Cognitive Abilities Scale-Second Edition [CAS-2]* (Bradley-Johnson & Johnson, 2001); *Developmental Assessment of Young Children, Second Edition [DAYC-2]* (Voress & Maddox, 2013); *Differential Ability Scales®-II [DAS®-II]* (Elliott, 2007); and *the Kaufman Assessment Battery for Children, Second Edition [KABC™-II]* (Kaufman & Kaufman, 2004).

Numerical summary

A method of taking large amounts of numerical (number-based) information and condensing it into something more manageable.

Observable

Behavior or skills that can be seen or heard. In regard to assessment, we should document objective and factual statements versus impressions, perceptions, or feelings.

Observing

The practice of attending to a child, a group of children, or the environment with a specific focus in mind for the purpose of gathering relevant information that can be used in a data-driven assessment process.

Operational definition

A thorough, specific, objective, observable, and measurable description of a behavior or skill.

Outcomes

Expectations for learning or development.

Over-identification

The result of low specificity, a high rate of Type I errors, and a high proportion of false positives. When overidentification happens, it means that children did not pass a screener and were referred for evaluation, but in reality the children did *not* need special services.

Patterns

Recurring events, meaning those that repeat in a predictable manner.

Patterns of assistance

Situations during which support is required or requested consistently under predictable circumstances- situations beyond what would be expected of a novice learner for the child's age/present level of ability/developmental readiness, culture, and/or prior exposure. Assistance isn't merely presenting a prompt, cue, or reminder, but rather, when objects from the environment and/or people have to complete part or all of the task/response for the child.

Patterns of interfering behavior

Situations during which a child consistently demonstrates a certain behavior instead of the desired or expected behavior or skills. Not all interfering behaviors are aggressive or purposeful; however, many times they are (e.g., hitting, biting, throwing). At times, behaviors can interfere given that the child (by choice or otherwise) is not able to maintain or establish attention, walks away from interactions or tasks, or even outright refuses to participate.

Patterns of lack of quality

The consistent demonstration of a concept or skill in a way that, while allowing the child to accomplish a desired task, is done in such a way that it may hinder understanding of others, the accuracy of the performance, and/or may get in the way of completing the task in a normal amount of time.

Patterns of strength

Consistent indicators that the child's development relative to a specific skill, behavior, or domain is "on target" and concerns and/or more intensive interventions are not warranted. Strengths should be identified by considering the child's age, developmental readiness, cultural expectations, and response to initial learning opportunities.

Patterns of time towards task

The consistent demonstration, relative to a specific skill, behavior, or domain, of an inadequate amount of time that passes from the directive or request to perform specific tasks, skills, or behaviors to the time the child demonstrates/initiates the required/desired tasks, skills, or behaviors.

Patterns of unexpected performance

Instances during which the child consistently demonstrates a skill that seems higher or harder than what is expected for their age or is missing a skill that is easier or should have emerged earlier in development.

Percentage

The proportion of accurate responses relative to the total number of items on an assessment.

Percentile rank

"Indicates where a child's score falls in a grouping of 100 possible data points [and] may be easier for team members to understand because it allows for a child's score to be compared to their peers" (Grisham-Brown & Pretti-Frontczak, 2011, p. 111-112). Converted from raw or standard scores.

Performance monitoring

A term used to describe the systematic and continuous process of informing decisions about whether children receiving research-based instruction or caregiving practices are responding to that instruction (Buzhardt, Walker, Greenwood, & Heitzman-Powell, 2012; Copple & Bredekamp, 2009; Hojnoski & Missall, 2007; Grisham-Brown & Pretti-Frontczak, 2011; Raver, 2003; Ysseldyke, Thurlow, & Christenson, 1987). It is an assessment process that is systematic, repeated, continuous, recursive, overtime, ongoing, and integrated. Also known as *progress monitoring* or *revising learning opportunities*.

Permanent records

A means of collecting evidence of children's work that tends to be lasting in nature. Permanent records include but are not limited to writing samples, art projects (e.g. constructions, sculptures, drawings, sketches), diagrams, photographs of children's work, and video or audio recordings.

Phase

A term that is used to describe an aspect of a graph or period of data collection that depicts a specific period of time during which data was collected, usually baseline or intervention.

Planning learning opportunities

The use of assessment information to identify children's strengths, emerging skills, and areas of need, and to then design appropriate instruction to enhance the child's learning experiences and developmental growth. This is one of six primary purposes of assessment. See also *program planning*.

 In Part C of IDEA, planning learning opportunities is often a part of the purpose of "child assessment", which is used to identify a child's unique strengths and needs to plan intervention. **Portfolios**

A way in which a permanent record can be organized. Arter and Spandel (1992) define a portfolio as "a purposeful collection of student work that tells the story of the students efforts, progress, or achievement in (a) given area(s)." (p. 36). Epstein, Schweinhart, DeBruin-Parecki, & Robin (2004) quote this definition and add that "portfolios describe both a place (the physical space where they are stored) and a process. The process provides richer information than standardized tests, involves multiple sources and methods of data collection, and occurs over a representative period of time" (p. 7).

Positive predictive value

The proportion of children who do not pass a screening and were later identified as needing special services (i.e., screening results correctly determine the proportion of children needing further evaluation due to the need for special services). A true positive would be associated with a high proportion of children who did not pass a screener being referred and found to need special services, while a false positive would be associated with a large proportion of children who did not pass a screener being referred and not needing special services.

Predictive validity

A form of criterion validity that has to do with whether or not the scores from a particular test can in essence predict a child's future performance or status at a later point in time.

Proficiency

The demonstration of a high or accepted level of performance on a specific test or with respect to a given standard.

Program evaluation

The process of "systematically collecting, synthesizing, and interpreting information about programs for the purpose of assisting with decision making" (Snyder & Sheehan, 1996, p. 359). Program evaluation is the process of "clearly articulating the services and desired outcomes of an intervention or program" (National Child Care Information Center [NCCIC], 2005, p. 1). Program evaluation is one of six primary purposes of assessment.

Examples include the Early Childhood Environment Rating Scale Revised (ECERS-R), the Infant/Toddler Environment Rating Scale Revised (ITERS-R), and the Early Childhood Work Environment Survey (ECWES).

Program planning Sometimes used interchangeably with *planning*

learning opportunities, this is a primary assessment purpose that involves determining what, where, when, when, and how to teach or support individual or groups of children over time based on assessment information.

Progress monitoring See also *performance monitoring* or *revising learning*

opportunities.

Rating scales and rubrics Measures of quantity (amount) and of quality (how well

or in what way). In other words, rating scales and rubrics allow us to document a) how well a child performs a behavior (accuracy); b) the amount of force a child uses to perform a behavior (intensity); c) the amount of assistance the child needs to perform the behavior (independence); and d) the particular aspects or components of the behavior that the child is able to

perform.

Raw score The actual score a child receives when tallying the total

number the child received on each of the items of an

assessment measure.

Readiness assessment Measures the extent to which a child has acquired the

skills thought to be necessary to learn something new. Kindergarten readiness assessments are one such

example.

Reliability An issue closely related to validity, and refers to the

stability and consistency of assessment results (Sattler, 2001). The higher the reliability of an assessment's scores or procedures, the more confidence users can have in the accuracy. In other words, reliable

assessments demonstrate similar results for a particular child regardless of who administers it, the setting in which it is administered, or at different times

in a short time span.

Response to Intervention

(RtI)

An approach to determining the needs of children and designing instruction using a multi-tiered model of instruction and/or support that relies on universal

screening to initially place children into tiers.

Revising learning opportunities

A recursive feedback process of adjusting and revising instruction in accordance with data that are systematically collected through ongoing observation and then documented, summarized, analyzed, and interpreted. Revising learning opportunities is one of six primary purposes of assessment. This phrase is also synonymous with/inclusive of *progress monitoring* and *performance monitoring*.

Running records

Descriptive narratives, specimen description, or transcripts that are rich descriptions of children's behaviors and related events that are observed during a particular point in time during particular episodes. Wortham states that a running record "is a more detailed narrative of a child's behavior that includes the sequence of events" (2008, p. 119).

Screening

Used in early childhood for a number of different purposes, all centered on early detection and prevention. All screening should be brief (limited number of items); inexpensive to administer; require limited training, resources, or materials in order to administer; and should allow for comparison of the child's development to other children of the same age. In other words, tools used for screening should have undergone a standardization process to ensure comparisons between children can be made. There are two types of screening: developmental and behavioral or universal. Screening is one of six primary purposes of assessment.

Sensitivity

Also known as the true positive rate, it refers to the ability of a screening instrument to correctly identify children in need of further evaluation (Squires, 2000). Said differently, a screening instrument is sensitive when children who are at risk or who have a delay are referred based upon the results of the screener.

Social validity

The extent to which findings are relevant, meaningful, and acceptable to the consumer/end user.

Specificity

Also known as the true negative rate, it refers to the ability of a screening instrument to accurately exclude children who do not need further evaluation (Squires, 2000). Said differently, a screening instrument is specific when children who are *not* at risk are correctly excluded and *not* referred for additional testing.

Stability

The extent that the line in a phase on a graph is stable, meaning that the line is relatively horizontal and lacking big peaks and valleys. This indicates that the behavior or skill occurred at a consistent level across the phase.

Standard deviation

Used to systematically talk about the distribution, or spread of scores, where most scores will fall within 3 deviations of the center score. When a child's score falls 1.5 or more standard deviations from the center score, the interpretation is that the child's performance (whether delayed or gifted) is different than most.

Standard score

The conversion of a raw score to a format that makes it easier to interpret and compare.

Standardization

The process of "normalizing" the sample or determining how other children of a particular age perform. In other words, standardized instruments have undergone a process by which norms, including mean performance levels and standard deviations, have been established for what should be a representative sample of children. Assessment instruments that have undergone standardization are not necessarily considered standardized tests in the colloquial sense.

Standardized testing

The process by which children must answer the same set of questions, in the same order, following the same administration procedures. Further, a single and predetermined response is the only one allowed or accepted in order to show what a child knows or can do. Although standardized tests do not necessarily standardize the sample, most do.

State Performance Plan (SPP)

Required by the Individuals with Disabilities Education Act (IDEA, 2004), it is a six-year plan that is developed by each state to carefully illustrate how the state intends to implement IDEA and improve upon performance indicators that have been identified by the Office of Special Education Programs (OSEP) at the U.S. Department of Education.

Summarizing information

The third step in the data-driven decision-making process. Involves compiling assessment information that has been documented and organizing it in a meaningful way that highlights the results.

Summative assessment

Conducted at the end of an instructional period in an effort to summarize how the child has done up until a given point in time. Summative assessment allows for comparisons to expectations or other standards. Summative assessment provides a snapshot of the child's performance at a specific interval or time.

Surveillance

"A flexible, longitudinal, continuous, and cumulative process whereby knowledgeable health care professionals identify children who may have developmental problems" (American Academy of Pediatrics, 2006, p. 407).

Technical adequacy

Empirical evidence of the validity and reliability of an assessment, particularly for a specific purpose.

Testing

"A formal, systematic procedure for gathering a sample of pupils' behavior. The results of a test are used to make generalizations about how pupils would have performed on similar but untested behaviors" (Epstein, Schweinhart, DeBruin-Parecki, & Robin, 2004, p. 2). Testing "usually involves a series of direct requests to children to perform, within a set period of time, specific tasks designed and administered by adults, with predetermined correct answers" (Epstein, et al., 2004, p. 2).

Test-retest reliability

The extent to which scores on a test are stable or consistent. If a test is administered to the same group of children (usually within two weeks) this construct measures the degree to which children's performance is the same across both administrations of the test.

Tier one outcomes

Skills and processes that are common for all children of a certain age or grade.

Tier two outcomes

Skills and processes a small group of children might struggle with or where development and learning has stalled.

Tier three outcomes

Skills and processes which are considered foundational in human development (e.g., manipulating objects, imitating others, expressing wants and needs, moving around the environment) or prerequisites to learning more advanced skills (e.g., isolating sounds, knowing the function of objects, labeling).

Tiered performance

monitoring

The frequency, intensity, and intent of data collection efforts vary dependent on the child's needs and the

outcomes the child is working towards.

Tracking See also *Monitoring*.

Traditional assessment See also Conventional testing.

Trends The direction or way in which something is headed. A

key way to examine trends is through visual analysis.

True negative rate See also *Specificity*.

True positive rate See also *Sensitivity*.

Under-identification The result of low sensitivity, a high rate of Type II

errors, and a high proportion of false negatives. When under-identification happens, it means that children passed a screener and were not referred for evaluation,

but in reality, the children did need special services.

Universally designed

assessment

Assessments that are designed in a way that is developmentally appropriate, validated for use with

many types of children, and allows for

accommodations and/or modifications based on

student needs.

Universal Screening "Examines how well all children are performing relative

to a benchmark for a specified outcome area (e.g., early

literacy, language, and behavior/social-emotional

development) instead of across multiple

developmental domains (e.g., fine motor, gross motor, adaptive)...[and] is carried out for all children on an ongoing basis—usually at least three times a year. The systematic nature of the 'universal screening' ensures that children who need additional support will be identified early to continue to benefit from Tier 1 teaching and caregiving whereas developmental screening helps teams make decisions regarding the

need for further testing" (DEC, NAEYC, NHSA, 2013, pp.

7-8). Universal screening is one of two types of screening, while screening in general is one of six

primary purposes of assessment.

Validity

"The degree to which evidence and theory support the interpretations of test scores entailed by proposed uses of tests" (American Educational Research Association [AERA], American Psychological Association [APA], and the National Council on Measurement in Education [NCME], 1999, p. 9). The basic tenant of validity is that an assessment instrument correctly and accurately measures what it was intended to measure; it is the overall degree of justification for test interpretation and use. There are many forms of validity, but all relate or contribute to the appropriateness, meaningfulness, and usefulness of the specific inferences made from test scores.

Value-added Modeling (VAM)

A method of teacher evaluation in which the current scores of each child in the teachers' classroom are compared to a) previous years and/or months' test scores; and b) the scores of same-aged peers. A statistical formula is used to predict the child's current or future scores based on previous scores, and the difference between actual and predicted scores is attributed to the effectiveness of the teacher. The extent that the line in a phase on a graph has lots of big peaks and valleys, which indicates that the behavior or skill did not occur at a consistent level across the phase.

Variability

Variables

Any factor that can change or vary. In regard to assessment, we think about variables as being any factor that may be attributed to or may affect a child's performance. In applied behavior analysis (ABA), these can include independent and dependent variables.

Visual analysis

Allows for comparing individual or groups of children's' performance to one another, or comparing children's performance over time to their response to instructional efforts, in order to improve planning and revising for learning opportunities. Visual analysis always begins with an inspection of what is going on before instruction or support is provided or changed (i.e., an examination of what is going on within the baseline phase).

Visual summary

Illustrates strengths, emerging skills, and progress towards prioritized outcomes. In addition, visual summaries can help identify even small increments of change. Visual summaries help a) identify trends or patterns in children's performance; b) quickly determine the effects of intervention; and c) communicate with caregivers regarding children's progress over time. As with the other types of summaries, visuals can and should be paired with other types of summaries. Visuals are particularly useful when paired with numerical summaries.

Withdrawal phase

The phase in a graph that represents the period when instruction or support is removed or withdrawn.

Within-phase analysis

An examination of what is going on across a particular phase of a graph. Specifically, we examine the trend, the mean, and the variability of a child's response across the phase.

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"NOT EVERYTHING
THAT COUNTS
CAN BE COUNTED,
AND NOT EVERYTHING
THAT CAN BE COUNTED
COUNTS"
-William Bruce Cameron

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