



Glossary of Terms Common to Response to Intervention (RtI)

Field Guides to RtI Prepared by
Wayne County RtI/LD Committee

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Glossary

- Confidence Interval** An estimated range of values surrounding a score or set of data. The confidence interval accounts for error and provides a plausible estimate of the true score.
- Curriculum Based Measurement** CBM is a set of assessment methods for keeping track of how well students are learning basic skills. Using CBM, teachers assess students' academic performance on a regular basis (e.g., weekly or monthly) with very brief, simple tests. Teachers use the results for two purposes: (a) to determine whether children are profiting appropriately from the typical instructional program, and (b) to build more effective programs for the children who do not benefit adequately from typical instruction.
- DIBELS** The Dynamic Indicators of Basic Early Literacy Skills (DIBELS) are a set of standardized, individually administered measures of early literacy development. They are designed to be short (one minute) fluency measures used to regularly monitor the development of pre-reading and early reading skills.
- Fidelity Measures** Refers to measures taken to assess how well an intervention was implemented. Typically, fidelity measures monitor adherence to the intervention protocol or plan.
- Formative Data** Formative evaluation is also known as “developmental evaluation.” It involves monitoring and adjusting an intervention. Formative assessments require frequent data collection throughout the intervention’s implementation that will lead to adjustments in the implementation of the plan. There are two types of formative data collection:
1. Direct observation of behavior
 2. Scoring of permanent products (worksheets etc.)
- Mean** The average of a set of numbers.
- Median** The median is the measure of central tendency that divides the distribution of data in half. Half of the distribution is above the median, and half is below. For example the baseline scores for a student may be 28, 45 and 35. The median is 35, half the distribution is above, (45), and half is below, (28), the median.
- Mode** The mode of a data sample is the element that occurs most often in the collection. For example, the mode of the sample (1, 3, 6, 6, 6, 6, 7, 7, 12, 12, 17) is 6.

- Observational Recording Procedures**
1. Continuous—Record all behavior during a prescribed period of time.
 2. Frequency Recording—Count the number of times the behavior occurs.
 3. Duration Recording—Record the amount of time the student engages in the behavior.
 4. Interval Recording—Record the number of times a behavior occurs during a prescribed period of time.
 5. Time Sampling—Observe the behavior at equal interval or intermittent time periods and record the occurrence or non-occurrence of the behavior.

Phonological Awareness..... The ability to deal explicitly and segmentally with sound units smaller than the syllable.

Phoneme Awareness..... Adams (1990) describes 5 levels of phonemic awareness in terms of abilities:

- to hear rhymes and alliteration as measured by knowledge of nursery rhymes
- to do oddity tasks (comparing and contrasting the sounds of words for rhyme and alliteration)
- to blend and split syllables
- to perform phonemic segmentation (such as counting out the number of phonemes in a word)
- to perform phoneme manipulation tasks (such as adding, deleting a particular phoneme and regenerating a word from the remainder).

Performance Assessment..... Assessment of student performance with respect to a specific usually hands on curriculum. This type of assessment is appropriate for hands on science, math, social studies or vocational curricula (complete electrical circuits solve math problems using ten blocks, construct a model of an urban center).

Positive Behavior Support (PBS)..... Positive behavior support is an application of a behaviorally-based systems approach to enhance the capacity of schools, families, and communities to design effective environments that improve the link between research-validated practices and the environments in which teaching and learning occurs. Attention is focused on creating and sustaining primary (school-wide), secondary (classroom), and tertiary (individual) systems of support that improve lifestyle results (personal, health, social, family, work, recreation) for all children and youth by making problem behavior less effective, efficient, and relevant, and desired behavior more functional.

Portfolio Assessment Portfolio assessment involves comparing a student's work throughout the school year to some pre determined standard (performance criteria) so progress through the school year can be documented and instruction and modified.

Glossary—continued

Progress Monitoring Progress monitoring is a scientifically based practice that is used to assess a student’s academic performance and evaluate the effectiveness of instruction. Progress monitoring can be implemented with individual students or an entire class.

Reliability Reliability refers to the consistency or dependability of a test across time or across items. Reliability is determined by test -retest or internal consistency. Test-retest reliability describes whether a test provides similar test results over a short period of time (2 to 3 week period). Internal Consistency reliability describes whether all test items are measuring the same construct (statistical procedures are used to determine the internal consistency between items on a test). Acceptable total test reliability coefficients should be between .80-.90.

Response to Intervention (RtI)..... A method of measuring the success of educational interventions with individual students. A specific targeted instructional intervention is implemented with frequent samples of student learning. The instructional intervention is modified based on samples of student progress or “response” to the instructional intervention.

Standard Error of Measurement (SEM) .. The standard error of measurement (SEM) is an estimate of error to use in interpreting an individual’s test score. A test score is an estimate of a person’s “true” test performance. Using a reliability coefficient and the test’s standard deviation, we can calculate this value:

$$SEM = s (\sqrt{1 - r})$$

Where:

S = the standard deviation for the test

r = the reliability coefficient for the test

Standard Deviation..... A measure of variability in a data set. The standard deviation represents the spread or dispersion of scores around the mean.

Summative Evaluation Is administered less frequently than formative and occurs once or twice a year. Summative evaluation determines if the long term goal has been meet, while formative evaluation measures if the objectives are being meet.

- Universal Screening** Brief screening assessment of academic skills that are administered to all students to establish instructional targets. The following description was taken from the model developed by STEEP:
- Every child is screened in math, writing, and reading in a process that takes about one hour. School-wide screening occurs several times per year and relies on curriculum-based measurement. The school uses these results to determine where help is needed. If middle-performing child in the class (median score) falls in the frustration range for the expected grade-level skill, then class-wide intervention is performed prior to singling out any children for individual assessment. If the median score for the class is in the instructional range, then the “can’t do/won’t do” assessment is performed for children scoring in the bottom 16% of their classes and in the frustration range for the skill. The school-wide screening usually identifies about 15% of children for further assessment.
- Technical Adequacy** A test or data sample demonstrates sufficient reliability and validity to assure the user that the test is dependable and the test measures what it purports to measure.
- Treatment Fidelity** The degree to which an intervention is implemented as intended.
- Validity** Validity determines whether tests are measuring what they purport or intend to measure (reading achievement etc.) Validity is determined by assessing performance on a highly related test. Construct validity refers to the extent to which an assessment measures a concept as determined by expert judges.
- Valuation Data** Refers to samples of student behavior using observations in the classroom. The data are collected through a variety of procedures, such as direct observation, continuous recording, time sampling, event recording, and probes.

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