

Formative Assessment

As a classroom teacher in Pennsylvania, you use four types of assessments* – Formative, Benchmark, Diagnostic, and Summative – to gather information about student learning, provide instructional feedback, and adjust ongoing teaching to improve student achievement. This issue of the Teachers' Desk Reference focuses on formative assessment.

Formative assessment has been shown to be one of the most powerful tools you can use to increase student learning. Pennsylvania defines formative assessment as classroom-based assessment that allows teachers to monitor and adjust their instructional practice to meet the individual needs of students. Formative assessment includes both formal instruments and informal observations to obtain evidence of each student's learning.

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You can gather information about student learning in many ways. Effective teachers plan for and integrate ongoing formative assessment strategies into their daily instructional routines. Having clear and up-to-the-minute data about how students are

progressing toward educational goals and where they are having difficulty provides you with the information you need to determine whether to reteach, try alternative instructional approaches, or offer more opportunity for practice. You should use formative assessment results to adjust your instructional procedures. Your students may also use information from formative assessment to adjust the strategies they use to learn.

You can incorporate formative assessments as part of the instructional process throughout the year in three basic ways (Wiliam, 2007):

- Long-cycle assessment takes
 place across a unit or term from
 four weeks to one year, with the
 result of aligning curriculum and
 monitoring student attainment
 of concepts. Formal assessment
 instruments are used frequently
 in long-cycle assessment.
 - Medium-cycle assessment occurs within and between teaching units from one to four weeks, with student engagement in assessment and ongoing teacher monitoring of learning.

^{*} For more information about Pennsylvania's four types of fair assessments, read *Teachers' Desk Reference*: Assessment and visit the Standards Aligned System (SAS) website at pdesas.org.

 Short-cycle assessment takes place within and between lessons on a day-to-day, minute-tominute basis, resulting in high levels of student engagement, classroom practice, and on-thespot feedback for teachers and students.

Long-cycle assessments may include:

- District-wide tests (e.g., Terra Nova)
- End of unit tests in specific content areas
- Benchmark assessments (e.g., 4Sight, DIBELS -Dynamic Indicators of Basic Early Literacy Skills)

Medium-cycle assessments may include:

- Rubrics, which specify the level of performance expected to attain different ratings of quality. Levels may be written as ratings (e.g., Excellent, Good, Needs Improvement) or as numerical scores (e.g., 4, 3, 2, 1), which are added up to form a total score associated with a grade (e.g., A, B, C).
- Curriculum-based measures (CBM), which are reliable and practical means of measuring student skills in basic subject areas such as reading, writing, and math. In CBM, the student is given brief, timed exercises to complete using materials drawn directly from the child's academic program.
- Role plays, skits
- Tests based on text and lectures
- Performance in group projects
- Oral reporting
- Progress-monitoring probes (e.g., DIBELS oral reading fluency probes)
- Behavior data recording sheets
- Presentations, videos, podcasts
- Online posts, blogs, wikis

- Journaling
- Homework

Short-cycle assessments may include:

- Warm-up/review checks
- Oral reporting, verbal responses
- Observations
- Notebook checks
- Participation in class discussions
- Worksheets
- Graphic organizers, which are pictorial or visual ways to organize information and thoughts for understanding, remembering, or writing.
- Response cards require all students to raise cards at the same time on the signal of the teacher to indicate their response to a question. Questions have only one right answer such as Yes/No; True /False; A, B, C, D; negative/positive; etc.
- Write-on boards (laminated paper or plastic plates) can be used by students to write their response to a question posed by the teacher.
 Students hold up their boards and the teacher checks for understanding.
 - Choral responding techniques require students to give an oral response in unison to a question posed by the teacher. The teacher can determine approximately how many students responded correctly.
 - Fist of Five is a self-assessment in which students respond to a question by showing the number of fingers that represent their level of understanding of the question or concept, with one finger being the lowest, and five fingers being the highest level of understanding.

Effective teachers plan for and integrate ongoing formative assessment strategies into their daily instructional routines.

- Thumbs up/thumbs down is a self-assessment, which requires students to respond to a question by putting their thumbs up if they fully understand a concept, thumbs down if they do not understand, or thumbs to the side if they are not sure.
- Think-pair-share is a technique in which students think through questions using three distinct steps:
 - Step 1: Think Students think independently about the question that has been posed, forming ideas of their own.
 - Step 2: Pair Students are grouped in pairs to discuss their thoughts.

 This step allows students to articulate their ideas and to consider those of others.
 - Step 3: Share Student pairs share their ideas with a larger group, such as the whole class. Often, students are more comfortable presenting ideas to a group with the support of a partner. In addition, students' ideas have become more refined through this three-step process.
- Random selection questioning can be accomplished by writing each student's name on a separate popsicle stick, and placing the sticks in a container. The teacher selects a stick at random and poses an open-ended question to that student. The stick is returned back to the pool of sticks and can be re-selected. This increases student accountability and engagement during instruction.
- Student-created questions can be used at the end of a lesson. Students work together in groups to write one challenging question for the class to answer on white boards or with response cards.

- Entrance tickets can be used to help decide questions to ask the class, tasks to set, or how to group students. As students enter the room, or at the beginning of a new lesson, ask students to respond in writing to a prompt or question.
- Exit tickets can be used to find out whether students understand the concepts well enough to progress. Students respond in writing to a prompt or question posed by the teacher at the end of a lesson; the teacher collects the cards to help plan the next lesson.

Using a variety of formative assessments will increase student achievement by helping you to monitor and adjust your instructional practice. When developing your lesson plans, remember to plan for and integrate ongoing formative assessment strategies in order to meet the individual needs of your students.

References

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