Inquire: Formative Assessment

Formative Assessment Benefits

For Faculty

Provides *actionable* evidence of student learning with which to shape short- and long-term instructional planning.

Promotes evidence-based decision making by providing information regarding instructional strategies that are (or are not) producing student learning.

For Students

Promotes metacognitive awareness of their own learning.

Provides concrete evidence that the instructor cares about learning.

Encourages gradual release of responsibility for student learning.

Formative Assessment Strategies

Prior Knowledge, Recall, And Understanding

Background knowledge probe
Give students short, simple questionnaires at the beginning of a course, or at the start of a new unit or lesson. This technique collects specific feedback on students' prior learning, which can help instructors determine the most effective starting point for a lesson.

Minute paper
Ask students to write for a minute or so on a question that you pose. Choose a specific question, or ask them: What is the most significant thing you learned today? Students can submit papers anonymously or for participation credit. This allows instructors to determine what students think is most important, and how that aligns with their goals.

The muddiest point
Ask students to write what was the "muddiest point" in the lecture, homework, reading, film, etc. They can do this before they come to class about material they have reviewed outside of class, or in the middle or at the end of a class meeting. This provides instructors with feedback on what students find most confusing, and helps students reflect on what they don't understand.

Instant or online polling
Ask students to respond to questions during class using anonymous online polls (www.polleverywhere.com is a good one) or clickers. This provides students with feedback on their understanding when the answer is revealed, and instructors can see how well the students understand concepts in real time. Students could also participate in polls/quizzes online before or after c lass to get feedback on their preparation for class or how well they understood material covered in class.

Synthesis And Creative Thinking

The one-sentence summary
Ask students to answer the question "who does what to whom, when, where, how, and why?" about a given topic, and then to synthesize their answer into a single informative sentence. This provides feedback about how students can summarize a large amount of information concisely and completely. This works well when there is information that can be summarized in declarative form, such as in

historical events, political processes, plots of stories or novels, chemical reactions, and mechanical processes.

Concept maps
Students map out how concepts are related and organize them into a framework. This presents a "big picture" view of a students understanding, and can help them make connections between ideas that they have learned on their own and that the instructor has focused on in class.

Application And Performance

Directed paraphrasing
Ask students to paraphrase part of a lesson for a specific audience and purpose using their own words. This allows instructors to examine students' understanding of information. This works well when students are learning topics or concepts they will be expected to communicate to others.

Application cards
After students have been introduced to some principle, generalization, theory, or procedure, the instructor passes out index cards and asks students to write down at least one possible, real-world application for what they learned. Instructors can determine if quickly determine if students understand the applications of course content.

Student generated test questions
Students prepare several potential test questions and correct responses. Instructors can see what students consider important content, what they understand as useful questions, and how well they can answer their questions. This helps students assess how well they know the material and tells the instructor if students have inaccurate expectations about upcoming exams.

Paper or project prospectus
Students prepare a brief, structured first-draft plan for a paper or project. This requires students to think through the elements of the assignment, such as the topics, purpose, intended audience, major questions, organization, and time and resources required. Students synthesize what they already have learned about a topic or field, and instructors get useful feedback about students' understanding of the assignment and the topic, as well as their planning skills.

Analysis And Critical Thinking

Pro and con grid
Students jot down a quick list of pros and cons on a particular topic or issue. This forces students to go beyond their first reactions, to search for at least two sides to an issue or claim, and to weigh the value of competing claims. This provides information on students' depth and breadth of their analyses and capacity for objectivity.

Defining features matrix
Students categorize concepts according to the presence or absence of important defining features. This provides instructors with feedback on their analytic reading and thinking skills.

Categorizing grid / card sorting
Students sort or order a scrambled list into categories or a temporal framework. This can be done using a grid into which groups of students write the items, or using notecards with items on each card. This provides feedback on how students understand each item and how they are similar or different.

Personal Learning Strategies And Progress

Journals
Students keep journals that detail their thoughts about the class, and they can turn them in several times throughout the course so the instructor can track development. The instructor can ask students to focus on course knowledge or skills or on their learning process and personal attitudes and values.

Exam/Homework Wrappers
Students are given short handouts to complete when their exam is returned to them. The post-exam reflections guide students in reviewing their performance, instructor feedback, and future exam preparations. Additionally, some assignments could have reflection questions before and after the assigned questions or required work.