Classroom Assessment Techniques (CATs)

The following are some examples of formative assessment techniques that take a short period of time to do but add a lot of value to the learning experience for students.

Method	Description	How To Use
Ticket-Out-The-Door	During the last few minutes of class, students write responses to a question or two about class concepts. Hand in as exit class.	Review/read all before next class and use to clarify, correct or elaborate more for students.
One Minute Paper	During the last few minutes of class, students write response to "Most important thing I learned today" and "What I understood the least today".	Review/read all before next class and use to clarify, correct or elaborate more for students.
Muddiest Point	Similar to One-Minute Paper – but only ask students to describe what they didn't understand during class and what they think might help them.	Same as One-Minute Paper but if many students have same problem, reteach concept another way.
Student-Generated Test Questions	Divide the class into groups and assign each group a topic on which they are to each write a question and answer for the next test.	Use as many of the questions as possible on next test.
Memory Matrix	Students fill in cells of a two-dimensional diagram with instructor-provided labels such as a comparison chart outlining similarities and differences in two columns against a variety of concepts in the discipline.	Tally the number of correct and incorrect responses. Look for patterns amongst the incorrect responses. Address in class.
K-W-L Chart	Label three charts K (What I KNOW Already), W (What I WANT to Know) and L (What I have LEARNED). Complete the first two before a unit/topic and the last one at end.	Discuss with students their perceptions of what they thought they knew, what they have come to know etc.
Directed Paraphrasing	Ask students to write a layperson's "translation" of something they have just learned (geared for a non-expert audience) to assess their ability to comprehend/transfer concepts.	Categorize student responses according to characteristics you feel are important. Address in class.
One Sentence Summary	Students summarize knowledge of a topic by constructing a single sentence to cover the core concept. The purpose is to require students to select only the defining features of an idea.	Evaluate the quality of each summary in brief fashion. Note: if students have identified the core concepts of the class topic. Share with students.

Prior Knowledge Survey	Short survey you give students at beginning of course or any new unit/topic on concepts to be studied.	Review immediately and make adjustments to classes based on what class knows/doesn't know.
Think-Pair-Share	Give the class a question. Allow everyone to think on own for a few minutes jotting down some thoughts. Then ask students to pair up with a peer and discuss thoughts for another few minutes. Can do groups of 4 as well. Ask to share with whole class.	Use when you want to have a better discussion by a greater number of students. By thinking alone first and with small groups of peers, shared responses should be richer and more varied.
Application Cards	After teaching a theory, principle or procedure, ask students to write down at least one real-world application for what they have just learned to determine if they can see the transfer of their recent learning.	Quickly read through once and categorize them according to quality. Pick out a broad range of examples to share with the class the next day.
Weekly Report	Written by students each week in which they address three questions: What did I learn this week? What questions remain unclear? And What questions would you ask your students if you were the instructor to find out if they understood the material?	Read at end of each week, categorize responses and share with class. Follow up on unclear questions with class or small group of students.
ConcepTests	Instructor presents one or more questions during class involving key concepts, along with several possible answers (multiple choice). Students indicate (by show of hands or poll voting) which answer they think is correct. If most of the class has not identified the correct answer, students are given a short time to persuade their neighbor(s) that their answer is correct. Question is asked again to gauge mastery.	Often lasts a few minutes but uncovers misunderstandings, and great conversation amongst students. Share answer after second voting session to see how the class responses changed or didn't change.
Instructor Meetings	Instructor meets informally with students either in class or after class to answer questions, inquire about conceptual understanding or provide feedback on student learning.	Design specific questions to help guide the meeting and address concepts and understandings you want to know more about.
Question-And-Answer / Class Discussion	Instructor creates a series of questions to pose to the class or smaller groups for discussion. Students may prepare through homework or in class with responses.	Provide feedback to students on how well they engaged in discussion. Ensure all students had a chance to participate and follow up next class with areas for clarification.

 $More\ info: \underline{https://crlt.umich.edu/sites/default/files/resource}\ files/\underline{ClassroomAssessmentTechniquesHopkins.pdf}$