## Formative Assessment Defined

Throughout the year, Instructor should be checking your students' understanding and learning through formative assessment.
Formative assessment consists of the methods through which a teacher monitors and checks student understanding on a continual basis.
Formative assessment is different than summative assessment, or evaluations of knowledge at the end of units to check total understanding,
in that it is often done several times during a lesson or unit and doesn't always need to be graded.

The following are some examples of formative assessment techniques:

|  | Method | Description | How to Use |
| :--- | :--- | :--- | :--- |
| 1 | Ticket-Out-The-Door | During last few minutes of class, <br> students write response to a <br> question or two about class <br> concepts. <br> Hand in as exit class. | Review/read all before <br> next class and use to <br> clarify, <br> correct or elaborate more <br> for students. |
| 2 | One Minute Paper | During the last few minute of class, <br> students write response to "Most <br> important thing I learned today" <br> and "What I understood the least <br> today". | Review/read all before <br> next class and use to <br> clarify, <br> correct or elaborate more <br> for students. |
| 3 | Muddiest Point | Similar to One-Minute Paper - but <br> only ask students to describe what <br> they didn't understand <br> during class and what they think <br> might help them. | Same as One-Minute <br> Paper but if many <br> students <br> have same problem, <br> reteach concept another <br> way. |
| 4 | Student-Generated <br> Test Questions | Divide the class into groups and <br> assign each group a topic on which <br> they are to each write a question <br> and answer for next test. | Use as many of the <br> questions as possible on <br> next test. |
| 5 | Memory Matrix | Students fill in cells of a two- <br> dimensional diagram with <br> instructor-provided labels such as <br> a comparison chart outlining <br> similarities and differences in two | Tally the number of <br> correct and incorrect <br> responses. <br> Look for patterns <br> amongst the incorrect |


|  |  | columns against a variety of concepts in the discipline. | responses. <br> Address in class. |
| :---: | :---: | :---: | :---: |
| 6 | 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 perceptions of what they thought they knew, what they have come to know etc. |
| 7 | 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. |
| 8 | 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. <br> Note if students have identified the core concepts of the class topic. Share with students. |
| 9 | 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. |
| 10 | Think-Pair-Share | Give the class a question. Allow everyone to think on own for a few minutes jotting down some thoughts. <br> 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 <br> a greater number of students. By thinking alone first and with small groups of peers, shared responses should be richer and more varied. |
| 11 | Application Cards | s After teaching a theory, principle or procedure, ask students to write | Quickly read through once and categorize them |


|  |  | 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. | according to quality. Pick out a broad range of examples to share with the class the next day. |
| :---: | :---: | :---: | :---: |
| 12 | Classroom Opinion Polls | Using 'clickers', or online polling questions, ask students a variety of questions about a topic and seek their anonymous opinion | Often polling devices can present immediate results back to the class to provide discussion and next steps. |
| 13 | 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. |
| 14 | Concept Mapping | Ask students to construct a concept map showing big picture and connections of all that they have learned prior to a mid-term or final exam or assignment. Ensure they label relationships between items. | Have groups of students complete and share with whole class or with another group. Ask them to explain relationships and understandings of the concepts. |
| 15 | Concept Tests | 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/clicker voting) which answer they think is correct. If most of the class has not identified correct answer, students are given a short time to persuade their neighbor(s) that their answer is correct. <br> The question is asked a second time to gauge class 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. |


| 16 | 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 <br> address concepts and understandings you want to know more about. |
| :---: | :---: | :---: | :---: |
| 17 | Question-And- <br> Answer / <br> 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. |
| 18 | Thumbs Up, Sideways, or Down | This is a very easy strategy that teachers can use multiple times throughout a lesson. Students give the thumbs up sign if they understand the content, a sideways thumb if they're a little confused, and thumbs down if they're very confused. | Another formative assessment method that can be used during a lesson is thumbs up, sideways, or down. |
| 19 | Individual Dry Erase Boards | This allows the teacher to see which students understand and which students do not. | Giving each student a dry erase board and marker is also <br> a good way to make formative assessments during a lesson. <br> Throughout the lesson, the teacher can ask students to write their answers on the board and hold them up in the air. |
| 20 | Fist to Three | Additionally, teachers might try the first to three during a lesson. | Teacher can ask students to hold up a 1,2 , or 3 with their fingers based on their |


|  |  |  | understanding of the material. <br> Students hold up a 1 if they don't understands at all, <br> a 2 if they think they understand, and a 3 if they're confident that they understand the lesson. |
| :---: | :---: | :---: | :---: |
| 21 | Quizzes | Perhaps the most classic formative assessment, quizzes can be given to students at any point during a unit or lesson. <br> Quizzes are short, specific assessments that serve to give quantitative data about student learning. Quizzes can sometimes be graded but are most useful when used to gauge student understanding of a topic. | For example, in the middle of a unit on fractions, a short quiz can be given to see if students are understanding the basics of fractions. This quiz will ask a few questions about numerators, denominators, and parts of a whole. <br> Depending on student performance on the quiz, you can determine whether or not to move on to more complex topics or spend some more time teaching the basics. |
| 22 | Observing, Questioning, \& S.O.S. | By observing students and asking questions of them, you can see how each individual student is progessing as well as get a picture of the class as whole. <br> A simple way to observe and question students is to circulate around the room as students are working | S.O.S. can often be helpful in reading lessons. In this case, the teacher gives her students a statement to think about regarding a character in the current story they're reading. <br> Students then write |


|  | or while you are teaching a lesson. <br> Much constant movement keeps <br> students alert and allows you to see <br> student work in progress. You can <br> stop and ask questions of individual <br> students one on one instead of <br> engaging the whole class. More <br> personal interactions may <br> encourage students to attempt to <br> answer <br> the question, even if they aren't sure <br> of the answer. | whether they think the <br> statement is true <br> or false and provide <br> evidence from the text to <br> support their claim. |
| :--- | :--- | :--- |
| S.O.S. stands for statement, <br> opinion, and support. In this <br> assessment, teachers are able to <br> gauge <br> students' understanding of specific <br> ideas and concepts. In S.O.S., you <br> give students will provide <br> their opinion about the statement, <br> which they must support with <br> evidence S.O.S. can be used in <br> a variety of subjects and situations. |  |  |

## References:

Centre for Innovation and Excellence in Learning. Vancouver Island University. (2018). Chapter 5: How do I measure Student Learning?.
Vancouver Island University Teaching and Learning Handbook. Retrieved from https://ciel.viu.ca/teaching-learning-pedagogy/new-or-fairly-new-teaching/viu-teaching-learning-handbook

Hughes, Derek. (n.d.). Types of Formative Assessment. Retrieved from https://study.com/academy/lesson/types-of-formative-assessment.html.

