

## Formative Assessment Strategies

Quick Write	Student writes for 2-3 minutes about what he heard from a lecture or explanation/read/learned. Could be an open ended question from teacher
12 Word Summary	In 12 words or less, have students summarize important aspects of a particular chunk of instruction or reading.
3-2-1	Students jot down 3 ideas, concepts, or issues presented. Students jot down 2 examples or uses of idea or concept. Students write down 1 unresolved question or a possible confusion.
Muddiest Point	Students are asked to write down the muddiest point in the lesson (up to that point, what was unclear)
Quick Class Check	Give students paper plates, index cards, whiteboard, or large sheets of paper when they enter. When asking a question have ALL students write the answer and at your signal, have ALL students hold up the plate (or whatever) so that you can see who/ how many got the answer. Discussion to elaborate can follow.
Class Vote	Present several possible answers or solutions to a question or problem and have students vote on what they think is best.
Idea Wave	Each student lists 3-5 ideas about the assigned topic. One volunteer begins the "idea wave" by sharing his idea. The student to the right of the volunteer shares one idea; the next student to rights shares one idea. Teacher directs the idea wave until several different ideas have been shared. At the end of the formal idea wave, a few volunteers who were not included may contribute.
Tickets to Enter and/or Exit	Teacher asks students a specific question about the lesson. Students then respond on the ticket and gives to teacher, either on their way out or on their way in the next day. Teacher can then evaluate the need to re-teach or questions that need to be answered.
Four Corners	Teacher posts questions, concepts, or vocabulary words in each of the corners of the room. Each student is assigned a corner. Once in the corner, the students discuss the focus of the lesson in relation to the question, concept, or words. Students may report out or move to another corner and repeat. After students have moved, as a writing assignment they should be encouraged to reflect on changes in opinion or what they have learned.

Concept Mapping	Explain/ model a concept map. After lecture, explanation, or reading, have students fill in concept map (partner or individually). Report out.
Flash Cards	After 10 minutes into a lecture or concept presentation, have students create a flash card that contains the key concept or idea. Toward the end of the class, have students work in pairs to exchange ideas and review the material.
Learning Cell	Students develop questions and answers on their own (possibly using the Q-Matrix). Working in pairs the first student asks a question and the partner answers and vice versa. Each student can correct the other until a satisfactory answer is reached. (Good way to encourage students to go back to the text).
One Minute Paper	Teacher decides what the focus of the paper should be. Ask students "What was the most important thing you learned? What important question remains unanswered? Set aside 5-10 minutes of next class to discuss the results. May be used in the middle of a class also.
Signal Cards/thumbs up-thumbs down	Create cards to check for understanding. green means "I got it", yellow means "I'm not sure, Maybe", and blue means "I'm lost. I have questions"
Transfer and Apply	Students list what they have learned and how they might apply it to their real lives. Students list interesting ideas, strategies, concepts learned in class or chunk of class. They then write some possible way to apply this learning in their lives, another class, or in their community.
Circular check	Students in groups are given a problem with a definite answer (good for math & science). First students completes first step without contribution from others in group and passes it to the next student. Second student corrects any mistakes and completes next step, again with out input from the group. Problem gets passed to next student and the process continues until the group has the correct answer.
KWL Chart	Students complete a chart at the beginning of a unit of study, to determine what they already <b><u>K</u></b> know about the topic, and <b><u>W</u></b> what they would like to learn about the topic. At the end of the unit the students revisit their charts and work on the <b><u>L</u></b> what I learned column.
Gallery Walk	Students, in groups, work together to come up with a list of ideas, answers, explanations, etc. on a topic assigned by the teacher. Students write their ideas on a piece of poster paper. These posters are then posted around the class and the students all circulate and view one another's posters. For example: Students read "Goldilocks and the Three Bears" they then brainstorm questions using Costa's levels of questioning. The groups must come up with one level one question, one level two question and

	<p>one level three question. As a class we then evaluate, are the questions the level they claim to be? Are they good? Why? Why not. This gives students the chance to apply their knowledge while also providing students an opportunity to demonstrate their understanding of the concepts learned.</p>
Think, Pair, Share	<p>This strategy encourages students to think first and then discuss their opinions with a small group of people. In groups, students consider a question or issue. They begin by reflecting on their opinions and ideas on the topic and recording them on a template, pairing up with a student next to them to discuss their ideas and opinions. The next stage of the process requires the team to come together and share their ideas and collate a group response. This should then be fed back to the class as a whole.</p>
Round the Clock Learning Partners	<p>The students are each given a piece of paper with a clock on it. Each student will form four partnerships with students in the class. They will be 3:00, 6:00, 9:00 and 12:00. When the teacher says, "meet with your 3:00 partner" the two students will pair up and discuss the topic.</p>
Numbered Tables	<p>The students are put at tables of 3 or 4. Each student is given a number from 1-4. The students are then given a discussion topic to discuss in their group. The teacher then calls a number, for instance "2". All students with the number 2 assigned to them stand up and discuss what their group talked about (or give the answer their group came up with). Basically, all students have the opportunity to be the expert.</p>
Cross the Line	<p>As a review the teacher questions the students on information covered. Students decide which side of the line to go to based upon their answer to the question. Ex: "Pluto is no longer a planet, true or false." Students believing this to be true go to the true side, students believing this to be false go to the false side. Teacher then calls on one from each side to state their position.</p>
Piece it Together	<p>To check for understanding before a quiz or test the teacher places questions and answers on separate flash cards. The students must match the question and answer. When the teacher then asks the question both partners (question and answer) stand up and present their information.</p>
Pyramid	<p>Based upon the \$10,000.00 Pyramid Game. One student faces the board and sees what the teacher has put there. The other student attempts to get his or her partner to come up with the correct answer.</p>
White Board Quiz	<p>Make up inexpensive "white boards" for you students. How? Get a page protector and place a piece of white card stock inside of it. In addition you will need tissues to wipe off the "boards" and expo markers for the students to use. Do a quick check for understanding "quiz" at the end or beginning of class. Ask questions and have students quickly write the answer on their white boards, first one up gets extra credit points. Works great for groups too.</p>

Deck of Cards	The teacher passes out all 52 cards in the deck (Some students will receive more than one card). The teacher then picks a card from another deck and asks a question. Whoever has the matching card must answer the question.
Four Corners	To check for students understanding of a topic use the four corners of the room as designated areas. For example: Give the students choices to make regarding your topic. From I strongly agree to I strongly disagree and in between or sequence of a math problem, "Which step comes first?" Students go to the corner that represents their opinion and discuss. They choose a speaker to tell why they feel their corner is correct.
Index Card Summaries/Questions	Periodically, distribute index cards and ask students to write on both sides, with these instructions: (Side 1) Based on our study of (unit topic), list a big idea that you understand and word it as a summary statement. (Side 2) Identify something about (unit topic) that you do not yet fully understand and word it as a statement or question.
Hand Signals	Ask students to display a designated hand signal to indicate their understanding of a specific concept, principal, or process: - I understand _____ and can explain it (e.g., thumbs up). - I do not yet understand _____ (e.g., thumbs down). - I'm not completely sure about _____ (e.g., wave hand).
One Minute Essay	A one-minute essay question (or one-minute question) is a focused question with a specific goal that can, in fact, be answered within a minute or two.
Analogy Prompt	Periodically, present students with an analogy prompt: (A designated concept, principle, or process) is like _____ because... _____.
Web or Concept Map	Any of several forms of graphical organizers which allow learners to perceive relationships between concepts through diagramming key words representing those concepts.
Misconception Check	Present students with common or predictable misconceptions about a designated concept, principle, or process. Ask them whether they agree or disagree and explain why. The misconception check can also be presented in the form of a multiple-choice or true-false quiz.
Student Conference	One on one conversation with students to check their level of understanding.
3-Minute Pause	The Three-Minute Pause provides a chance for students to stop, reflect on the concepts and ideas that have just been introduced, make connections to prior knowledge or experience, and seek clarification. <ul style="list-style-type: none"> <li>• I changed my attitude about...</li> <li>• I became more aware of...</li> </ul>

	<ul style="list-style-type: none"> <li>• I was surprised about...</li> <li>• I felt...</li> <li>• I related to...</li> <li>• I empathized with...</li> </ul>
Observation	<p>Walk around the classroom and observe students as they work to check for learning. Strategies include:</p> <ul style="list-style-type: none"> <li>•Anecdotal Records</li> <li>•Conferences</li> <li>•Checklists</li> </ul>
Self-Assessment	A process in which students collect information about their own learning, analyze what it reveals about their progress toward the intended learning goals and plan the next steps in their learning.
Give One/Get One	Students are given papers and asked to list 3-5 ideas about the learning. Students draw a line after their last idea to separate his/her ideas from classmate's lists. Students get up and interact with one classmate at a time. Exchange papers, read your partner's list, and then ask questions about new or confusing ideas.
Learning Journal/Portfolio Check	Check the progress of a student's portfolio. A portfolio is a purposeful collection of significant work, carefully selected, dated and presented to tell the story of a student's achievement or growth in well-defined areas of performance, such as reading, writing, math, etc. A portfolio usually includes personal reflections where the student explains why each piece was chosen and what it shows about his/her growing skills and abilities.
Quiz	<p>Quizzes assess students for factual information, concepts and discrete skill. There is usually a single best answer. Some quiz examples are:</p> <ul style="list-style-type: none"> <li>• Multiple Choice</li> <li>• True/False</li> <li>• Short Answer</li> <li>• Paper and Pencil</li> <li>• Matching</li> <li>• Extended Response</li> </ul>
Journal Entry	Students record in a journal their understanding of the topic, concept or lesson taught. The teacher reviews the entry to see if the student has gained an understanding of the topic, lesson or concept that was taught.
Choral Response	In response to a cue, all students respond verbally at the same time. The response can be either to answer a question or to repeat something the teacher has said.
A-B-C Summaries	Each student in the class is assigned a different letter of the alphabet and they must select a word starting with that letter that is related to the topic being studied.

Debriefing/Reflection	A form of reflection immediately following an activity. Students will share either individually or in group based on teacher/student questions.
Idea Spinner	The teacher creates a spinner marked into 4 quadrants and labeled "Predict, Explain, Summarize, Evaluate." After new material is presented, the teacher spins the spinner and asks students to answer a question based on the location of the spinner. For example, if the spinner lands in the "Summarize" quadrant, the teacher might say, "List the key concepts just presented."
Inside-Outside Circle	Inside and outside circles of students face each other. Within each pair of facing students, students quiz each other with questions they have written. Outside circle moves to create new pairs. Repeat.
Numbered Heads Together	Each student is assigned a number. Members of a group work together to agree on an answer. The teacher randomly selects one number. Student with that number answers for the group.
One Sentence Summary	Students are asked to write a summary sentence that answers the "who, what where, when, why, how" questions about the topic.
One Word Summary	Select (or invent) one word which best summarizes a topic.
Crystal Ball	Students are given content clues to determine thru inference what the future is for the lesson topic.
Riddle Me This	Students write questions individually using a textbook/expository reading assignment. Then in small groups let other students try to answer one another's questions.
Turn to Your Partner	Teacher gives direction to students. Students formulate individual response, and then turn to a partner to share their answers. Teacher calls on several random pairs to share their answers with the class.
Oral Questioning	<ul style="list-style-type: none"> <li>- How is _____ similar to/different from _____?</li> <li>- What are the characteristics/parts of _____?</li> <li>- In what other ways might we show show/illustrate _____?</li> <li>- What is the big idea, key concept, moral in _____?</li> <li>- How does _____ relate to _____?</li> <li>- What ideas/details can you add to _____?</li> <li>- Give an example of _____?</li> <li>- What is wrong with _____?</li> <li>- What might you infer from _____?</li> <li>- What conclusions might be drawn from _____?</li> <li>- What question are we trying to answer? What problem are we trying to solve?</li> <li>- What are you assuming about _____?</li> <li>- What might happen if _____?</li> <li>- What criteria would you use to judge/evaluate _____?</li> <li>- What evidence supports _____?</li> </ul>

	<ul style="list-style-type: none"> <li>- How might we prove/confirm _____ ?</li> <li>- How might this be viewed from the perspective of _____ ?</li> <li>- What alternatives should be considered _____ ?</li> <li>- What approach/strategy could you use to _____ ?</li> </ul>
Homework, Quizzes, and Tests	<ol style="list-style-type: none"> <li>1. The easiest form of information to collect or analyze about your student's learning is their regular work in the form of homework, quizzes, and tests.</li> <li>2. This information will be richer if you include questions that require students to explain their thinking. It is especially helpful to ask questions that require students to apply their thinking to a new situation that you have not discussed in class. This requires flexible thinking on their part and should reveal how they are thinking better than questions that allow them to say back what they have memorized.</li> <li>3. Photocopy examples that helped you learn about your students in ways that helped you adjust your teaching.</li> </ol>
Exit Tickets variation	<ol style="list-style-type: none"> <li>1. Give students "tickets" – small pieces of paper designed to look like tickets, but with space for writing.</li> <li>2. Ask students two questions. One that requires a factual answer about the big idea of today's lesson, but in their own words. A second question should require more explanation of a concept.</li> <li>3. Give students five minutes at the end of class to write their answers. Their names do not go on these exit tickets.</li> <li>4. They must give you an Exit Ticket to leave class for the day.</li> <li>5. Analyze the tickets to learn how many students got the big idea and how they understand it or misunderstand it. Photocopy 4-6 on a single sheet of paper for your portfolio. Select ones that you learned something about your students from that you didn't know before reading the Exit Tickets.</li> </ol>
Concept Map	<ol style="list-style-type: none"> <li>1. Provide small groups of students with a list of about 15 related words that might fit well in an outline.</li> <li>2. Give them small sticky notes to write the words on.</li> <li>3. Ask them to create a concept map by moving the sticky notes around on a piece of paper until they have them in the right place.</li> <li>4. Model for them on the board how to draw connections between words and emphasize that the connections should be labeled with words describing the nature of the relation (leads to, is an example of, sometimes goes with, can't happen without, etc.).</li> <li>5. Walk around while students are creating their concept maps-ask questions about why they are placing words where they do. Keep in mind that the purpose of this exercise at this point is to find out what they are thinking, not for them to get the right answer. So don't prompt them with correct answers.</li> <li>6. Collect the papers, analyze them to find out what students</li> </ol>

	<p>know, don't know, and what their misconceptions are. Do not write on the concept maps, though you may want to photocopy one or two for your portfolio. If you do this, select interesting examples that helped you adapt your teaching.</p> <p>7. Create your own concept map-perhaps on overhead transparency.</p> <p>8. The next day-hand back the concept maps and show your concept map to the class. Emphasize that there is more than one way to organize a group of related terms. Ask groups of students to compare theirs to yours and explain how theirs are different and whether and in what ways they think they should change theirs.</p>
<p>Problem Solving Observation</p>	<ol style="list-style-type: none"> <li>1. Give the class a complex problem to solve. Ask them to work in pairs.</li> <li>2. Good problems will have more than one part and will require students to explain their thinking to each other. It may be helpful to use problems that require students to show their thinking in more than one way. Examples of showing their thinking in more than one way might include graphing, diagramming, explaining how someone with a different perspective might answer the question, and generating examples.</li> <li>3. Join one of the groups while they work. Have in mind that you are observing and focus in a way that you can write down later what you observed. You may find it helpful to jot down 2 or 3 words during this observation to prompt your recall later.</li> <li>4. Prompt students to explain their thinking to each other. Ask them to say aloud what they are thinking while they are solving the problem. Prompt them with questions such as "Why" "how are you deciding to" or "What were you thinking about when you did that."</li> <li>5. As soon as practical jot down notes about what you observed-especially including notes about student's problem solving process and what they understand about the process.</li> </ol>
<p>Survey Students</p>	<ol style="list-style-type: none"> <li>1. Although this is not formative assessment of their learning, you can learn a great deal by surveying students.</li> <li>2. A sample survey is provided on the last page-you can photocopy this survey for your students.</li> </ol>
<p>Four "A"s Text Protocol</p>	<ol style="list-style-type: none"> <li>1. The group reads the text silently, highlighting it and writing notes in the margin on post-it notes in answer to the following four questions (you can also add your own "A"s <ul style="list-style-type: none"> <li>• What Assumptions does the author of the text hold?</li> <li>• What do you Agree with in the text?</li> <li>• What do you want to Argue with in the text?</li> <li>• What parts of the text do you want to Aspire to?</li> </ul> </li> <li>2. In a round, have each person identify one assumption in the</li> </ol>



text, citing the text (with page numbers, if appropriate) as evidence.

3. Either continue in rounds or facilitate a conversation in which the group talks about the text in light of each of the remaining “A”s, taking them one at a time – what do people want to argue with, agree with, and aspire to in the text? Try to move seamlessly from one “A” to the next, giving each “A” enough time for full exploration.
4. End the session with an open discussion framed around a question such as: What does this mean for our work with students?
5. Debrief the text experience.

**Odd One Out**

combines seemingly similar items and challenges students to choose which item in the group does not belong. Students are asked to justify their reason for selecting the item that does not fit with the others.

**Design and Administration:** Select items that lend themselves to a grouping where one item justifiably doesn’t fit with the others. Be sure to choose items and a relationship that is not immediately obvious in order to promote deeper thinking. Provide the list as a handout, overhead projection, or chart. Alert students to what the topic of the Odd One Out is before they examine the list of items. Make it clear to students that they should explore what they think rather than guess the answer they think you, the teacher, are expecting. Have students record their own thinking before discussing their ideas with a partner or in groups. Allow students enough time to discuss the various possibilities before homing in on “the odd one out.”

**Modifications:** With younger children or less fluent readers, consider using pictures with words. Use only one or two sets for younger students. Instead of “Odd One Out,” use “Which of These Things Is Not Like the Other?”

**Caveats:** Make sure students are familiar with the words or objects listed before they are asked to examine the relationship between them.

**Use With Other Disciplines:**

**ODD ONE OUT**

In each set, circle the Odd One Out and describe why it does not fit with the others.

Which is the Odd One?	Which is the Odd One?
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Summative assessment Formative assessment MAP assessment Benchmark assessment	
Which is the Odd One?	Which is the Odd One?
Feedback Rubrics Grades Comments	
Which is the Odd One?	Which is the Odd One?
Learning progression Standard Learning target Sequence	
I Have the Question, Who Has the Answer?	<p>One set contains questions related to the unit of study. The second set contains the answers to the questions.</p> <p>Distribute the answer cards to the students and either you or a student will read the question cards to the class. All students check their answer cards to see if they have the correct answer.</p> <p><i>Another variation is to make cards into a chain activity:</i> The student chosen to begin the chain will read the given card aloud and then wait for the next participant to read the only card that would correctly follow the progression. Play continues until all of the cards are read and the initial student is ready to read his card for the second time.</p> <p><i>Zig zag around the room</i></p>
Signal Cards	<p>Provide students with cards to signal understanding of concepts, or directions, or a sense of "I'm lost!", and you send the message that it is all right not to understand everything the first time around.</p> <p>Cards:</p> <p><i>Got it!</i></p> <p><i>Confused!</i></p> <p><i>Can you repeat!</i></p> <p><i>I am learning something new!</i></p>

Content Frames	Have the topics, themes, etc. in a chart and have students fill in the important aspects of each topic. Quick way to determine if they understand main instruction.
Framed Paragraphs	Start sentences for students to finish with the “meat” of the topic to determine if they understood.
Post Reading Mapping	Have students in groups or individually map or draw what were the important topics discussed. Easy to tell at a glance if they caught the right information.
Sentence Synthesis	Use several new vocabulary words in one sentence to determine understanding of words. Share orally or on overhead to discuss usage.
3-2-1 Cards	Example: <b>3</b> things I learned about _____ <b>2</b> questions I still have about _____ are... <b>1</b> way I see _____
Graffiti Walls	The teacher places a large sheet of paper on a smooth surface and invites the students to write or draw what they know about the topic. Students “sign” their work or statements, allowing the teacher to see, at a glance, misconceptions, naïve conceptions, prior knowledge, and new learning targets.
Capsule Vocabulary	Put students in groups and have them use and discuss the new words and then put them in a paragraph to determine if they understand the uses.
Student Self Assessment	The three stages most commonly followed by teachers when asking students to self-assess their work are: Stage 1 - Students identify their own successes. Stage 2 - Students identify a place for improvement. Stage 3 - Students identify their successes and make an “on the spot” improvement. Have students self-assess using a few guiding sentence fragments, such as: <ul style="list-style-type: none"> <li>• I am pleased with my work so far, because...</li> <li>• Two improvements I’ve made are...</li> <li>• Next time I revise my work, I need to focus on...</li> <li>• I would grade myself a 1,2,3,4,5 because I...</li> </ul>

	<ul style="list-style-type: none"> <li>• In order to improve, I need to...</li> </ul>
Peer Assessment	<p>Have students peer assess using a few guiding sentence fragments, such as:</p> <ul style="list-style-type: none"> <li>• You did these really well:</li> <li>• You could have...</li> <li>• Next time you need to focus on...</li> </ul> <p>When using peer assessment, focus on only one aspect of the assignment at a time. For example, the peer may look for multiple pieces of evidence, or only grammatical errors.</p>
Minute Paper (closure)	Give students an open-ended question and three to five minutes to write an answer. Example: What is the most important thing you learned today?
RSQC <sub>2</sub>	In two minutes, students <i>recall</i> and list in rank order the most important ideas from a previous day's class; in two more minutes, they <i>summarize</i> those points in a single sentence, then write one major <i>question</i> they want answered, then identify a thread or theme to <i>connect</i> this material to the course's major goal. Add an additional <i>comment</i> , if desired.
<b>Transfer and Apply</b>	Students write down concepts learned from the class in one column; in another column provide an application of each concept.
Problem Solving Observations	Give students a multi-step problem to solve in pairs. Try to pick problems that can be solved in multiple ways or ones that require students to explain their thought process.
<b>Characteristic Features</b>	Students summarize in matrix form those traits that help define a topic and differentiate it from others; useful for determining whether students separate items or ideas that are easily confused.
<b>Windshield Check</b>	<p>Example:</p> <ul style="list-style-type: none"> <li>• CLEAR = I get it!</li> <li>• BUGS = I get it for the most part, but some things are still unclear.</li> <li>• MUD = I still don't get it!</li> </ul>
<b>One Sentence Summary</b>	Students summarize knowledge of a topic by constructing a single sentence

	that answers the questions
<b>Application Cards</b>	After introducing an important theory, principle, or procedure, ask students to write down at least one real-world application for what they have just
<b>Paraphrasing</b>	Students summarize in well-chosen (own) words a key idea presented during the class period or the one just past.
<b>Memory Matrix</b>	Students fill in cells of a two-dimensional diagram for which the instructor has provided labels. Example?
Happy/Sad	Students draw and color a happy face on the front of the circle, cut it out and color the back side as a sad face. Students will place this circle on the corner of their desk and use it as an indicator for understanding. Happy side means I understand the lesson or what I am suppose to be doing , Sad side means confusion, misunderstanding or I'm stuck.
Most and Least Clear	Students reflect on what is most and least clear in the materials and to write their comments in the appropriate boxes. Student describe concepts or skills they do and don't understand/need more practice.
Huh?	Students read a passage and identify aspects of the reading that they fell are still unclear. I just read _____ Here are three things I didn't understand completely... The part I didn't understand was _____.
Under the Microscope	Students will pretend they are placing their work under a microscope. Have them discuss what a microscope does (enlarge images, make details visible, help us describe things)
Role Play	Role Play a situation using a concept to be mastered.
Runway Model	Students act out/model a learned concept or skill.