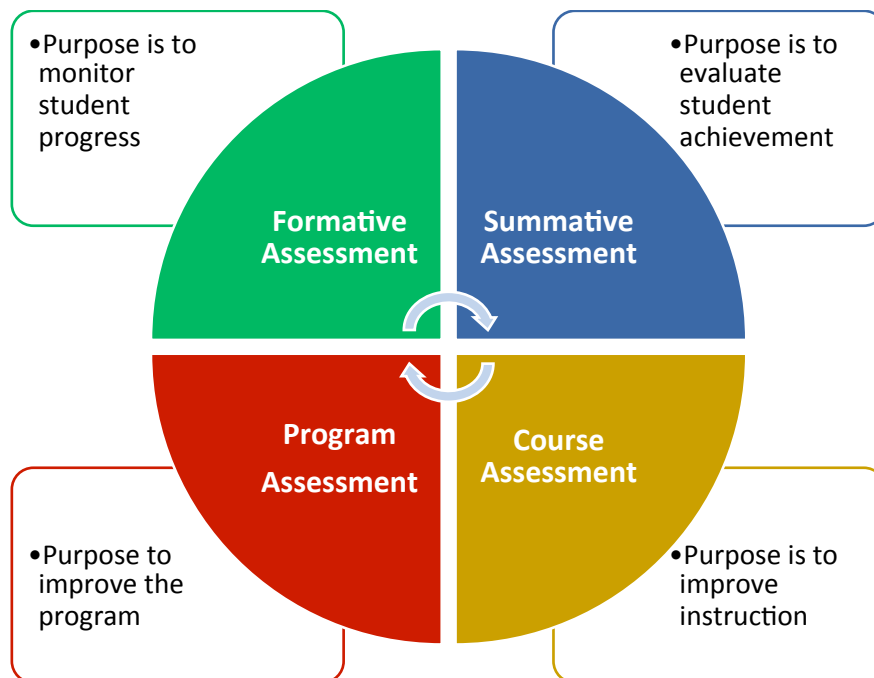


Assessment

There are literally dozens of books published just in the last 10 years that focus on assessment of student learning at the university level. This section's goal is to get you started by providing some basic background. More information can be accessed by contacting the Center. We also have books in our lending library that you can check out.

What is Assessment?

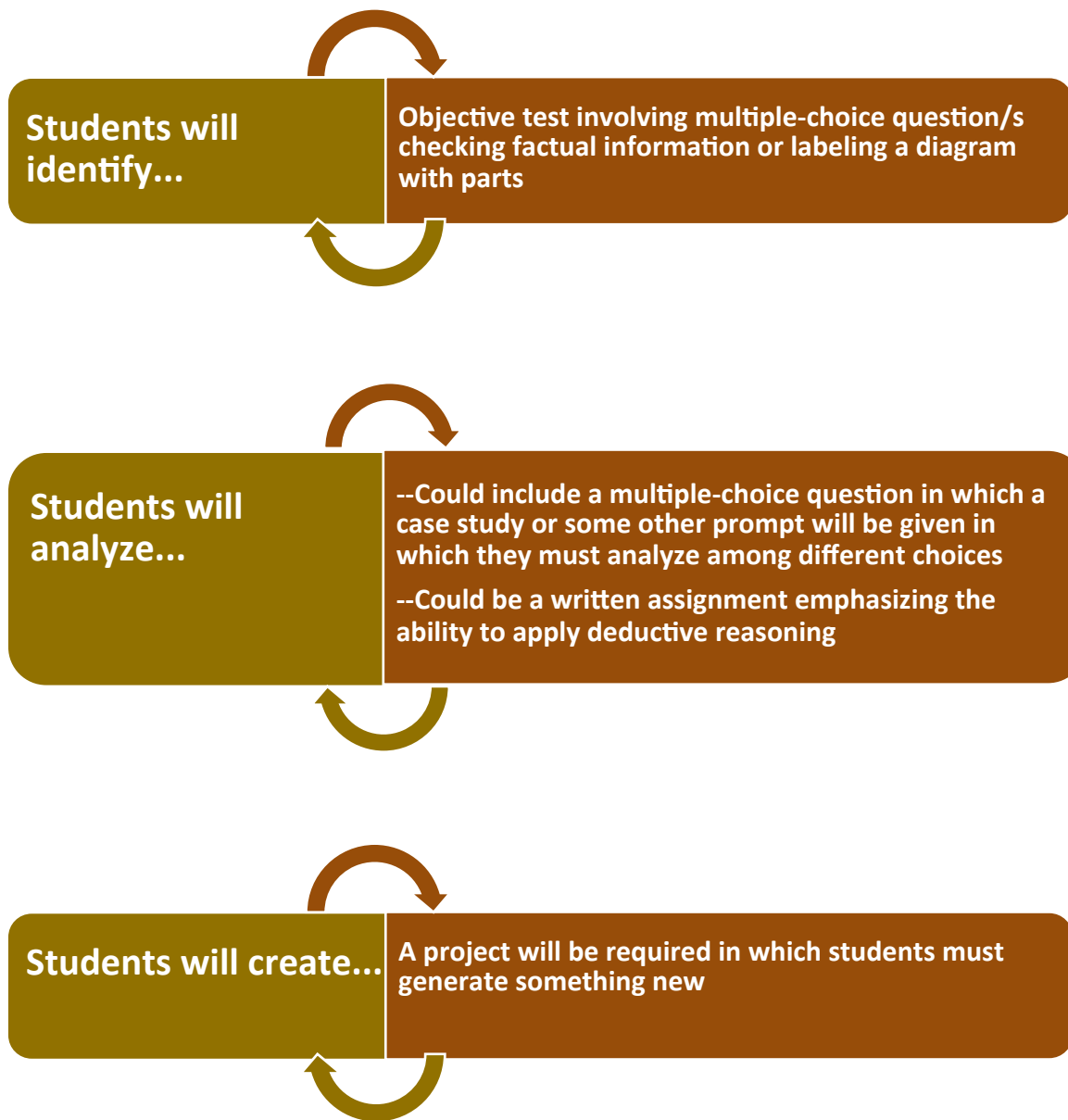


Our focus here will be on the top half of the circle which concentrates on student progress and achievement. However, it is important to remember that assessment can help provide input on how to improve your instruction and your overall program.

Summative Assessment—What assignments will I be giving?

We will begin with summative assessment, since that probably is the first thing you think about—how are you going to evaluate student achievement in your course? You must start by returning to your student learning outcomes (see Center website section on “Identifying student learning outcomes”). Your student learning outcomes should inform and directly connect you to your summative assessment.

See in the diagrams below how the student learning outcome informs the assessment which then loops around to be a valid indicator of whether the student learning outcome was achieved.



Since your student learning outcomes should span cognitive functioning to include lower-level and upper level cognitive thinking AND you may have included psychosocial skill and affective skills, your summative assessments should be varied since they must assess what you indicated students should be learning. This match is critical. Otherwise you will not be able to determine validly whether your students have achieved what they were to achieve.

We at the Center for the Enrichment of Teaching and Learning are able to sit down with you to ensure this match is made and provide suggestions as to different assessments you can try. If you are thinking that multiple choice exams will be part of your assessments, you can view this powerpoint that has been used in workshops with the College of Pharmacy and the College of

Formative Assessment—How can I check to see if the class is on the right track? How can I check that what I am teaching is actually being learned?

This type of assessment *informs* you and your students as to how they are doing. Formative assessment is not used to insert a grade to be calculated toward the final course grade, but to provide a sense of “Are they learning?” “Are the students getting what they should be getting?” “Is my teaching effective?”

You already might use formative assessment spontaneously. Have you lectured and stopped to ask a question—maybe using clickers, maybe not? If you have, this is formative assessment. You are touching base with the students and quickly checking their understanding. There are many techniques that can be used and here are a few ideas:



Ten-two

When lecturing, go no more than **10** minutes and spend **2** minutes having the students reflect on and discuss or summarize what they have learned so far. One important concept in learning is rehearsal and this provides a time to stop and have the students “rehearse” the information and organize it. These 2 minutes could be with a question asked to the class. If you find the same students answer the questions you pose, consider having your students discuss the question with their neighbor for 60 seconds and then call on someone. This technique is called, “Think, Pair, Share.”

Also consider when questioning that you do not simply accept the first response even if it is correct. Volley to another student by asking “What do others think about _____’s idea?” or “Would someone add to _____’s idea or share a different thought?” or probe by asking “What do you think would happen if _____?” Important to asking questions is a wait time of 3 seconds that research has shown to increase responses and complexity of responses.

Another idea is to simply ask the students to go through their notes and place a star by information they feel is important. Then have them share what they starred. This technique fosters both rehearsal and getting them to organize their notes and chunk information.



Missed Conception

Missed conception is a statement that reflects a commonly held idea but it is incorrect. Students are asked to analyze a statement, describe why people may believe it is true, describe what one could do to help someone change his or her “missed conception” in favor of the scientific idea, and reflect on their own ideas in relation to the statement.



Fist to Five or Thumbs up or Thumbs down

This technique provides you with a quick scan in terms of students self-assessing if they are understanding the content. You can ask them to show a fist (not clear at all) to five (very sure of content) or a thumbs up (I am clear) to thumbs down (I am confused). This technique appears very simplistic, but

it gets the students' attention and requires them to assess whether they are following what the class is learning.



Quick end of class checks

Muddiest Point in which students are asked to take a few minutes to jot down what the most difficult or confusing part of a lesson was for them. They can jot these down on index cards and you quickly scan them before the next class to see what you might need to review.

POMS—Points of most significance in which students are asked to identify the most significant learning or idea they gained from a lesson. This technique helps you see whether the class is on task and focused.

Three-Two-One is a structured way for students to reflect on their learning. Three prompts are given. The first asks for three responses; the second asks for two, and the one asks for one. For example:

- Three key ideas I will remember
- Two things I am still struggling with
- One thing that will help me tomorrow

These formative assessments are but a few that you could use. Notice how they engage the students in active learning and the research is clear that active learning increases student achievement.

Please feel free to contact the Center if you want help in exploring more formative assessments.

Also please check out these books on summative and formative assessment that are available from the Center's lending library:

- Chase, D., Ferguson, J. L., & Hoey, J. J. (2014). *Assessment in creative disciplines: Quantifying and qualifying the aesthetic*. Champagne, IL: Common Ground Publishing.
- Diamond, R. M. (2008). *Designing and assessing courses and curricula: A practical guide*. San Francisco: Jossey-Bass.
- Hernon, P., Dugan, R. E., & Schwartz, C. (Eds.). (2013). *Higher education outcomes assessment for the twenty-first century*. Santa Barbara, CA: Libraries Unlimited.
- Maki, P. L. (2010). *Assessing for learning*. Sterling, VA: Stylus Publishing.
- Nilson, L. B. (2010). *Teaching at its best: A research-based resource for college instructors*. San Francisco: Jossey-Bass.
- Suskie, L. (2009). *Assessing student learning: A common sense guide*. San Francisco: Jossey-Bass.
- Walvoord, B. E. & Anderson, V. J. (2010). *Effective grading: A tool for learning and assessment in college*. San Francisco: Jossey-Bass.