



Alternate Forms of Assessment

Current Collection of Tips

- **Assess student understanding by promoting student discussion.** As *Principles and Standards* notes, communication deepens understanding. Students need opportunities to discuss their reasoning and negotiate meaning with their peers. When solving problems, always leave time for students to discuss, explain and justify their solutions, even if they are not completely correct. To give them initial direction, try using questions such as, "How did you solve the problem? Why did you solve it that way? Could we solve the problem another way?"



- **Take time to observe.** Most often, it is harder to watch students struggle than it is to intervene, but there are real benefits to allowing them the opportunity to make sense of the mathematics on their own. Watch students engage in the mathematics they are learning, and ask yourself, "How are students involved in the lesson activity? How successful are they?" You may want to take notes on your observations as you make your way around the classroom. You will not only get a good idea of how well your students are grasping the concepts, but you will also get a sense of how to create the right balance between allowing students the opportunity to grapple with the concepts and offering support.

- **Include presentations, and require that all students participate.** It is important that all students become comfortable talking about mathematics. Allow collaborative groups, but hold each student accountable by requiring all students to take an active part in the presentation.
- **Involve students in the development of rubrics.** It may motivate students to create the guidelines used to score their performances. Using rubrics both outlines the expectations for students and eliminates subjective grading practices.



- **Interview your students.** This is particularly useful to assess the progress of individual students, specifically to identify early misconceptions. Ask a couple students each class to solve a problem for you while describing his or her steps out loud. (This can take place as you walk around checking for homework completion as the students talk to peers about problems they had questions about.) You can then address the common misconceptions with the class as a whole before they are held accountable for the material in a summative assessment. Don't try to reach all students at once. Keep track and make sure that you have individually spoken to all of your students a few times before the end of the semester.

- **Make writing a routine, not a special occasion.** Sometimes it may be difficult to interview each student individually. It may be more feasible to use writing activities to get and give feedback to students concerning their levels of understanding. In addition to asking them to work out and explain problems, ask students to create and write up their own application problems to share with others in a later class. Invest yourself by writing back to the students before returning the writing activities. Refer to [Tips on Creating Writing Prompts and Giving Feedback](#).
- **Find a way for students to continue to talk outside of class.** You may reserve a room after school for students to conveniently meet, or think about an online discussion board. Be sure to check with your school about the logistics of a discussion board. Students are spending their time outside of class on the internet anyway, so make mathematics discussion a part of their after-school habit. They will be able to get ideas from their peers and you will also be able to monitor their understanding.

- **Assign self-assessments from your students to monitor their progress.** Require students to give themselves a grade before you grade their work. This may be included in a homework portfolio where after checking for completion, students revise solutions and then hand in a collection of assignments as evidence of their personal growth.
- **Don't try to do it all at once.** Pick one assessment idea, such as observation or interviews, and try it for a while. Revise and try again. Find ways to make the idea simpler and work with your unique classroom needs.

For additional resources on assessment, including articles, books, news releases, and a framework to evaluate large-scale assessments, visit the [Assessment Resource Page](#).

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