

Assessment FOR Learning: Five Strategies that Really Work!

Source: “*Classroom Assessment: Minute by minute, day by day*” by Leahy, Lyon, Thompson and Wiliam, Educational Leadership (ASCD, November 2005)

Clarify and Share Intentions and Criteria

Low achievement is often the result of students failing to understand what teachers require of them (Black & Wiliam, 1998). Many teachers address this issue by posting the state standard or learning objective in a prominent place at the start of the lesson, but such an approach is rarely successful because the standards are not written in student-friendly language.

Teachers in our various projects have explored many ways of making their learning objectives and their criteria for success transparent to students. One common method involves circulating work samples, such as lab reports, that a previous year's class completed, in view of prompting a discussion about quality. Students decide which reports are good and analyze what's good about the good ones and what's lacking in the weaker ones. Teachers have also found that by choosing the samples carefully, they can tune the task to the capabilities of the class. Initially, a teacher might choose four or five samples at very different quality levels to get students to focus on broad criteria for quality. As students grow more skilled, however, teachers can challenge them with a number of samples of similar quality to force the students to become more critical and reflective.

Effective Classroom Discussion

Teachers spend a considerable proportion of their instructional time in whole-class question-and-answer sessions, but these sessions tend to rehearse existing knowledge rather than create new knowledge for students. Moreover, teachers generally “correct” answers instead of listening for what they can learn about the students; as Davis (1997) says, they listen *evaluatively* rather than *interpretively*. Teachers with whom we have worked have tried to address this issue by asking questions that either prompt students to think or provide teachers with information that can be used to adjust instruction to meet learning needs.

With this focus, teachers have become aware of the need to carefully plan the questions they use in class. Many of our teachers now spend more time planning questions than grading student work, a practice that emphasizes the shift from quality assurance to quality assurance. By thinking more carefully about the questions they ask in class, they can check on students' understanding while the students are still in the class rather than they have left, as is the case with grading.

Questions are designed as “range-finding” questions to reveal what students know at the start of an instructional sequence. For example, a high school biology teacher asked her class how much water taken up by the roots of a corn plant is lost through transpiration. Many students believe that transpiration is “bad” and that plants try to minimize the amount of water lost in this process, whereas, in fact, the “lost” water plays a key role in transporting nutrients around the plant.

A mathematics teacher might ask students to indicate how many fractions there are between $\frac{1}{6}$ and $\frac{1}{7}$. Some students will think there aren't any; others may answer that, although in some way understandable, is an incorrect use of the word “between,” such as 1 over $6\frac{1}{2}$. The important feature of such range-finding questions is that they can help a teacher judge where to begin instruction.

Teachers can use the same item in a number of ways, depending on the context. At the end of the question about fractions at the end of a sequence of instruction on fractions, teachers can ask students to see whether students have grasped the main idea. A middle school science teacher might ask students at the end of a laboratory experiment, “What was the most interesting thing in today's lab?” A social studies teacher, at the end of a project on the Civil War, might ask students to state their views about which year the war began and to explain their choice.

so use questions to check on student understanding before continuing the lesson. This is a "hinge point" in the lesson because the lesson can go in different directions depending on student responses. By explicitly integrating these hinge points into lessons, teachers can make their teaching more responsive to their students' needs in the moment.

Whether how good the hinge-point question, the traditional model of classroom questioning presents two additional problems. The first is lack of engagement. If the teacher dictates that students raise their hands to answer questions, then students disengage from the classroom by keeping their hands down. For this reason, many of us have instituted the idea of "no hands up, except to ask a question." Teachers can either decide whom to call on to answer a question or use some randomizing device. One teacher we worked with reported that her students love the fairness of this method and that her shyer students are showing greater confidence as a result of participating in this way. Other teachers have said that some students think they don't get a chance to show off when they know the answer.

One problem with traditional questioning is that the teacher gets to hear only one student's response. To gauge the understanding of the whole class, the teacher needs to get responses from all the students at the same time. One way to do this is to have all students write their answers on index cards or erasable boards, which they hold up at the teacher's request. The teacher can then scan the responses for novel solutions as well as misconceptions. This technique would be helpful with the fraction question we cited.

Another technique is to give each student a set of four cards labeled *A*, *B*, *C*, and *D*, and use them in multiple-choice format. If the question is well designed, the teacher can gauge the different levels of understanding in the class. If all students answer correctly, the teacher can move on. If no one answers correctly, the teacher might reteach the concept. If some students answer correctly and some answer incorrectly, the teacher can use that knowledge to engineer a whole-class discussion on the concept or match up the students for peer teaching. Hinge-point questions provide a way to assess students' thinking and, at the same time, give the teacher some ideas about how to help students' learning forward.

Feedback That Moves Learners Forward

tion, of course, comes grading. The problem with giving a student a grade and a comment is that these practices don't cause further learning. Before thinking about assessment for learning, none of the teachers with whom we worked had that their students spent as long considering teacher feedback as it had taken teachers to provide that feedback. Indeed, the research shows that when teachers give a grade and a comment, they ignore the comment (see Butler, 1988). The first thing they look at is the grade, and the second thing they look at is their grade.

Therefore, feedback needs to cause thinking. Grades don't do that. Scores don't do that. Comments like "Good job" don't do that either. What *does* cause thinking is a comment that addresses what the student needs to do to improve, linked to rubrics and standards. Of course, it's difficult to give insightful comments when the student is asked for 20 calculations or 20 historical dates, but even in these cases, a comment can cause thinking. For example, one approach that many of our teachers have used is to say to a student, "Five of these 20 answers are incorrect. Find them!"

Teachers worried about the extra time needed to provide useful feedback. When students engaged in self-assessment and peer assessment, the teachers were more selective about which elements of student work they looked at, and they were giving feedback that peers were unable to provide.

Teachers worried about the reactions of administrators and parents. Some teachers were asked by principals to vary school policy (for example, to give comments on interim assessments). Most principals were happy to permit these changes. Teachers explained their reasons. Parents were also supportive. Some even said that comments were more useful than grades because the comments provided a clear path on how to help their children.

Activate Students as Owners of Their Learning

Developing assessment for learning in one's classroom involves altering the implicit contract between teacher and students by creating shared responsibility for learning. One simple technique is to distribute green and red "traffic light" cards, which students "flash" to indicate their level of understanding (green = understand, red = don't understand). A teacher who uses this technique with her 9th grade algebra classes told us that one day she moved on too quickly, without scanning the students' cards. A student picked up her own card as well as her neighbors' cards, waved them in the air, and pointed at them wildly, with the red side facing the teacher. The teacher considered this ample proof that this student was taking ownership of her learning.

Students also take ownership of their learning when they assess their own work, using agreed-on criteria for success. Teachers can provide students with a rubric written in student-friendly language, or the class can develop the rubric with the teacher's guidance (for examples, see Black, Harrison, Lee, Marshall, & Wiliam, 2003). The teachers we have worked with report that students' self-assessments are generally accurate, and students say that assessing their own work helped them understand the material in a new way.

Activate Students as Instructional Resources for One Another

Getting students started with self-assessment can be challenging. Many teachers provide students with rubrics but find that the students seem unable to use the rubrics to focus and improve their work. For many students, using a rubric to assess their own work is just too difficult. But as most teachers know, students from kindergarten to 12th grade are much better at spotting errors in other students' work than in their own work. For that reason, peer assessment and feedback can be an important part of effective instruction. Students who get feedback are not the only beneficiaries. Students who give feedback also benefit, sometimes more than the recipients. As they assess the work of a peer, they are forced to engage in understanding the rubric, but in the context of someone else's work, which is less emotionally charged. Also, students often communicate more effectively with one another than the teacher does, and the recipients of the feedback tend to be more engaged when the feedback comes from a peer. When the teacher gives feedback, students often just "sit there and take it" until the ordeal is over.

Using peer and self-assessment techniques frees up teacher time to plan better instruction or work more intensively with small groups of students. It's also a highly effective teaching strategy. One cautionary note is in order, however. In our view, students should not be giving another student a grade that will be reported to parents or administrators. Peer assessment should be focused on improvement, not on grading.