

FairTest

National Center for Fair & Open Testing

The Value of Formative Assessment

The current wave of test-based “accountability” makes it seem as though all assessment could be reduced to “tough tests” attached to high stakes. The assumption, fundamentally unproven, is that such tests produce real improvements in student learning better than do other educational methods.

In this environment, Paul Black and Dylan William’s “Inside the Black Box: Raising Standards Through Classroom Assessment” (*Phi Delta Kappan*, October 1998) provides strong evidence from an extensive literature review to show that classroom “formative” assessment, properly implemented, is a powerful means to improve student learning — but summative assessments such as standardized exams can have a harmful effect.

Summative assessment is the attempt to summarize student learning at some point in time, say the end of a course. Most standardized tests are summative. They are not designed to provide the immediate, contextualized feedback useful for helping teacher and student during the learning process. High quality summative information can, of course, shape how teachers organize their courses or what schools offer their students.

By contrast, formative assessment occurs when teachers feed information back to students in ways that enable the student to learn better, or when students can engage in a similar, self-reflective process. If the primary purpose of assessment is to support high-quality learning (principle one in Principles and Indicators for Student Assessment Systems), then formative assessment ought to be understood as the most important assessment practice.

The evidence shows that high quality formative assessment does have a powerful impact on student learning. Black and William report that studies of formative assessment show an effect size on standardized tests of between 0.4 and 0.7, which is larger than most known educational interventions. (The effect size is the ratio of the average improvement in test scores in the innovation to the range of scores of typical groups of pupils on the same tests; Black and William recognize that standardized tests are very limited measures of learning.) Formative assessment is particularly effective for students who have not done well in school, thus narrowing the gap between low and high achievers while raising overall achievement.

Unfortunately, the research shows that high-quality formative assessment is relatively rare in classrooms, and that most teachers do not know well how to engage in such assessment. Black and William also found that most classroom testing encourages rote and superficial learning. Teachers do not help each other become good assessors, and they often emphasize quantity of work over high quality. Actual assessment practices are often harmful: marking and grading are overemphasized while giving useful advice is underemphasized, and comparing students competitively causes low-achieving students to believe they cannot learn. Teachers, it turns out, generally replicate standardized tests in their own assessment practices and therefore lack sufficient information about their students.

In sum, the state of formative assessment is quite weak. The massive emphasis on external, standardized exams, often with high stakes attached as with the federal No Child Left Behind law, has intensified the domination of summative tests over curriculum and instruction — even though the research examined by Black and William supports the conclusion that summative assessments tend to have a negative effect on student learning. Meanwhile, there has been some lip service but little real attention to strengthening teachers' formative, classroom assessment capabilities. Worse, there has recently been a proliferation of so-called “benchmark” tests that are claimed to be formative but are no more than mini-standardized tests intended to predict how well the test-taker will do on the end-of-year big test.

Changing Assessment

Black and William offer recommendations for changing this state of affairs. They begin with the student, “the ultimate user” of that assessment information which is geared toward improving learning. To be truly helpful to students, formative information should be focused on the task, not the student; and the student must understand the feedback so as to make use of it. To really succeed, however, students must learn to self-assess “so that they can understand the main purposes of their learning and thereby grasp what they need to do to achieve.”

Black and William discuss what makes for effective feedback from teachers, such as opportunity for students to express their understanding, classroom dialogue that focuses on exploring understanding, and feedback which includes opportunities to improve and guidance on how to improve. They conclude with policy prescriptions, starting with the need to change from a focus on standardized tests to what is still the “black box” of actual student learning and to changing classroom practices, particularly formative assessment.

“Inside the Black Box” is a must read for educators and policymakers. It is a strong and clear summary of the vast array of evidence that Black and William review in the journal *Assessment in Education* (March 1998).

The latter publication also includes commentaries on the Black and William review. In one, Phillippe Perrenoud introduces concepts and research evidence from the French. He argues that schools fail students mostly by failing to respond to their differences. He calls for “diversity in approach at the service of equality” and summarizes with a simple equation: “diversity in people + appropriate treatment for each = diversity in approach.” As with Black and William, the purpose of diversity is not negatively discriminatory tracking and the denial of opportunity, but using classroom assessment integrated with high quality curriculum and instruction to ensure that all students reach high levels of important learning.

The articles in *Assessment in Education* are often quite complex, but should be of great value to researchers and to educators working to improve classroom assessment practices. Taken together, the Kappan article and the pieces in *Assessment* make a powerful contribution to the knowledge base for assessment reform and a powerful rebuttal to the now-dominant political forces which reduce assessment to “tough” tests.

- “Inside the Black Box” can be found on the Kappan web site at <http://www.pdkintl.org/kappan/kbla9810.htm>.
- *Assessment in Education*, Vol. 5, No. 1, can be obtained from Carfax Publishing, 875-81 Mass. Ave., Cambridge, MA 02139; 800-354-1420; their web site is <http://www.carfax.co.uk>.
- Other important work on formative assessment includes material from the British Assessment Reform Group at <http://arg.educ.cam.ac.uk/> (especially the publication, *Assessment for Learning*) and publications by Richard Stiggins.