

Classroom Assessment for Deep Understanding: Shifting from Assessment Of Learning to Assessment For Learning and Assessment As Learning¹

Lorna M. Earl, Ph.D.

¹ This paper is excerpted and adapted from Earl, L. (2003) *Assessment As Learning: Using Classroom Assessment to Maximize Student Learning*. Thousand Oaks: Corwin Press.

The history of assessment shows a long line of structural changes designed to inject quality control into education using a testing system designed to measure student performance and hold schools accountable. We have been consumed with more frequent and rigorous testing, as the obvious mechanism for improving schools. Even well-meaning reformers offer testing as a politically feasible solution to the problems in schools. Unfortunately, criticizing educators does not improve schools and higher test scores do not equal higher standards or better learning. Although policy makers often find ways to straddle the fence, educators are independent actors who can wield their own influence in their classrooms and their schools. The time is right for rethinking assessment in schools.

Schools and districts are caught in an era with the contradictory purposes of "education for all" and "education as gatekeeper" with control on the nature of goals and rewards. Teachers and administrators are the instruments of these contradictory demands and are both recipients and perpetrators of these competing messages. In this confused and emotionally-charged assessment environment the stakes are high to "get it right". Educators find themselves in a difficult position. They are part of the transition, laden down with the burdens of the past, while contemplating the possibilities of the future. They know how it has always been and have a great deal invested in maintaining stability but, at the same time, many of them acknowledge that it just doesn't feel right. What better way to bring some clarity to a murky subject than to return to first principles - What is our purpose? What are we trying to accomplish? What is assessment for?

Purpose is Everything

Paul Black (1998), in England, identified 3 broad purposes of assessment in schools - to support learning; to report achievement of individuals for certification, progress and transfer; and to satisfy the demands for public accountability. He goes on to point out that there are tensions among the purposes that involve choices about the best agencies to conduct assessments and of the optimum instruments and appropriate interpretations to serve each purpose. It is not possible to use one assessment process for the many purposes that we want it to fulfil. Different purposes require vastly different approaches and mixing the purposes is likely to ensure that none of them will be well

served. It is becoming more and more obvious that we must first decide about the purpose and then design the assessment program to fit (Gipps, 1994).

A vision of schools in which the purpose is deep understanding of ideas and concepts, requires a dramatic change in the assumptions underlying education and it requires a different view of schools, schooling, teachers, teaching, and particularly, assessment. In this conception, *schools* have the responsibility for preparing **all** students for tomorrow's world; *teachers* have the wherewithal to guide all students to high levels of learning and deep understanding; and, *assessment*, first and foremost, is part of student learning. This seemingly straightforward shift requires dramatic changes in the way teaching and learning happen in schools.

Rethinking Classroom Assessment

While most public attention is focused on the results of large-scale assessment programs, there is considerable evidence that classroom assessment – the assessment that teachers do in classrooms every day has an immense impact on student learning and can be the lever for deep understanding.

Black and Wiliam (1998) synthesised over 250 studies linking assessment and learning and found that the intentional use of assessment in the classroom to promote learning raised student achievement. They also reported, however, that the characteristics of high quality formative assessment are not well understood by most teachers and that it is weak in practice. Increasing the amount of assessment will not enhance learning. Assessment influences learning when teachers use it to become aware of the knowledge and beliefs that their students bring to a learning task, use this knowledge as a starting point for new instruction, and monitor students' changing perceptions as instruction proceeds. Students bring a range of prior knowledge, skills, beliefs and concepts that influence how they will perceive, organize and interpret the new task/learning environment. This makes assessment a major element in the learning process.

Classroom assessment has always been used for a variety of purposes but the purposes are becoming more differentiated and complex. As classroom assessment purposes become more complex, is not easy to use one assessment process for the many

different purposes. Assessment activities work best when the purpose is clear and explicit and the assessments are designed to fit that purpose.

Typically teachers use three intertwined but distinct assessment purposes – *assessment for learning*; *assessment as learning* and *assessment of learning*².

Assessment of learning is assessment used to confirm what students know, to demonstrate whether or not the students have met the standards and/or show how they are placed in relation to others. In *assessment of learning*, teachers use assessment to provide statements of proficiency or competence for students. Its purpose is summative, intended to certify learning and report to parents and students about their progress in school, usually by signalling students' relative position compared to other students. *Assessment of learning* in classrooms is typically done at the end of something (e.g., a unit, a course, a grade, a Key Stage, a program) and takes the form of tests or exams that include questions drawn from the material studied during that time. In *assessment of learning*, the results are expressed symbolically, generally as marks or letter grades and summarized as averages of a number of marks across several content areas to report to parents.

This is the kind of assessment that still dominates most classroom assessment activities, especially in secondary schools, with teachers firmly in charge of creating the tests and marking the tests. Teachers use the tests to assess the quantity and accuracy of student work, and the bulk of teacher effort in assessment is taken up in marking and grading. There is a strong emphasis on comparing students; and feedback to students comes in the form of marks or grades, with little direction or advice for improvement. These kinds of testing events indicate which students are doing best and which ones are doing poorly. Typically, they don't give much indication of mastery of particular ideas or concepts because the test content is generally too limited and the scoring is too simplistic to represent the broad range of skills and knowledge that have been covered. But this lack of specificity hasn't presented a problem because the teachers' perceived purpose of the assessment is to produce a rank order of the students and assign a symbol to designate the students' position within the group, whatever group it might be. Teachers maintain

² Some authors use *assessment for learning* to encapsulate the ideas described here in two categories – *assessment for learning* and *assessment as learning*.

voluminous records of student achievement that are only used for justifying the grades that are assigned.

Assessment for learning is designed to give teachers information to modify the teaching and learning activities in which students are engaged in order to differentiate and focus how individual students approach their learning. It suggests that students are all learning in individual and idiosyncratic ways, while recognizing that there are predictable patterns and pathways that many students go through. The emphasis is on teachers using the information from carefully-designed assessments to determine not only what students know, but also to gain insights into how, when, and whether students use what they know, so that they can streamline and target instruction and resources. *Assessment for learning* shifts the emphasis from summative to formative assessment, from making judgments to creating descriptions that can be used in the service of the next stage of learning.

When they are doing *assessment for learning* teachers collect a wide range of data so that they can modify the learning work for their students. They craft assessment tasks that open a window on what students know and can do already and use the insights that come from the process to design the next steps in instruction. To do this, teachers use observation, worksheets, questioning in class, student-teacher conferences or whatever mechanism is likely to give them information that will be useful for their planning and their teaching. Marking is not designed to make comparative judgments among the students but to highlight each student's strengths and weaknesses and provide them with feedback that will further their learning.

Clearly, teachers are the central characters in *assessment for learning* as well, but their role is quite different than in the prior approach. In *assessment for learning*, they use their personal knowledge of the students, and their understanding of the context of the assessment and the curriculum targets to identify particular learning needs. *Assessment for learning* happens in the middle of learning, often more than once, not at the end. It is interactive, with teachers providing assistance as part of the assessment. It helps teachers provide the feedback to scaffold next steps. And it depends on teachers' diagnostic skills to make it work. Before teachers can plan for targeted teaching and

classroom activities, they need to have a sense of what it is that students are thinking.

What is it that they believe to be true? This process involves much more than "Do they have the right or wrong answer?" It means making students thinking visible and understanding the images and patterns that they have constructed in order to make sense of the world, from their perspective.

Record-keeping in this approach may include a grade book but the records that teachers rely on are things like checklists of student progress against expectations, artefacts, portfolios of student work over time and worksheets to trace the progression of students along the learning continuum.

Assessment as learning emphasizes using assessment as a process of developing and supporting metacognition for students. *Assessment as learning* focuses on the role of the student as the critical connector between assessment and learning. Students, as active, engaged and critical assessors make sense of information, relate it to prior knowledge, and use it for new learning. This is the regulatory process in metacognition. It occurs when students personally monitor what they are learning and use the feedback from this monitoring to make adjustments, adaptations and even major changes in what they understand. When teachers focus on *assessment as learning*, they use classroom assessment as the vehicle for helping students develop, practice and become comfortable with reflection and with critical analysis of their own learning.

Assessment Purpose Is Paramount

Assessment for learning, assessment as learning and assessment of learning are all valuable purposes of classroom assessment. However, it is not always easy getting the balance right. If deep understanding is the purpose, the role of assessment for learning and assessment as learning takes on a much higher profile and assessment of learning becomes more focused and less pervasive. At this point in time, most classroom assessment is assessment of learning, focused on measuring learning after the fact and using the information to make judgments about students and report these judgments to others. Teachers also use assessment for learning by building in diagnostic processes, formative assessment and feedback at stages in the program, although this process may often be informal and implicit. Systematic assessment as learning, where students

become critical analysts of their own learning, is rare. Some teachers incorporate self-assessment into their programs but very few explicitly use assessment to develop students' capacity to evaluate and adapt their own learning.

If assessment is going to fulfill its promise as an aid to learning, it is time to rethink its purpose and shift the balance away from assessment of learning and utilizing the assessment process as a vehicle for learning for teachers and students about the progress and problems embedded in new learning. When the goal is deep understanding, assessment is too powerful to waste by leaving it to the end. Teachers and students can use on-going assessment and pertinent feedback to move learning forward and deepen the students' grasp of the ideas. Assessment allows teachers access to students' existing beliefs and knowledge, in order to identify incomplete understandings, false beliefs and naïve interpretations of concepts that will influence or distort their learning. When it is frequent and varied, teachers can use classroom assessment to tell a great deal about a student. They can observe students thinking over time, probe their understanding and look for links between prior knowledge and new learning and use the information to provide the feedback loop in the learning cycle.

Clarke (2001) tackles the "sticky" issue of how to give feedback on written work to guide students' learning. She suggests focusing feedback on a few things that are directly connected to the learning intentions for the task. She uses simple strategies like - using a highlighter pen to identify examples of the learning intentions in the child's work; selecting a few of these highlighted elements and writing what she calls a "closing the gap" prompt - prompts for making changes to their work that are geared to learning intentions and to the particular student, influenced by what the teacher already knows about that student.

An Example of Possible "Closing the Gap Prompts" (Earl (2003) adapted from Clarke, 2001)

<p>Learning Intention: To effectively introduce a character at the start of a story.</p> <p>Activity: Choose someone you know but the class doesn't to describe in a written paragraph.</p> <p>We Are Learning To: Write about people's characters for our stories.</p> <p>How Will We Know We've Done It: (created with the class) We will have written something about their appearance, their likes and dislikes, their personality, their attitudes and other things that help others know more about them.</p>

Let's assume that a child has written about someone he knows from a summer camp. After highlighting several phrases that successfully give information about this person, the teacher asterisks the phrase "This person is a good friend". The arrow to the "closing the gap" prompt could take any of the following forms:

A Reminder Prompt: *Say more about how you feel about this person.*

A reminder prompt is most suitable for a student who probably has good command of figurative language but has not used it here, for whatever reason.

A Scaffolding Prompt: *Can you describe how this person is a good friend? (question) Or, Describe something that happened that showed you what a good friend this person is. (directive) Or, He showed me he was a good friend when..... (finish the sentence)*

Scaffolding prompts work well with students who need more structure or some direction but are likely to carry on from here.

An example prompt: *Choose one of these sentences to tell me more about your friend. "He is a good friend because he never says unkind things about me." Or, "My friend helps me do things".*

When a student is struggling or doesn't appear to understand the concept, example prompts can provide them with actual models of the learning intention.

Students are very motivated by these "closing the gap" strategies and teachers are astounded by how quickly and thoughtfully they respond. A number of exciting spin-offs have come from this approach to feedback in marking. Once they get the hang of it, it lends itself to self and paired student assessment. Students start to think about what the teacher would highlight; they develop arguments and reasons for their choices; they offer one another suggestions for improvement and they revisit their own work with a critical eye.

Going deeper comes from ensuring that students are not only learning, but thinking about their learning by reviewing their experiences of learning (What made sense and what didn't?; How does this fit with what I already know, or think I know?) and applying what they have learned to their future learning. Assessment gives students the feedback and direction that they need to review and reflect on their learning, to determine how it fits and to make adaptations if they are necessary.

When students (and teachers) become comfortable with a continuous cycle of feedback and adjustment, learning becomes more efficient and students begin to internalize the process of standing outside their own learning and considering it against a range of criteria, not just the teacher's judgement about quality or accuracy. This ongoing metacognitive experience allows them to monitor learning along the way, make

corrections and develop a habit of mind for continually reviewing and challenging what they know.

In this reconfigured assessment environment, assessment would make up a large part of the school day, not in the form of separate tests, but as a seamless part of the learning process. And there would be tests, when the decisions to be made require identification of a few individuals or groups or when a summative description is important for students and for others, as a milestone or "rite of passage". In the real world, these incidents are far fewer than the experience of schools would lead us to believe.

References

- Barton, P. (1999). *Too Much Testing of the Wrong Kind; Too Little of the Right Kind in K-12 Education*. Princeton, Educational Testing Service.
- Black, P. (1998). *Testing: Friend or Foe? Theory and Practice of Assessment and Testing*. London, Falmer Press.
- Black, P. & D. Wiliam (1998). *Inside the Black Box. Raising standards through classroom assessment*. London, School of Education King's College.
- Broadfoot, P. (1996). *Education, Assessment and Society*. Buckingham, Open University Press.
- Broadfoot, P. (2001). "Editorial: new wine in old bottles? The challenge of change for educational assessment." *Assessment in Education: principles, policy & practice* 8(2): 109-112.
- Cuban, L. (1984). *How teachers taught. Constancy and Change in American Classrooms. 1890 - 1980*. New York, Longman Inc.
- Darling-Hammond, L. (1994). "Performance-Based Assessment and Educational Equity." *Harvard Educational Review* 64(1): 5-30.
- Earl, L. & Cousins, J.B. (1995). *Classroom Assessment. Changing the Face, Facing the Change*. Toronto, OPSTF.
- Firestone, W. Winter, & Fitz, J. (2000). "Different Assessments, Common Practice? Mathematics testing and teaching in the USA and England and Wales." *Assessment in Education: principles, policy & practice* 7(1): 13-37.
- Firestone, W. & Mayrowetz, D. (1998). "Performance-based assessment and instructional change: The effects of testing in Maine and Maryland." *Educational Evaluation and Policy Analysis* 20(2): 95-113.
- Gipps (1994). *Beyond Testing. Towards a Theory of Educational Assessment*. London, The Falmer Press.
- Haertel, E. (1999). "Validity arguments for high-stakes testing: In search of the evidence." *Educational Measurement: Issues and Practice* 18(4): 5-9.
- Haney, W. Madaus, G. and Lyons (1993). *The Fractured Marketplace for Standardized Testing*. Boston, Kluwer Academic Publishers.
- Hargreaves, A., Earl, L & Ryan, J. (1996). *Schooling for Change. Reinventing Education for Early Adolescents*. London, Falmer Press.
- Lemann, N. (1999). *The Big Test. The secret history of the American Meritocracy*. New York, Farrar, Straus and Giroux.
- McDonnell (1994). "Assessment Policy as Persuasion and Regulation." *American Journal of Education* 102(4): 394-420.
- Popham, J. (2002). "Right Task Wrong Tool." *American School Board Journal*: 19-22.

Shepard, L. (2000). The Role of Assessment in a Learning Culture. Presidential Address. 2000 AERA Annual Meeting, New Orleans.

Stiggins, R. (2001). Student-Involved Classroom Assessment. Upper Saddle River, Merrill Prentice Hall.