



Assessment and Learning Research #2

Purpose:

To extend the research base from Activity 1.4A beyond the Black and Wiliam work.

Extending beyond ...

The Black and Wiliam (e.g. 1998) research has been taken up and extended. These extracts take you further into the research on assessment and learning connections.

What you need:

- this page and one Discussion Starter for each pair of teachers
- a highlighter pen per pair of teachers.

This activity uses the "2-4-8-whole group" strategy.

Step 1: (10 minutes)

- READ and HIGHLIGHT your Discussion Starter.
- ANNOTATE it and PREPARE how you will teach the key ideas to another pair. What implications does it have for you?

Step 2: (10 minutes)

- FORM "4s" from 2 pairs, who have read different Discussion Starters
- Each pair TEACH the other about the key ideas in their research.
- Each group of 4 then PLAN how they will teach another group of 4 about the key ideas in their two Discussion Starters.

Step 3: (10 minutes)

- FORM "8s", who have read different Discussion Starters.
- Each group of 4 LEADS a discussion on the key ideas in their two Discussion Starters.
- DISCUSS in groups of 8:
"What implications does all of this research have for us, here?"

Step 3:

Further research is available in the Professional Reading and/or the references and websites on the Module 1 Resources web page.

Assessment and Learning Research

Activity 1.4B - Discussion Starter 1

Factors that improve or inhibit learning through assessment.

“The evidence from research...

Professors Paul Black and Dylan Wiliam synthesised evidence from over 250 studies linking assessment and learning.... The outcome was a clear and incontrovertible message: that initiatives designed to enhance effectiveness of the way assessment is used in the classroom to promote learning can raise pupil achievement ... They also found evidence that the gain was likely to be even more substantial for lower-achieving pupils.

The research indicates that improving learning through assessment depends on five, deceptively simple, key factors:

- the provision of effective feedback to pupils;
- the active involvement of pupils in their own learning;
- adjusting teaching to take account of the results of assessment;
- a recognition of the profound influence assessment has on the motivation and self-esteem of pupils, both of which are crucial influences on learning;
- the need for pupils to be able to assess themselves and understand how to improve.

At the same time several inhibiting factors were identified. Among these are:

- a tendency for teachers to assess quantity of work and presentation rather than quality;
- greater attention given to marking and grading, much of it tending to lower the self-esteem of pupils, rather than to providing advice for improvement;
- a strong emphasis on comparing pupils with each other which demoralises the less successful learners;
- teachers' feedback to pupils often serves social and managerial purposes rather than helping them to learn more effectively;
- teachers not knowing enough about their pupils' learning needs.” (pages 4-5)

Extract from: “*Assessment for Learning: Beyond the Black Box*” by the Assessment Reform Group UK (1999). If you wish to read more, this whole document can be downloaded as a pdf file from:

<http://www.aaia.org.uk/assessment.asp>

Discussion starters:

1. What are the key ideas in this reading that you can teach your colleagues about?
2. What are the implications of this extract for your classroom assessment?

Assessment and Learning Research

Activity 1.4B - Discussion Starter 2

Using evidence from assessment of learning processes for formative purposes.

“The aftermath of tests can also be an occasion for formative work. Peer marking of test papers can be helpful, as with normal written work, and is particularly useful if pupils are required first to formulate a mark scheme, an exercise which focuses attention on criteria of quality relevant to their productions. After peer marking, teachers can reserve time for discussion of the questions that give particular difficulty; peer tutoring can tackle those problems encountered only by a minority...

Some have argued that formative and summative assessments are so different in their purpose that they have to be kept apart, and such arguments are strengthened by experience of the harmful influence that narrow ‘high-stakes’ summative tests can have on teaching ...

The main possibilities for improving classroom practice [through the formative use of summative tests] are as follows:

- Pupils should be engaged in a reflective review of the work they have done to enable them to plan their revision effectively.
- Pupils should be encouraged to set up questions and mark answers to help them, both to understand the assessment process and to focus further efforts for improvement.
- Pupils should be encouraged through peer- and self-assessment to apply criteria to help them understand how their work might be improved.

The main overall message is that summative tests should be, and should be seen to be, a positive part of the learning process. By active involvement in the test process, pupils can see that they can be beneficiaries, rather than victims, of testing because tests can help them improve their learning.” (pages 13-14)

Extract from: Black, P., Harrison, C., Lee, C., Marshall, B., & Wiliam, D., (2002). *Working Inside the Black Box: Assessment for learning in the classroom*. Kings College, London.

Discussion starters:

1. What are the key ideas in this reading that you can teach your colleagues about?
2. What are the implications of this extract for your classroom assessment?

Assessment and Learning Research

Activity 1.4B - Discussion Starter 3

The sounds and sights of educative assessment.

Educative Assessment:

“Classroom Sounds

Where assessment is educative, we hear classroom and hallway conversations that are different from those heard in schools that use traditional assessment methods. Students are no longer asking teachers, “Is this what you want?” or “Is this going to be on the test?” Instead, learning goals and standards are so clearly spelled out that students understand what they are expected to learn. Moreover, these goals and standards are spelled out in terms of performance so that students know how they are expected to demonstrate their learning. All the students are aware of their current personal levels of performance and their talk reflects it... All students can accurately self-assess their work, irrespective of their performance ability, and they unendingly self-assess their work on specific tasks... Students can be heard routinely seeking and taking feedback provided by adults or peers and then revising their work, explaining which feedback they did and did not take and why. The importance of expecting and receiving feedback and using it is so well established that all teachers build formative assessment and revision days into each unit plan. Major performance tests are always in multipart form to ensure that there is time and opportunity for revision and improvement based on feedback and self-assessment...” (p. 1-2)

“Classroom Sights

Although we see nothing out of the ordinary, assessment is taking place.... The assessment process is so unobtrusive to students and teachers, so seamless with teaching and learning, that it is visually indistinguishable from what takes place during good instruction.... Students are being given the kinds of challenges, diversity, and flexibility that make assessment far more realistic and educative - and professional. They are working together and critiquing one another’s writing, bringing science experiments to fruition, finishing art exhibits, honing debating points, and even making presentations to panels of outside judges. These authentic tasks - challenges that more closely resemble the ways students will be expected to use their knowledge and skills in the real world - are built on careful protocols and elaborated scoring systems, but they appear to the novice observer to be enjoyable and challenging activities....” (p. 3-4)

“The Core Premise: The Purpose of Assessment

...the aim of assessment is primarily to educate and improve student performance, not merely to audit it. I use the terms auditing and audit test to describe checking up on activities after they are over, as accountants audit a business’s books to check that all the financial records match over a fiscal year.... We sacrifice our aims and our children’s intellectual needs when we test what is easy to test rather than the complex and rich tasks that we value in our classrooms and that are at the heart of our curriculum.... assessment is of no value unless it is educative... And once assessment is designed to be educative, it is no longer separate from instruction [teaching]; it is a major, essential, and integrated part of teaching and learning. Once we see how achievement of excellence depends not only on the quality of the tasks that students undertake but also on the quality of the feedback they get, we will better marshal the energy and resources needed to honor this vision.” (p. 7-8)

Extract from the book: Wiggins, G. (1998). *Educative Assessment: Designing assessments to inform and improve student performance*. San Francisco: Jossey Bass.

Discussion starters:

1. What are the key ideas in this reading that you can teach your colleagues about?
2. What are the implications of this extract for your classroom assessment?

Assessment and Learning Research

Activity 1.4B - Discussion Starter 4

Equity in assessment.

Equity and social contexts

“... schools need to act as ‘social anchors’ providing young people with, among other things, a set of agreed and common values that will provide certainty in a fast-changing world. Assessment plays a fundamental role in relation to such social purposes. Because of the instrumental functions... assessment practices have the potential to advantage some and disadvantage others. It is important therefore, that assessment practices operate equitably for all individuals and groups.

... in Australia, it has become recognised that certain kinds of testing (e.g. multiple choice tests) tend to favour boys over girls. It also appears that the kind of high-stakes testing used to select students for university entrance favours students from high socioeconomic areas over those from low socioeconomic areas. Inequities can also be seen when students whose first language is not English are required to take tests in English. Such students are at a disadvantage before they start the test. These are not easy issues to address, but they alert us to the social issues that can have an impact on assessment practice.

Assessment can also point to inequities. The National School English Literacy Survey conducted in 1996 showed very poor results for indigenous students. ... Such results ... do highlight a problem that urgently needs to be addressed. ...

What seems to be well accepted now is that assessment operates differentially in relation to different social groups. Thus the question teachers need to ask is whether the results they are getting based on different kinds of assessment practices are a true indicator of a student’s learning, or whether they might be caused by some other factors such as race, gender, ethnicity or level of poverty. That is to say, assessment outcomes need to be subjected to a reality check. They do not ‘speak for themselves’ and they rarely speak unambiguously.

Assessment therefore has the potential to influence the social contexts of students in different ways. It can actually exacerbate social problems if assessment outcomes are interpreted outside of the social contexts they inevitably influence. Thus assessment has to be used with care and in such a way that unintended social outcomes are not created. On the other hand, assessment can alert us to potential social problems and inequities and provide the grounds on which specific action can be taken.” (p. 8-9)

Extract from: Brady, L. & Kennedy, K., (2005). *Celebrating Student Achievement - Assessment and Reporting*. (2nd ed.). Frenchs Forest, NSW: Pearson.

Discussion starters:

1. What are the key ideas in this reading that you can teach your colleagues about?
2. What are the implications of this extract for your classroom assessment?

Assessment and Learning Research

Activity 1.4B - Discussion Starter 5

Links between learning theories and assessment.

“The theoretical foundations of learning and assessment practice ...

I will consider here three views of learning, identifying their manifestation in classroom practice and the role of assessment in each. ... (p. 52)

Behaviourist theories of learning

... the environment for learning is the determining factor. Learning is viewed as the conditioned response to external stimuli. Rewards and punishments, or at least the withholding of rewards, are powerful ways of forming or extinguishing habits. Praise may be part of such a reward system. These theories also take the view that complex wholes are assembled out of parts, so learning is best accomplished when complex performances are deconstructed and when each element is practised, reinforced and subsequently built upon. ... From this perspective achievement in learning is often equated with the accumulation of skills, and the memorization of information (facts) in a given domain, demonstrated in the formation of habits that allow speedy performance. Implications for teaching construe the teacher's role as being to train people to respond to instruction correctly and rapidly ... Positive feedback, often in the form of non-specific praise, and correction of mistakes are used to make the connections between stimulus and response ...

Implications for assessment are that progress is measured through unseen timed tests with items taken from progressive levels in a skill hierarchy. Performance is usually interpreted as either correct or incorrect and poor performance is remedied by more practice in the incorrect items, sometimes by deconstructing them further and going back to even more basic skills ... (p. 54-5)

Cognitive, constructivist theories of learning

Learning ... requires the active engagement of learners and is determined by what goes on in people's heads....

A particular focus is on how people construct meaning and make sense of the world through organizing structures, concepts and principles in schema (mental models). Prior knowledge is regarded as a powerful determinant of a student's capacity to learn new material. There is an emphasis on 'understanding' (and eliminating misunderstanding) and problem solving is seen as the context for knowledge construction ...

...in essence the role of the teacher is to help 'novices' to acquire 'expert' understanding ... In view of the importance of prior learning as an influence in new learning, formative assessment emerges as an important integral element of pedagogic practice because it is necessary to elicit students' mental models (through, for example, classroom dialogue, open-ended assignments, thinking-aloud protocols and concept mapping) in order to scaffold their understanding of knowledge structures and to provide them with opportunities to apply concepts and strategies in novel situations. In this context teaching and assessment are blended towards the goals of learning, particularly the goal of closing the gap between current understanding and the new understanding sought. (p. 55-6)

Socio-cultural, situated and activity theories of learning

... learning occurs in an interaction between the individual and the social environment ... Thinking is conducted through actions that alter the situation and the situation changes the thinking; the two constantly interact.

Especially important is the notion that learning is a mediated activity in which cultural artefacts have a crucial role. These can be physical artefacts such as books and equipment but they can also be symbolic artefacts such as language. Since language, which is central to our capacity to think, is developed in relationships with people, social relationships are necessary for, and precede, learning... Thus learning is by definition a social and collaborative activity in which people develop their thinking together. Group work is not an optional extra ...the teacher needs to create an environment in which people can be stimulated to think and act in authentic tasks (like apprentices) beyond their current level of competence (but in what Vygotsky calls their 'zone of proximal development') ... Tasks need to be collaborative and students need to be involved in the generation of problems and of solutions ... Learning can be inferred from active participation in authentic (real world) activities or projects ... Students' own self-assessment must be central.” (p. 57-8)

Extract from James, M. (2006). *Assessment, Teaching and Theories of Learning*.
In J. Gardner (Ed.) *Assessment and Learning*. London: Sage.

Discussion starters:

1. What are the key ideas in this reading that you can teach your colleagues about?
2. What are the implications of this extract for your classroom assessment?

Assessment and Learning Research

Activity 1.4B - Discussion Starter 6

Assessment and motivation.

“The importance of motivation for learning

Motivation has been described as ‘the conditions and processes that account for the arousal, direction, magnitude, and maintenance of effort’ (Katzell and Thompson, 1990: 144), and motivation for learning the ‘engine’ that drives teaching and learning (Stiggins, 2001: 36). It is a construct of what impels learners to spend the time and effort needed for learning and solving problems (Bransford et al. 2000). It is clearly central to learning ... Assessment is one of the key factors that affect motivation. Stiggins claims that teachers can enhance or destroy students’ desires to learn more quickly and more permanently through their use of assessment than through any other tools at their disposal (2001: 36).” (p. 61-2)

“Components of motivation for learning

Interest

... Not surprisingly those with personal interest in particular activities persist with them for much longer, learn from them and enjoy the activities more than those with less personal interest ... Features of learning activities such as novelty, surprise and links to existing experience provide a meaningful context and can therefore help engage students’ interest. Some potentially boring activities can be made interesting through, for example, making them into games...

Goal orientation

How learners see the goals of engaging in a learning task determines the direction in which effort will be made and how they will organize and prioritize (or not) time spent for learning ... Goals will only be selected if they are understood, appear achievable, and are seen as worthwhile ... [There are] two main types of goals. These are described as ‘learning (or mastery) goals’ and ‘performance (or ego) goals’ (Ames, 1992). Those motivated by goals identified in terms of learning apply effort in acquiring new skills, seek to understand what is involved rather than just committing information to memory, persist in the face of difficulties, and generally try to increase their competence. Those oriented towards goals identified as a level of performance seek the easiest way to meet requirements and achieve the goals, compare themselves with others, and consider ability to be more important than effort ... goal orientations ... are subject to change and manipulation and so can be influenced by classroom culture.” (p. 64-5)

“... assessment can have a negative impact on student motivation for learning by:

- Creating a classroom culture which favours transmissive teaching and undervalues variety in ways of learning;
- Focusing the content of teaching narrowly on what is tested;
- Orienting student to adopt goals as performance rather than goals as learning;
- Providing predominantly judgemental feedback in terms of scores and grades;
- Favouring conditions in which summative judgements permeate all teachers’ assessment transactions.” (p. 77)

Extract from: Harlen, W. (2006). The Role of Assessment in Developing Motivation for Learning. In J. Gardner (Ed.) *Assessment and Learning*. London: Sage.

Discussion starters:

1. What are the key ideas in this reading that you can teach your colleagues about?
2. What are the implications of this extract for your classroom assessment?

Assessment and Learning Research

Activity 1.4B - Discussion Starter 7

Changing learning environments through assessment.

“A Learning Environment: Roles And Expectations

It is one thing to plan new types of classroom activity and quite another to put them into practice in ways that are faithful to the aims they were developed to serve. Here there are no recipes to follow in a uniform way. Inside the Black Box was clear in stating that the effective development of formative assessment would come about only if “each teacher finds his or her own ways of incorporating the lessons and ideas that are set out above into her or his own patterns of classroom work.”

A second principle is that the learning environment envisaged requires a classroom culture that may well be unfamiliar and disconcerting for both teachers and students. The effect of the innovations implemented by our teachers was to change the ‘classroom contract’ between the teacher and the student - the rules that govern the behaviors that are expected and seen as legitimate by teachers and students.

The students have to change from behaving as passive recipients of the knowledge offered by the teacher to becoming active learners who can take responsibility for and manage their own learning.

For the teachers, courage is necessary. One of the striking features of the project was that, in the early stages, many participants described the new approach as ‘scary’ because they felt they were going to lose control of their classes. Toward the end of the project, they spoke not of losing control but of sharing responsibility for the students’ learning with the class - exactly the same process but viewed from two very different perspectives. In one perspective, the teachers and students are in a delivery/recipient relationship; in the other, they are partners in pursuit of a shared goal:

What formative assessment has done for me is made me focus less on myself but more on the children ... I have had the confidence to empower the students to take it forward. - Robert, Two Bishops School

What has been happening here is that everybody’s expectations - that is, what teachers and students think that being a teacher or being a student requires you to do - have been altered. While it can seem daunting to undertake such changes, they do not have to happen suddenly. Changes with the ... teachers came slowly and steadily, as experience developed and confidence grew in the use of the various strategies for enriching feedback and interaction. For example, many teachers started by using questions to encourage thinking. Then they improved their oral and written feedback so that it brought thinking forward and went on to develop peer and self-assessment.

To summarize, expectations and classroom culture can be changed:

- by changing the ‘classroom contract’ so that all expect that teacher and students work together for the same end: the improvement of everyone’s learning;
- by empowering students to become active learners, thus taking responsibility for their own learning;
- by incorporating the changes in the teacher's role one step at a time, as they seem appropriate; and
- by sustained attention to and reflection on ways in which assessment can support learning.”

Extract from: Black, P., Harrison, C., Lee, C., Marshall, B., & Wiliam, D., (2004). Working Inside the Black Box. *Phi Delta Kappan*, 86(1), 9-21.

Discussion starters:

1. What are the key ideas in this reading that you can teach your colleagues about?
2. What are the implications of this extract for your classroom assessment?

Assessment and Learning Research

Activity 1.4B - Discussion Starter 8

Assessment for learning - for teachers.

“the centrality of learning by teachers for the development of assessment for learning...

...interpretations of results from the Learning How to Learn project carry three strong messages for teachers' professional learning if it is intended to support the development of assessment for learning. First, classroom assessment for learning practices are underpinned most strongly by teachers' learning in the contexts of their classrooms with a clear focus on change in the teacher and learner roles and practices and on interactions between assessment, curriculum and pedagogy ...

Second... both individual and social processes of teacher learning are to be valued ... This justifies the approach taken in ... providing, or encouraging, opportunities for teachers to learn together in in-school teams, departmental teams and across-school groups.

Third, if 'promoting learning autonomy' is the ultimate goal but the greatest challenge, as our evidence suggests it is, and if 'inquiry' approaches to teacher learning are productive in this respect, then more emphasis needs to be placed on providing opportunities and encouragement to teachers to engage with and use research relevant to their classroom interests, and recognizing the value of and supporting, teachers' collaborative inquiries into their own practices ... [It was] Stenhouse's (1975) belief that 'it is teachers who, in the end, will change the world of the school by understanding it' ... He argued for teacher research on the grounds that, 'It is not enough that teachers' work should be studied, they need to study it themselves' (p. 208). In the thirty years since he wrote these words, many forms of teacher research and inquiry have flourished, some more focused on student learning than others.... If teachers are prepared and committed to engage in the risky business of problematizing their own practice, seeking evidence to evaluate in order to judge where change is needed, and then to act on their decisions, they are thus engaging in assessment for learning with respect to their own professional learning. Helping students do the same with respect to their learning becomes less challenging because teachers are familiar with the principles and processes through inquiry into their own practices. In other words, they are well on the way to conceptualizing, developing and valuing expanded roles for themselves and their students in teaching and learning." (p. 39-40)

Extract from:

James, M. & Pedder, D. (2006). Professional Learning as a Condition for Assessment for Learning. In J. Gardner (Ed.) *Assessment and Learning*. London: Sage.

Discussion starters:

1. What are the key ideas in this reading that you can teach your colleagues about?
2. What are the implications of this extract for your classroom assessment?