Section B: Embedding Formative Assessment
Unit 1: So what are the pupils doing?

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1   Embedding assessment for learning

Embedding assessment for learning in everyday classroom practice is not about adding yet more tricks to a teacher's toolkit. Rather, it involves thinking about and developing a different way of working designed to stimulate and support learning through improved interactions with and by pupils. The aims of these interactions will be to encourage greater levels of participation, dialogue, engagement & thinking by and between pupils and teachers. Assessment for learning is embedded as pupils more actively pursue their learning objectives, have opportunities to talk about their learning, are able to assess their progress and are stimulated to think most of the time they spend in the classroom.

That is a challenging list and, to explore it further, we will revisit *Inside the Black Box* as a source of insight and guidance.

2   Just good teaching?

The popularity of assessment for learning has brought mixed blessings. It has reawakened an interest in how teachers can direct and support learning rather than measure it, but, being very practical and classroom-based, it is often seen as "just good teaching". But what does that mean? In making such a close connection between teaching and assessment for learning, we could find ourselves thinking that little needs to be done to develop or embed it.

Yet *Inside the Black Box* warns that formative assessment is different, and needs persistence if its considerable potential is to be realised. Were it otherwise, we should be able to find significant evidence of its use. That doesn't seem to be the case. When Black and Wiliam looked, they were disappointed, finding "a poverty of practice" and "a wealth of research evidence that the everyday practice of assessment in classrooms is beset with problems and shortcomings". Things are likely to have improved since these words were written, but hardly enough to suggest that it has become common practice.

Unless we understand and share the principles underpinning the practice, engagement with the strategies is probably not sustainable: the impact of two stars and a wish or traffic-lighting will lessen with use and, unless we are clear about why they are valuable, meaningful interaction in the classroom may wither with them. The language we use may be part of the problem: traffic lighting is less a strategy than a tactic that serves a higher strategic purpose of finding out how well learners think they have learned something. Time spent reflecting on and discussing why particular tactics could be useful can help to embed practice.

Discussion point: *What do you consider the essential features of good teaching to be and how do you think assessment for learning relates to these features?*

3   What are your pupils doing about it?

So, what accounts for the gap between what many teachers see as "just good teaching" and the more pessimistic evidence gathered by Black and Wiliam? A good starting point lies in the answer to the third and last question posed in *Inside the Black Box*: is there evidence about how to improve formative assessment?

Three areas were identified. The first two addressed aspects of pupils' involvement in assessing themselves that are inevitably part of formative assessment: only the third explored the evolution of effective teaching as a way of achieving such engagement by pupils. So, teaching is presented not as an end in itself but as an opportunity to stimulate and support good learning, which requires learners to believe that they can get better and that having and using effective self-assessment skills will help them do so. In other words, just as teachers need to develop strategies to help them assess the quality of learning and teaching in the classroom, the approaches often described as 'good teaching' also need to be taught to learners so that they can be trained in using similar strategies and techniques to assess themselves.

The importance of pupil self-assessment is clear from the definition of assessment in *Inside the Black Box*:

> all those activities undertaken by teachers, *and by the students in assessing themselves*, which provide information to be used as feedback to modify the teaching and learning activities in which they are engaged. *Such assessments become 'formative assessment' when the evidence is actually used to adapt the teaching work to meet the needs.*
>
> Black and Wiliam

Self-assessment and evidence used as feedback to inform improvement are clearly essential, but how often are they the automatic or necessary focus of good teaching?

More recently, the Assessment Reform Group defined formative assessment as:

> Seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go and how best to get there.
>
> Assessment for Learning: 10 Principles (2002)

So, we teach using learning intentions and success criteria both because students need to know what they are being asked to learn *and* because they have to learn how to articulate their own learning priorities. We use better questions and try to improve our discussion skills both to get feedback from learners on their progress *and* because they need to learn about gathering evidence of their own learning. We give focused feedback both because we want pupils to take an appropriate next step in their learning *and* to train them in closing the gap between where they are now and their own learning goals.

Refocusing teaching on training learners to assess their own progress represents a new way of working for many: teachers modelling their own understanding and experience of formative assessment to help pupils develop a habit of self-evaluation. So perhaps we should think of formative assessment not as good teaching but essentially good assessment.

Discussion point: *how do you prepare your pupils practise peer and self-assessment in your classroom?*

4   Why self-assessment?

Inside the Black Box says this about the role of self-assessment:

> *Self-assessment by pupils, far from being a luxury, is in fact an essential component of formative assessment.* Where anyone is trying to learn, feedback about their efforts has three elements - the *desired goal*, the evidence about their *present position*, and some understanding of a *way to close the gap* between the two (Sadler, 1989). All three must to a degree be understood by anyone before they can take action to improve their learning.

The original review of 250 research studies on which *Inside the Black Box* is based has this to say about closing the gap:

> The core of the activity lies in the sequence of two actions. The first is the perception by the learner of a gap between a desired goal and his or her present state (of knowledge, and/or understanding, and/or skill). The second is the action taken by the learner to close that gap in order to attain the desired goal (Ramaprasad, 1983; Sadler, 1989). For the first action, the prime responsibility for generating the information may lie with the student in self-assessment, or with another person, notably the teacher, who discerns and interprets the gap and communicates a message about it to the student. Whatever the procedures by which the assessment message is generated, in relation to action taken by the learner it would be a mistake to regard the student as the passive recipient of a call to action.

The emphasis on the learner continues later:

> Sadler argued that ultimately, the action to close that gap must be taken by the student – a student who automatically follows the diagnostic prescription of a teacher without understanding of its purpose or orientation will not learn. Thus self-assessment by the student is not an interesting option or luxury; it has to be seen as essential. Given this, the orientation by a student of his or her work can only be productive if the student comes to share the teacher's vision of the subject matter.

When looking for evidence of good teaching, how often do we seek examples of learners assessing themselves? Could the real challenge for teachers in their use of formative assessment be how it can support not just their own assessment skills in the classroom but also the development of assessment *by* pupils?

Discussion point: *what benefits and challenges for both pupils and teachers are likely to arise from generating high levels of peer and self-assessment in the classroom?*

5   Developing practice to embed formative assessment

Following the argument so far, formative assessment becomes embedded as it is used by learners to direct and support their own progress. If the purpose of teaching is to stimulate and support good learning, and if, as *Inside the Black Box* tells us, learners will only achieve this by being involved in assessing themselves, then convincing evidence of good teaching will be revealed, not in signs that the teacher is using formative assessment, but in the extent to which learners are practising self-assessment.

This probably calls for more than minimal modifications to existing practice. What teachers do may not change substantially: how and why they do it in many cases will because the intending outcome is no longer a good lesson, but an opportunity for pupils to engage in some reflection on what they have learned. Discussing some very well known examples of the tactics (strategies) people associate with assessment for learning may help to illustrate this.

a) Developing pupil self-assessment

Promoting self-assessment is a major theme of this paper and one of the simplest and most accessible tactics for self-assessment is traffic lighting. There are many, many way in which teachers have used traffic-lights to gather pupils' perceptions of their own learning. We also know that we have to be careful in using the evidence we gather. The classroom ethos has to welcome mistakes as a necessary precursor to learning.

Traffic-lighting has been so popular that it is sometimes turned into a marking device. Yet there could be some conflict between the two functions. When pupils use red to indicate some lack of

understanding, they are also showing a degree of trust and confidence that it's safe to do so; if teachers also use red to offer a judgement on a piece of work, it could very well have the unintended side effect of eroding the safe environment in which traffic-lighting as self-assessment works most effectively. Could traffic-lighting as a marking device invite competitive rather than task orientated attitudes? Much will depend on the context in which it's used, but it would require careful thought and is a good example of the importance of being able to assess the value of a tactic against strategic criteria.

b) Being explicit about learning

As Black and Wiliam suggested, learners need some understanding of their desired learning goal before they can take any action to reach it. From this principle, WALT (We Are Learning To/day) and WILF (What I'm Looking For) have emerged as vehicles for communicating learning intentions and success criteria at the start of lessons. In turn, discussions have sometimes broken out about how these acronyms can be given personae to help learners associate with them, about the merits of WALT and WILF over, for example, OLI (Our Learning Intentions) and TIB (This Is Because) and about whether these personifications are suitable for older learners.

Such considerations are tactical, not strategic. They shouldn't overshadow the more important need to provide learners with information to help them engage successfully with a new piece of learning. Different tactics may be available but the best one will be hard to choose until the purpose is clear.

WALT and WILF help to display information about what pupils are to learn and how they'll know they're learning it. However, to engage with information and ideas about what's coming next in their learning, they will need more than just a display. Many people now agree that pupils need to discuss and devise their own success criteria before they begin. As Sadler (as summarised by Black and Wiliam) said: "a student who automatically follows the diagnostic prescription of a teacher without understanding of its purpose or orientation will not learn".

So pupils need to be involved in directing their own learning and simply displaying WALT and WILF won't achieve this. They will also need help in identifying learning intentions and success criteria for themselves so that they can begin to learn how to specify their own learning priorities as the start to a personal planning process.

Discussion point: *to whom does the 'I' in WILF refer, the teacher or the pupil? Is there a difference?*

c) Gathering evidence of learning

Teachers can improve the quality of interaction in classrooms by developing their questioning and discussion skills. Again, many tactics will improve both asking better questions and asking questions better: think time, no hands up, think, pair, share are a few of the better known.

They are all designed to help create the conditions in which teachers and learners can work together to explore mis/understandings, and, as a result, students really need to understand the context in which they're working. So, if a teacher is leaving more time after asking a question, students really need to know that the empty space is for them to think about an answer. They may need help in controlling an urge to respond too quickly; they may need to learn how to come up with something that makes a contribution to the discussion. Either way, the teacher's efforts should lie not just in asking better questions or in asking questions better but in working with learners to help them improve how they engage with and contribute to what better questions and questioning are supposed to stimulate.

Learners who engage and contribute to discussions like this provide teachers with valuable feedback on the quality of the learning that's taking place. Just as a teacher would want to share a learning intention with her class at the start of a lesson, so she could have a learning intention, too. But it's an easy one to frame and it need never change. It would be to learn more about the quality of her pupils' understanding. As Black and Wiliam put it, "a teacher's approach should start by being realistic - confronting the question 'Do I really know enough about the understanding of my pupils to be able to help each of them?'" There are probably only two ways of gathering evidence about understanding: observation and discussion. Observation is about knowing what to look for and discussion about knowing what to ask, how to ask it and how to direct the discussion that follows.

Genuine discussion involving thoughtful interaction between teachers and learners also stimulates pupils' learning. So, by getting more pupils to think for themselves more of the time, they will learn more effectively and learn how to assess their own progress by asking themselves the right kinds of question.

Wait time, no hands up, think, pair, share provide opportunities to explore how interactions among teachers and learners can generate evidence of learning to be used in feedback to guide further progress. However, it takes time and collaboration between teachers and pupils to become competent in gathering and using evidence as feedback. So, while the beginning may be easy, patience, persistence and reflection will then be required to build the expertise that improves thinking and learning by both pupils and teachers.

Discussion point: how would you answer the question "Do I really know enough about the understanding of my pupils to be able to help each of them?" Is your answer the result of having changed your practice or does it prompt you to do anything differently?

d) Focusing feedback on improvement

The best known piece of research on the potential of feedback to improve learning was carried out by Ruth Butler in Israel in 1988. By comparing the effect of different kinds of feedback on the attainment of three groups each containing a full range of ability, she concluded that giving grades had no effect on significant numbers while comments alone could produce measurable improvement across the entire ability range.

The psychology is fairly obvious. A grade evaluates a past performance: if high, it can be enjoyed and, if low, it takes time to recover from it. Either way, no one is likely to think about how to do better until the effect of the grade has faded. Too much of this too often hampers progress.

But it's not as simple as that. Later research investigated the comments that were most likely to prompt improvement and found that general ones like "Well done. Try to keep it up." had little effect. Good comments, rather, are encouraging, specific and focused on improvement. Hence the emergence of a tactic like two stars and a wish: the stars encourage by identifying successful aspects of a piece of work and the wish suggests how it could be made better.

Two stars and a wish is only one of many available tactics to achieve the objective of focusing feedback on improvement, so it doesn't matter if it seems too childish for older pupils. So long as a feedback comment highlights strengths in a piece of work as well as pointing out a specific improvement, it will have served the purpose, whatever it's called.

That shouldn't obscure the possibility that two stars and a wish could still be a good way of giving quite mature pupils a framework within which they can practise peer and then self-assessment.

Being a simple, easily remembered formula, it can be used to make sure that comments maintain a good balance between being encouraging and prompting improvement.

The need to focus feedback on specific improvement also gives assessment for learning a coherence that transcends any image it may have as a toolkit for teachers. If, as Sadler suggests, students will only learn if they have some understanding of their learning goal, then focused feedback will inevitably refer back to the learning intentions and success criteria they have been working with. From the student's perspective, the process has a meaningful unity of purpose that can culminate in a learning experience that is successful and, therefore, worth repeating.

The real power of assessment for learning comes from the connections that can be made between its different aspects. Such synergies are most likely to happen given time to experiment with, reflect on and discuss the principles, strategies and tactics on which it is based. Embedding assessment for learning in classroom practice needs this level of engagement by teachers and by learners.

Discussion point: to what extent is the feedback I give sufficiently focussed to provide encouragement and support improvement?

6   Thinking about thinking

In their original review of research into assessment for learning, Black and Wiliam made direct links between the capacity for productive thinking and self-assessment. To assess themselves successfully, pupils should be trained in how to think about their own learning.

There are two levels to this. The first relates to the importance of thinking in stimulating and supporting the learning process. The idea that learning is about thinking binds together different aspects of assessment for learning: being explicit about learning, gathering evidence of learning, focusing feedback on improvement.

The second leads into metacognition. Describing this as learning how to learn would be an oversimplification of the ideas involved but it does help to indicate its importance in developing learners' self-assessment skills. The effective development of the other two strands of the Assessment is for Learning programme – Assessment as Learning (personal learning planning) and Assessment of Learning (local moderation) - depend on participants who are able to articulate clear and specific learning goals alongside relevant criteria by which evidence of success can be judged.

The skills and dispositions learners need to engage effectively with their own learning in this way seldom occur naturally. This emphasises the importance of approaching the development of self-assessment by pupils in a structured way through, for example, training pupils in the approaches to thinking likely to provide them with practical tools to support and sustain their assessment efforts.

This paper is complemented by *Assessment for Learning: embedding and extending*, which develops these ideas into other aspects of Assessment is for Learning.

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September 2006

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