



### Joanne Jarvis looks at the positive power of sound assessment ...

Research has shown that assessment is a critical part of the teaching and learning process. This statement may appear self-evident, however, this article will argue that, when teachers adopt a deliberate approach to using formative assessment practices, they will have a significant, positive impact on student achievement.

There are numerous definitions of formative assessment but perhaps the definition offered by Black (2014) is the most useful. “Assessment refers to all of those activities undertaken by teachers, and by their 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 assessment becomes ‘formative assessment’ when the evidence is actually used to adapt the teaching work to meet the needs.” Marzano (2012) also describes formative assessment as a process as opposed to a specific task.

Professor John Hattie (2009) has provided evidence to support the view that there will be a noticeable difference to educational outcomes as a result of participating in a variety of formative assessment practices. He considers an effect size of greater than 0.4 to have a significant effect on student learning outcomes. The following teacher practices are among the top strategies listed (Hattie 2009, Appendix B):

- providing formative evaluation (effect size - 0.90);
- feedback (effect size - 0.73);
- questioning (effect size - 0.46).

One could argue that these practices regularly occur, however, researchers (see Black 2014) suggest that student information gained from this form of assessment does not necessarily lead to changes in teaching practice in the absence of teacher self-evaluation of lessons. This situation can be overcome by weaving formative assessment as a natural process in everyday lessons. Black (2014) certainly supports this notion when he described formative assessment as “the heart of effective teaching.”

A useful source that can be used to reinforce the importance of improving our approach to assessment is the section entitled Assessment For, As and Of Learning on the Board of Studies website. These principles are clear, sensible and reinforce effective teaching practice. When you immerse yourself in the understanding that assessment is something that you do every time you teach, rather than only the ‘bit’ at the end of a unit of work for the purpose of making a summative judgement, then you have become more proficient in formative assessment and likely to be making a significant difference to lifting student achievement.

Following are a collection of teaching strategies and approaches that may be used to foster formative assessment in classrooms. They have been collected over many years from a wide range of sources and colleagues.

**Self-Assessment** is an essential component of formative assessment. For it to be effective, students must be clear about: the outcome(s) they are to achieve; the standard against which their work is assessed; the ways they can improve. Students need to be trained in becoming effective at assessing their own work (Sadler 1989). Students can be taught this skill from Kindergarten; after all, they are born with the capacity to reflect upon their own learning. How else do babies ultimately teach themselves to walk?



Using a ‘traffic light’ technique is an effective way of incorporating self-assessment into learning. This can be in the form of coloured stickers, or highlighter marks adjacent to syllabus outcomes or assessment tasks, to indicate student confidence in each area: green (know well), amber (semi-confident) or red (struggling). This can lead to further discussion or self-reflection. Setting a revision quiz on the syllabus points which attract a red sticker is a useful way for students to accept responsibility for learning this material and will enable teachers to evaluate student progress and adjust teaching practice. Black (2013) has some good suggestions about this technique.

Individual teachers and indeed schools, can implement formal self assessment practices by having students complete a self reflection sheet whenever they submit a formal assessment task.

**Peer Assessment** works on the principle, ‘to teach is to know’. It ensures that students engage with the marking criteria as well as their peer’s response. It enables them to develop skills in the analysis and communication of ideas. Peer assessment is highly effective when students are asked to write back to their peer with constructive suggestions for improvements. Naturally, students need to be taught how to write in an environment of trust so that their comments are viewed as helpful. Sadler (1998 in Black 2013) argues that feedback offered by peers can be quite valuable because it is often written in a way that students can understand.

**Questioning** – research clearly shows that effective questioning is poorly used as a means of formative assessment. On average, teachers wait 2-3 seconds after asking a question before answering it themselves (Rowe 1974 in Black 2013). As a consequence, questions are often simplistic, seek factual as opposed to analytical responses, and students tend not to answer. Imagine if we waited and allowed thinking time? Not only would this enable time for students to think deeply, either individually, in pairs, or in groups, but it will also give teachers vital information about those students who may be struggling with a particular concept. Distributing questions to all students is an important consideration if teachers are to assess understanding of concepts from all students.

It takes time to develop skills in questioning. There are a multitude of articles freely available on this topic. Consider developing a bank of questions that are designed to illicit deep thinking prior to a lesson. Two examples come to mind:

1. I recently heard Professor Wayne Sawyer (Head of Education, University of Western Sydney) describe a History lesson in which he was an observer. He saw the teacher start their first lesson on the Russian Revolution with a timeline of the events that led to the revolution in 1917. The teacher began by asking students to consider the moments listed in the timeline that might have been critical turning points in the lead up to the revolution. This question led to immediate discussion about the nature of revolutions and the impact of personalities. It is certainly a more engaging way to involve students at the start of a complex topic.
2. I recently had the good fortune to teach a Year 7 History class their first lesson on the Qin dynasty. I used a map of China showing the outline of the borders of a unified Qin dynasty and my first question, after an introduction to the topic, was “what needed to have occurred for the leader of the Qin dynasty to unite seven other warring states with each other?” I asked them to discuss with each other before accepting responses. Their answers showed a surprising level of understanding, which was a result of having the time to think.



My second question was “what sort of leader would be required to keep the dynasty united?” They identified interesting traits about good leadership, which helped them to subsequently understand the reasons why the Qin dynasty did not last as long as others. Despite only teaching this class for two lessons, using questions allowed me to compare notes with the teacher about the students who appeared to struggle as well as those whom were rather exuberant in their responses.

Questioning is a highly effective way of building formative assessment into teaching practice and when thoughtfully considered, can lead to improved learning outcomes. Hattie (2009) provides further comment on the importance of questioning as a formative assessment tool in his book “Visible Learning” (p. 182).

**Feedback** – *“When asked to provide evidence and guidance on enhancing the quality of teaching and student performance, I’m usually equivocal about advocating quick fixes ... In the case of feedback, however, I’m prepared to state categorically that if you focus on providing students with improved, quality feedback in individual classrooms, departments and schools you’ll have an almost immediate positive effect.” (Steve Dinham 2008)*

A great deal has been written about the importance of feedback as a means of lifting student achievement. In fact, Hattie (2009 p.173) describes feedback as “among the most powerful influences on student achievement”. Well-meaning teachers writing copious amounts of feedback on assessment tasks can spend many hours marking but as Butler (1988 in Black 2013) argues, “it is the nature, rather than the amount, that is critical when giving students feedback on both oral and written work.”

A final observation is that students’ learning can be advanced by feedback through comments; the giving of marks – or grades – has a negative effect in that students ignore comments when marks are also given.” (Butler 1988 in Black 2013). Further useful information is provided on this topic in (Black 2013 p.8).

In the spirit of offering some practical ways of complying with the research comments outlined above, the following are suggestions for consideration:

- Provide individualised verbal feedback on a piece of writing or oral task during the course of a lesson while other students are working;
- Give students’ comments only and wait at least a day before giving any summative mark or grade. This allows time for students to self-assess based on teacher comments;
- Ensure that any comments not only say what has been done well but also what needs to be done to improve;
- Establish a marking information sheet to share with the entire class and provide whole-class feedback using models of student work;
- Prior to distributing a task to students, ensure that marking guidelines are discussed and clearly linked to task requirements. Annotate the marking guidelines to ensure that students know what they must demonstrate. The teacher writes comments on the task and upon returning it to students (without marks), requires that they use different coloured highlighters to identify key areas. For example, where they showed analysis, synthesis, or used evidence. Students then align their own findings with a description in the marking guidelines and allocate their own mark/grade. The teacher provides their own judgement the next lesson. In my experience, teacher and student judgement often align.



There are a broad range of teaching strategies that can be used to effectively implement formative assessment practices. When these are delivered in a planned and deliberate manner, teachers will have a significant, positive impact on student learning outcomes.

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## Bibliography

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