Assessment for learning

There is no failure, only feedback!

Success strategies

Black and Wiliam (2009) developed five major strategies for assessment for learning:

- Clarifying and sharing learning intentions and success criteria.
- Using effective classroom discussions and other learning tasks that elicit evidence of student understanding.
- Providing feedback that moves learners forward.
- Activating students as instrumental resources for one another, i.e. peer-assessment.
- Activating students as the owners of their own learning, i.e. self-assessment.

An assessment for learning classroom…

Looks like…
1 It's part of every lesson, everyday, for every student.
2 All students' achievement recognised.
3 Learning outcomes visible throughout the lesson.

Sounds like…
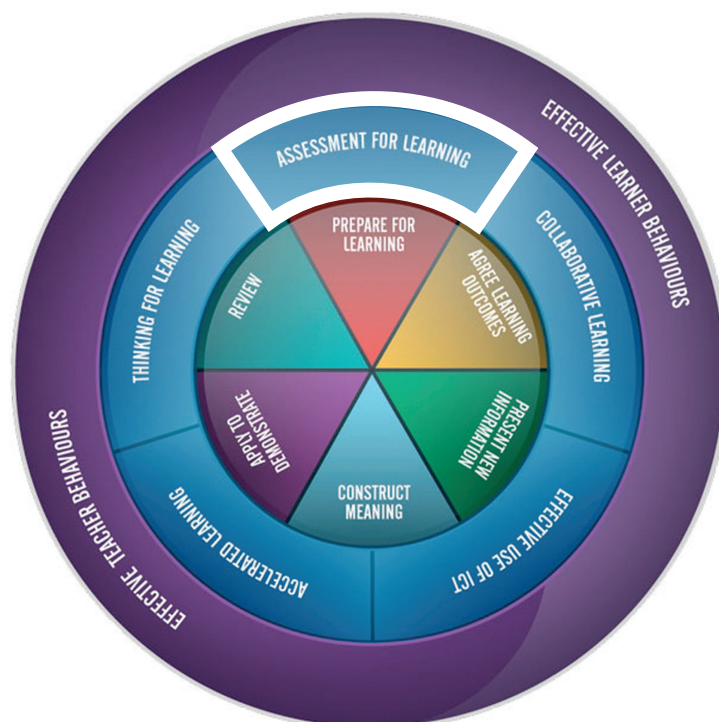1 Students describing how they can improve.
2 Students describing how they learn.
3 All students giving and using feedback.

Feels like…
1 Calm, can reflect on their success.
2 Safe, students take risks in their learning, as feedback is constructive
3 Motivating, students look to make their own improvements.

Steps to success
1 Plan clear achievable learning outcomes.
2 Share these outcomes with students every lesson.
3 Plan questions and how students will answer them.
4 Highlight to students why feedback is important.
5 Plan what, when and where students will receive feedback in schemes of work.
6 Model good feedback for students and make it explicit when you give feedback.
7 Dedicate lesson time for students to respond to feedback.
8 Train students to self and peer-assess.
9 Increase the opportunities for peer and self-assessment.

A safe environment

Develop a 'no put down zone' in your classroom. Display a sign like this one on the door of the classroom. It is a simple statement to the students that they are in an environment where they are free to learn, where no one will laugh or make fun of what they say, do or questions that they ask. In this environment students will be more likely to ask questions and seek out help and guidance. They will also feel more comfortable taking risks in their learning, knowing that if they make a mistake no one will make fun of them. Class teachers will endeavour to set out to consistently apply this rule making the message clear that students should support each other in their learning. It is important that students know that mistakes help us all to learn. Mistakes should be seen in a positive way, and a way for students to develop.

Feedback

One easy way of increasing the value students add to feedback is to ask students for their thoughts. Record this conversation on flipchart paper so that it can be displayed and referred to throughout the year. The example below contains genuine comments from year 9 students.

Feedback can have a very powerful impact on student learning (Hattie, 2012). When giving feedback, make sure you:

- focus on the task not the student
- provide elaborated feedback, describing the 'what', 'how' and 'why'
- present it in manageable units
- are specific and clear
- reduce uncertainty between performance and goals
- are unbiased and objective
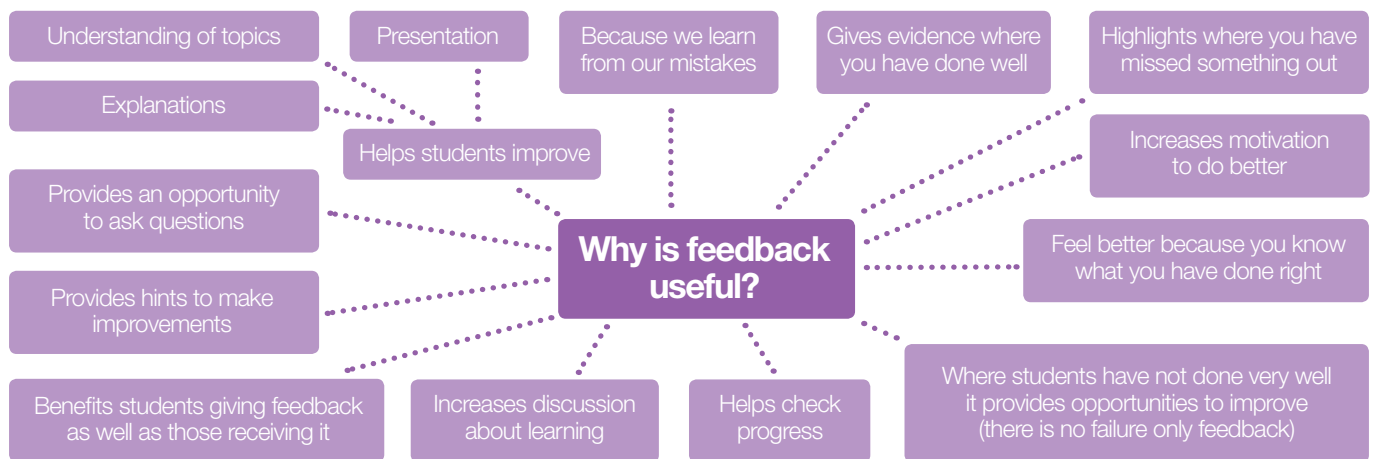- promote a learning goal (Shute, 2008).

The effect of feedback can vary depending on the type and the way it is given. One effective way of structuring feedback is to provide feedback relative to the three levels: task, process and self-regulation. To do this, you can structure your feedback against three questions:

Where am I going? e.g. does their answer meet the success criteria?

How am I going there? e.g. what strategies did they use?

Where to next? e.g. what learning goals have you achieved? (Hattie, 2012)

By answering these questions, you can enhance your students' learning, as well as increasing their effort, motivation or engagement (Hattie & Timperley, 2007).

Understanding of topics

Presentation

Because we learn from our mistakes

Gives evidence where you have done well

Highlights where you have missed something out

Explanations

Helps students improve

Increases motivation to do better

Provides an opportunity to ask questions

Why is feedback useful?

Feel better because you know what you have done right

Provides hints to make improvements

Benefits students giving feedback as well as those receiving it

Increases discussion about learning

Helps check progress

Where students have not done very well it provides opportunities to improve (there is no failure only feedback)

Exchanging feedback

When students have assessed the work of others, make them sit face to face to give their feedback. To do this the emotional environment in the classroom must feel safe. The feedback process is useful for both parties, as the person must really scrutinize the other's work against the success criteria. This process helps them reflect on their own work (Hattie 2012). The student receiving the feedback will benefit from someone providing an alternative view of his or her understanding.

Beware – students find giving objective feedback very difficult, and tend to avoid doing so, preferring just to say positive things. To avoid this establish the following ground rules:

1 The group/person receiving the feedback must sit in silence and only speak if they are asked a direct question. This allows them to focus on the feedback and makes it safer for the people giving feedback.

2 The person/group giving the feedback must feedback against only the agreed criteria. This helps to keep the feedback fair and open.

3 The feedback must include successes and advice on how to improve.

4 The feedback must be finished by saying I/we have finished our feedback. Thereby drawing a line under the feedback.

5 The person/group must respond 'Thank you for your feedback.' This shows that the effort made is appreciated.

6 No further discussion must take place after the feedback is over. It is advantageous to have groups feeding back to groups other than those from which they received their feedback.

Teacher marking

Teachers spend hours marking students' work, but how effective is this in helping students to learn? To make the most use of this effort, it is best to provide them with comments only. Research shows that when students receive a grade as well then the impact of the written comment is reduced. Harks et al (2013 Process-oriented feedback is perceived as more useful than grade-oriented feedback, as well as also enhancing achievement.

Good written feedback:

1 Informs the students when they are on the right track.
2 Encourages improvement.
3 Provides guidance on how to improve.

Steps to take:

1 Plan key pieces of work into schemes of work that you will mark in detail.
2 Do not aim to mark everything in a student's book.
3 Use comment only marking.
4 Make sure praise is specific, such as 'You have listed some reasons behind global warming. I particularly liked the layout of your news article. Well done.'
5 Only comment on agreed success criteria.
6 Plan lesson time for students to respond to your feedback.
7 Plan opportunities for students to go back to the targets you set.
8 Plan self and peer assessment into schemes of work.

▲
'I thought your diagrams were very clear and they helped me understand your ideas.'

Comment only marking strategies:

Strategy 1: Provide a hint. This will help your students think through the problem whilst keeping ownership of learning. For example – Giving the first letter of the answer, or starting a sentence, or drawing their attention to where they have useful information in their book or worksheet.

Strategy 2: Rephrasing the question can help students think about a problem in a different way. Questions can lead students to the answer.

Strategy 3: Provide a structure for your students to work within, such as sentences with gaps in so that students have to fill in key learning points. This can really help weaker students to focus on the subject. 'Some other ways to keep food fresh are r… (make it cool), p… (heating to kill microbes), and i… (using gamma rays to kill microbes).'

Strategy 4: Provide model answers. Highlight them in the student's work. Refer to them when work slips below the required standard. Use them as targets for students to match structure and quality.

Strategy 5: Colour coding student's work. Using one colour, say green to highlight where the student has met the learning outcome of a lesson. Where a learning outcome has not been met then highlight using a different colour, say blue. This could be used in connection with a praise sandwich e.g. two pieces of positive feedback 'bread' to one 'filling' improvement.

Strategy 6: Guidance can develop a student's understanding. Specific tasks should be quick to complete so that the student can see the improvement. For example, 'A good explanation – insert these key words into your answer: antagonistic, fulcrum.'

No hands up policy

The idea behind a no hands up policy is to ensure all students are involved, and expect to be involved, in learning. When the teacher asks questions, the same students will often put their hands up to answer. It is easier for the teacher to accept these offered responses, as the lesson can proceed quickly forward. It is also easy for the other students who did not raise their hands because they know they are unlikely to be asked to contribute. They can 'opt out' of the learning process. Teachers must know their students' names for this strategy to work, of course. Using a random name selector can add a dimension of anticipation here. We can use ICT to display names randomly on the whiteboard, or simply pick names out of a hat! The idea is to keep challenge high, whilst keeping the stress low. If students perceive too much stress they will stop participating and thinking.

To avoid this a range of get-out clauses will help your students manage high challenge but with low stress:

1 Training students to respond 'I do not know yet, please come back to me later' when stuck with a question is a good starting point. This buys the student some more time to think, look up answers and consult with friends.
2 Sell the idea that we learn by our mistakes so that offering their ideas is better than not. Student' misconceptions can be great starting points to lessons.
3 Give the students some educative guessing strategies, and model these regularly.
4 Employ an 'ask the audience' device, similar to the TV quiz show 'Who Wants to be a Millionaire'. The student with the impetus to answer opens up the question to the class to offer suggestions. The student still has to choose the response and therefore maintains ownership of this learning.

No hands up policy – how to implement

- Explain and discuss why you are going to use it and how it will benefit your students.
- Reinforce this message every time you start a question and answer session.
- Plan the 'big' questions you will ask. Plan who will be challenged by the question.
- Remember to use wait time after you have asked a question and after the students have answered.
- Allow your students to use the 'get out clauses' when needed.
- Use a random name selector such as Classtools' 'Random Name Picker' (http://tinyurl.com/3vvnqco).

## Increasing challenge in lesson outcomes

Use Anderson's revised taxonomy to plan lesson outcomes that are challenging for your students. Consider the thinking that would be required by those two contrasting outcomes.

1 Draw a cooling curve for water.
2 Predict cooling curves for different materials.

The first one requires students to translate numerical information into a graphical form. The student is translating and therefore showing 'comprehension'. Whereas the second requires the student to identify the important pattern in previous graphs, adapt it to create a new graph and speculate on the outcome of an experiment. In the second one the student is 'synthesising' information.

The thinking spiders are a good start point to planning lessons and questions.
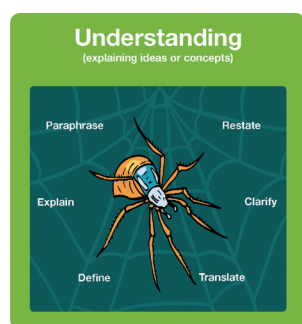

Success criteria

The agreeing of learning outcomes should be done at the beginning of most sessions. Outcomes should reveal the purpose of the lesson to your students, so that they know what they will be able to do by the end of the lesson, rather than just 'today we are learning about energy'. Make explicit the intentions and criteria of successful learning (Hattie, 2012). Anderson's revision of Bloom's taxonomy is useful here, as the words are active:

• Apply your knowledge of alkanes and aklenes to deduce the difference between them.

• Predict a heating curve for water.

These are very explicit examples of what success will look like, thereby making it measurable for teachers and students alike.
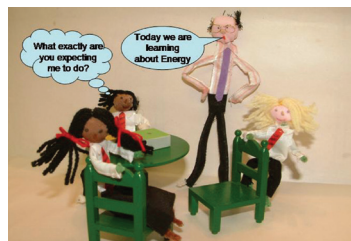
Increase student engagement

As well as using positive language when selling the learning outcomes to students, raise interest and motivation by capturing their imagination and emotions. If students are to be really engaged in learning they must be able to see the point of it. Why should they learn about it? We must set the learning in context.

This can be done several ways such as WILF (what I'm looking for) and TIB (this is because). The teacher outlines what is to be learned and then gives reasons why the learning is important. Although this is useful it is often more powerful to encourage students to create these links themselves. Once the lesson objectives have been shared, ask the students why it is important to learn about this. Once you get past the 'I might get asked about it in an exam sir!' response, other questions can be asked to help students to make connections (Hattie 2012).

'What jobs or professions would find this information useful?'

'How does this connect with what you already know?'

'What will you be able to explain in your world with this knowledge?'

For example, a science lesson on heat transfer was linked to chefs, firefighters and architects. By doing this the students saw their learning having real life applications.

Another way of involving students is this process is to ask them what they would like to find out about a topic. Students benefit from having a stimulus, such as books or magazine articles, while thinking about what they would like to know. It is vital that a response is taken from every student and that their ideas are recorded and displayed thereby adding value to the students' input, as well as increasing ownership of the learning. Used ideally at the beginning of a module, a range of questions can be gathered providing the teacher with an opportunity to use such suggestions to plan lessons around. This gives students further ownership of their lessons, and as a result, they should be more motivated.
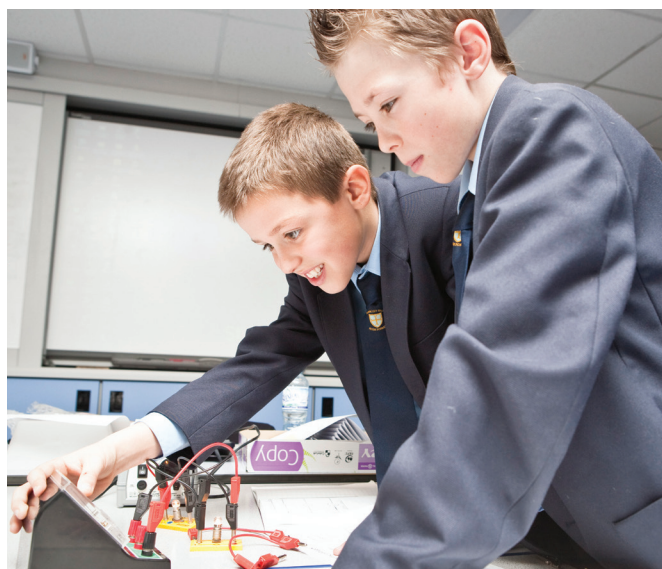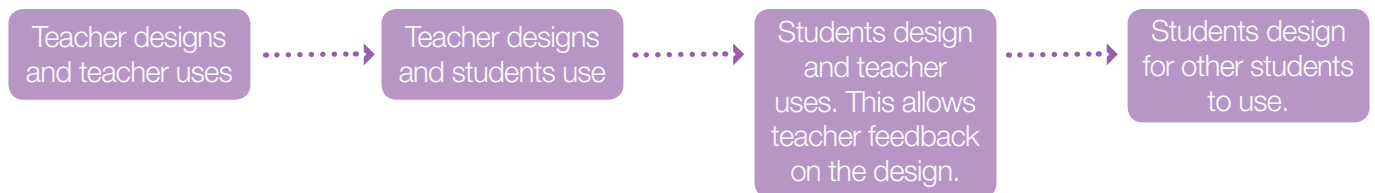
Celebrate progress

The celebration of progress is another big motivator for students. Rather than the familiar rank order of ability, an alternative ranking can be motivating for all students, regardless of ability. The display is ranked in order of the degree to which students have beaten their own personal targets. At the top the students have beaten their targets by more than those at the bottom. It is not a rank of ability. Watch out, for this list grows each time it is used, and more students achieve and move beyond their targets. Certificates are awarded on the basis of how much they exceed their targets. Gold more than 15%. Silver more than 5% and Bronze for achieving their target score. Clearly, those students who are very high attainers have a real challenge ahead of them to appear on a progress chart.

Rank	Name	Award
1	Hannah Jones	Gold (17%)
2	John Brown	Gold (15%)
2	Alice Smith	Gold (15%)
3	Neil Thomas	(Silver 8%)
4	Joanne Riley	(Silver 7%)
5	Richard Scott	(Bronze 0%)

Assessment tools

These help students (and teachers!) focus on the success criteria of a piece of work. They help agree what a high quality piece of work will look like. Over time the following steps can develop students from teacher dependent to independent.

These steps also increase a learner's capacity for self-assessment.

Teacher designs and teacher uses → Teacher designs and students use → Students design and teacher uses. This allows teacher feedback on the design. → Students design for other students to use.

Some examples of assessment tools:

1 The checklist
The first assessment tools you use may just be a simple tick exercise to acknowledge that criteria have been met. The next step will allow space for comment or guidance.

Teacher assessment tool for homework example –

'Why is the Thermos (Vacuum) Flask the greatest invention of all time?'

2 Structure space to invite comments
Students are asked for two positives and one improvement. Positive can-do language will encourage valuable contributions.

3 A sliding scale
Students were observing each other working as part of a group and asked to rate each other in different aspects of teamwork. Assessment tools are a great way to start training students to give each other feedback, as they provide a structure for the advice. This is especially powerful if the students make posters, agree a list of success criteria that a good poster should have, and then use this to feedback their successes.

Everybody uses the protocol to have his or her say

1 2 3 4 5 6 7 8 9 10

Never   **All the time**

Criteria - Does your work include...

YEAR 9 SELECTIVE BREEDING CHALLENGE — Peer Assessment

Questioning and wait time

During question and answer sessions the effective use of wait time can help students reflect more on their understanding. Hattie (2012) determines that one of the most powerful teaching strategies is that of class discussion but that the most commonly used questioning methods in class are the least effective in bringing about high quality class discussion. Petty (2009) evidences that the best teachers do not use the most common questioning techniques, instead applying the principles of assertive questioning leading to high quality class discussion. Teachers often answer their own questions, when a student appears to be stuck; often the time waited for a response is only around one second. So, this technique simply aims to increase the time to about four seconds. At first the silence of four seconds will feel uncomfortable, but once the students start thinking about responding with thoughtful answers it will become worthwhile.

Wait time should be used directly after a question has been asked to allow the students time to think through possible responses. When a response has been given pause again. This sends a strong message to them that further elaboration of their ideas is required. Any response given by the teacher at this point may stop a student in his tracks. A smile would convey that a correct answer is being given, although it may not be yet complete. A furrowed brow may indicate that an incorrect answer is being given. Feedback can be this simple.

When listening to a response an open body posture and impassive facial expression will help the students complete their thinking. The effective use of wait time is an integral strategy in the assessment for learning classroom.

- It increases student motivation, shown by more student contributions and questions.
- It helps build confidence, prompting students to be more speculative.
- They will test their ideas, as they know they are being supported.
- It develops students' ability to self assess their answers. These are likely to become longer and of better quality.

Value getting stuck

'How wonderful that we have met with a paradox. Now we have some hope of moving forward.'

Neils Bohr

Change the culture of finding tasks difficult. Explain to your students that no one ever climbed onto a bike and rode off into the sunset. Everybody falls off a few times, so why should learning in schools be any different? Learning should be exciting and when they do get stuck then they are about to learn something new. That is why they cannot do it at the moment. Share strategies with students to help them solve problems when they encounter them.

References and further reading

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