"The effect of feedback on learning . . . suggests average percentiles on learning outcomes of between 50% and 83% improvement."

(Hattie, 2009)

SETTING THE SCENE



1.0 • WHY READ YET ANOTHER BOOK ABOUT FEEDBACK?

Your students construct meaning through relevant learning activities. The learning effects of these activities are largely determined by the type, amount and timing of feedback. It's as simple and as complex as that. High-quality feedback makes a significant difference to learning.

And yet, isn't everyone in education already giving students lots of feedback? Of course they are! Indeed, if feedback is information that helps shape the next action, then any raised eyebrow, nod, wink, or a corrective or cautionary murmur can be thought of as feedback. Put it like that and it becomes almost impossible to think of a lesson that is not filled with dollops of feedback. That is not to say all students receive and act upon the feedback constructively, of course, but it is there nonetheless.

So why should you read yet another book about feedback? Here are two reasons:

- 1. Everyone in education is already using feedback, yet very few of us are managing to use feedback well enough to double the rate of learning (which is what research identifies as the expected effect).
- 2. Despite the growing body of evidence advising otherwise, there are still too many outdated practices being used.

These are some feedback practices that need to change:

· mixing feedback with grades

Feedback is information that helps to shape the next action.

Research suggests that feedback doubles the rate of learning.

And yet most students who receive feedback do not make double progress.
Why not?

1. Setting the Scene

Some of the reasons are to do with the timing and type of feedback.

- assessing the quality of the feedback *given* rather than the effect of feedback received and applied
- assuming that feedback ought to be written when in fact it is best generated in dialogue with students
- giving feedback *after* students complete their learning rather than before (no, this is not cheating, as we will show in Chapter 7)

This book will show you what can be done about all of these.

1.0.1 • Research Evidence About Feedback

Feedback is central to student learning. This has been confirmed by a number of influential meta-analyses, including by Hattie, Biggs and Purdie (1996).

Paul Ramsden (2003) argues that effective comments on students' work represent one of the key characteristics of quality teaching.

Dai Hounsell (2003, p. 67) notes that "it has long been recognized, by researchers and practitioners alike, that feedback plays a decisive role in learning and development, within and beyond formal educational settings. We learn faster, and much more effectively, when we have a clear sense of how well we are doing, and what we might need to do in order to improve."

Some of the best-known research comes from Dylan Wiliam and Paul Black. In the 1990s in the United Kingdom, one of the most talked-about books among teachers was *Inside the Black Box* by Black and Wiliam (1990). In this thinnest of books, the authors summarized more than 250 research studies, arguing that Assessment for Learning (or AfL, as became its popular abbreviation) "could do more to improve educational outcomes than almost any other investment in education" (p. 314).

Later, Avraham Kluger and Angelo DeNisi (1996), Jeffrey Nyquist (2003) and Robert Marzano (2007) all gave similar evidence. Perhaps best known of all, John Hattie, of *Visible Learning* fame, identified this evidence from Richard Lysakowski and Herbert Walberg:

At least 12 previous meta-analyses have included specific information on feedback in classrooms. These meta-analyses included 196 studies and 6,972 effect sizes. The average effect was 0.79 (twice the average effect). To place this average of 0.79 into perspective, it fell in the top 5 to 10 highest influences on achievement. . . . Clearly, feedback can be powerful. (Hattie, Biggs & Purdie, 1996)

However, it has not been all plain sailing. Despite—or maybe because of—its popularity, feedback and Assessment for Learning have fallen prey to overhype. Through a combination of gimmicks, government initiatives, simplistic messages and confusing policies, AfL has become at times a kind of *reductio ad absurdum*.

Some of the myths that have been pedaled include the following:

- · All feedback is good.
- All lessons must start with success criteria.
- The time for feedback is during the "plenary" session at the end of each lesson.

Myths about feedback:

- All feedback is good.
- Feedback should be given at the end of the learning process.
- Grades help with the feedback process.

All of these myths are misleading and sometimes completely untrue.



- Grades and levels are feedback (and since all feedback is good, grades and levels are therefore good).
- Grades or "curriculum levels" will tell students where they are and what they need to do next.
- Turning students' achievements into numbers will make the process of learning easier to understand and therefore easier to improve.
- Feedback should be written down so that there is "proof" that feedback has been given.

These are just a few of the misinterpretations and oversimplifications that have developed over the years.

They are all entirely wrong or partly wrong.

With this book, we will help you avoid these pitfalls and problems. As teachers in the United Kingdom, we have encountered all of these problems; our government has mandated us to use them; even our school leaders have insisted we use them or risk "failing" as a teacher.

With this book, we hope to help you avoid these problems before it's too late!

1.1 • WHAT IS FEEDBACK?

Feedback is information we receive that helps to shape our next response. It can be formal or informal.

Someone who tells a joke is looking for feedback. When students show a teacher their work, they are looking for feedback. If someone touches something too hot, feedback comes in the form of pain. When two microphones amplify each other, the loud squeal is feedback.

Though these examples vary in degrees of formality, they all provoke responses: the joker tells another funny story, the students edit their work, the casualty removes the hand from the heat and the musician separates the microphones as quickly as possible.

However, when it comes to feedback in education, the process is very often overformalized. Indeed, many students seem to believe that feedback has to come from their teacher and that the feedback has to be written down and accompanied by a grade or score. And yet this is a mistake.

Instead, it is much better to think of feedback as any message-formal or informal, verbal or nonverbal, written or spoken—that helps shape the receiver's next response. Thinking about it in this way will make it much more likely that feedback becomes an integral and everyday part of the learning process.

1.1.1 • Sources of Feedback

Feedback can come from many different sources: other people, books, games, experiences and self. A peer can suggest an alternative strategy, a book can give information that clarifies ideas, a parent can provide encouragement and support, a

1. Setting the Scene

Feedback flows all around a classroom. A nod, a wink, a yawn, a point or a cough can all be regarded as feedback

Feedback is information with which a student can confirm, add to, overwrite or fine-tune thoughts and/or actions.

student can evaluate his or her own success and we can teach our students how to learn from all of these. All of this can influence the receiver's next response.

Winne and Butler (1994) offer an excellent summary in the *International Encyclopaedia* of *Education*: "Feedback is information with which a learner can confirm, add to, overwrite, tune, or restructure information in memory, whether that information is domain knowledge, meta-cognitive knowledge, beliefs about self and tasks, or cognitive tactics and strategies" (p. 5740).

1.1.2 • Receiving Feedback

Despite coming from many different sources, feedback is often not received or understood. David Carless (2006) found that students often find teachers' feedback confusing, non-reasoned and difficult to understand. Sometimes they think they have understood the teacher's feedback when they have not, and even when they do understand it they may not know how to use it.

Richard Higgins (2000, para. 4) argued that "many students are simply unable to understand feedback comments and interpret them correctly." And, as many of us know, some students find feedback intimidating even when it is well intentioned and communicated effectively.

Maddalena Taras (2003) suggests that a part of the problem is that teachers (and students) see feedback in isolation from other aspects of the teaching and learning process, and consider feedback to be primarily a teacher-owned endeavor.

Furthermore, Mary Sully de Luque and Steven Sommer (2000) found students from different cultures receive feedback in different ways. They discovered that students from collectivist cultures (e.g., Confucian-based Asian and South Pacific nations) prefer indirect and implied feedback relating to a group rather than to an individual, whereas students from individualistic cultures (e.g., the United States) prefer more direct, individualized feedback, particularly when related to effort. They also found individualistic students are more likely to engage in self-help strategies because this helps them gain status and achieve outcomes.

1.1.3 • Feedback Complexity

As Mantz Yorke (2003) argued in his examination of formative assessment, teachers need an awareness of the psychology of giving and receiving feedback as well as an understanding of the content of feedback.

Furthermore, David Carless (2006) stated that feedback can have multiple functions: advice for the improvement of the current assignment, advice for the improvement of future assignments, explaining or justifying a grade, or an act by which the teacher demonstrates characteristics such as expertise, diligence or authority. He went on to say that students, and even teachers themselves, may not be fully aware of which of these functions or which combination of them is being enacted.

As teachers, we are not simply appraising our students' performance on a task, but we are also often looking for opportunities to teach or reinforce certain behaviors. Indeed, when giving feedback we may be fulfilling many different roles simultaneously: teacher, proofreader, editor, gatekeeper, life coach, encourager, evaluator, assessor, mentor and guide.

Different students prefer different types of feedback.

Feedback is complex. That's why this book has been written: to help find a way through the maze!



In addition, our personal knowledge of our students is usually greater than it would be between, say, a book reviewer and an author or between an interviewer and an interviewee. Furthermore, we tend to have more interest in creating and maintaining a good relationship with our students than other people who offer feedback might have. This puts us in the position of having to weigh all sorts of (sometimes conflicting) needs all at the same time. For example: Is the short-term pain worth the long-term gain? How can I say this without demotivating my students? Is this a "battle" I need to lose so as to win the "war"? By saying the same thing to this student as I did to another student, will I undermine the sense that this feedback is personalized?

In other words, as teachers we often have to weigh our choice of comments to accomplish a range of informational, pedagogical and interpersonal goals simultaneously.

1.1.4 • Negative Feedback

According to Richard Higgins, Peter Hartley and Alan Skelton (2001), students are often dissatisfied with the feedback they receive in terms of lacking specific advice to improve, being difficult to interpret or having a potentially negative impact on students' selfperception and confidence.

In addition, some types of feedback are a lot less powerful than others. Feedback that comes in the form of praise or reward is among the least effective. Indeed, tangible rewards such as stickers and achievement awards contain such little task information that they shouldn't really be thought of as feedback—even though many teachers and students regard them as such.

In their meta-analysis of the effects of feedback on motivation, Edward Deci, Richard Koestner and Richard Ryan (1999) found a negative correlation between extrinsic rewards and learning (-0.34). They also found that tangible rewards actually undermined intrinsic motivation, particularly for interesting tasks (-0.68), although they did find a small positive effect when the students were engaged in uninteresting tasks (0.18).

So perhaps when we think there is a need to motivate our students with extrinsic rewards, then it says more about the quality of the task we're asking them to complete than it does about the attitude or behavior of our students!

Note: The figures quoted from Deci et al. (1999) refer to effect sizes. Many researchers use effect size to show the relative effect of a strategy when compared with other strategies in the same field. John Hattie and many other researchers, including Dylan William and Shirley Clarke, have found that the average effect size of strategies used to help students learn is 0.4. So anything in the range 0.0 to 0.4 is positive but less than average; anything more than 0.4 is above average (and therefore relatively significant). And anything below zero has a negative effect on student learning.

Kluger and DeNisi (1996) conducted the most systematic meta-analysis on the effects of various types of feedback. Many of their studies focused on groups outside of typical schooling, for example, after-school clubs. So we're not just talking learning in classrooms here. From the 131 studies involving 12,652 participants, Kluger and DeNisi found the average effect of feedback was 0.38. This effect size is about average when compared with all effects on learning and therefore contrasts strongly with the headline that "feedback is one of the most powerful influences on student learning." One explanation for this is that of the 470 effects they found in those studies, 32 percent

Sometimes feedback can cause a negative effect—not just on students' mood but also on their learning outcomes.

Out of 131 studies, Kluger and DeNisi (1996) found one-third showed that feedback produced negative effects on student learning.

1. Setting the Scene

of them were negative. So in one-third of all cases, the feedback the students received actually caused them to make *less* progress than they would have done otherwise!

But is it really very surprising that some feedback is negative? Think about the feedback you've received in your life: Has it always helped you grow and develop? Or has it annoyed you or even put you off from ever trying again? That's the thing: surely it's silly to say "all feedback is good" since we know from bitter experience it is not.

Here's what Kluger and DeNisi (1996) found: when the feedback focused primarily on what the students had done wrong, or it was related to complex tasks that the students hadn't got their head around yet, and/or it threatened their self-esteem by making them feel as if they couldn't complete the task, then the feedback they received had a negative effect on their learning. Added to this, many of the types of feedback had very small effects and were therefore relatively ineffectual. These included praise for performance and extrinsic rewards.

1.1.5 • Top Three Feedback Questions

Feedback should provide information (relating to task, process or strategy) that helps your students close the gap between where they want to be next and where they are now.

To do this, feedback should help your students do the following:

- 1. Understand the goal or learning intention
- 2. Know where they are in relation to the goal
- 3. Realize what they need to do to bridge the gap between their current position and the goal

To put it another way, feedback should help learners answer these three questions:

- 1. What am I trying to achieve?
- 2. How much progress have I made so far?
- 3. What should I do next?

1.1.6 • Feedback Checklist

Feedback needs to meet as many of the following criteria as possible:

- Feedback should relate to clear, specific and appropriately challenging goals.
- Students should be actively involved in the feedback process—not just passive recipients.
- Feedback is more effective when it helps your students identify what they have done correctly so that they can better identify for themselves what they could do next.
- Feedback should reduce uncertainty in relation to how well your students are performing on a task and what needs to be accomplished to attain the goal(s).
- Feedback should relate to the task, process and/or strategy; it should not be focused on the person.

This checklist shows some of the best ways to ensure that feedback has a positive effect.



- Feedback should be timely: coming after the initial teaching and first attempt but before your students finish their learning.
- Your students should be expected to use the feedback they receive.
- Feedback should answer the three key questions. What am I trying to achieve? How much progress have I made so far? What should I do next?
- Grading should be kept separate from feedback.
- Feedback should be unbiased and objective. Feedback from a trustworthy source will be considered more seriously than other feedback, which may be disregarded.
- Feedback should allow for learning from mistakes rather than making students fearful of failure.
- · The quality of feedback should be judged not on what is given but on what effect it has. In other words, don't give feedback just to prove you have given it; instead, look for the effect of the feedback on the improvements in your students' performance and understanding.
- Feedback should not only be thought of as the information we give to our students; it should also be the information they get from books, parents, peers and themselves.
- Feedback can be used to move your students' attention away from a focus on performance and more toward a focus on learning. This includes emphasizing that effort leads to increased learning and that mistakes are an important part of the learning process.
- Feedback should be given in a culture of trust, respect and support.

1.2 • ASSESSMENT: TO SIT BESIDE

Often, the term feedback is used when giving advice to our students, whereas assessment is used when we are identifying (or measuring) what "level" students have reached. Ironic, then, that the word assessment has its roots in the Latin verb assidere, meaning "to sit beside"—which seems a long way removed from the practice of testing!

The "sitting beside" form of assessment is the best way to engage your students in the feedback process. It makes feedback more collaborative and constructive. By sitting beside your students (whether literally or metaphorically), you should be able to better understand what and why they've done what they've done so far and what they might be able to do to improve. Perhaps more importantly, this sitting beside should also enable and encourage your students to take responsibility for directing and regulating their own learning.

The following are the sorts of details we might try to ascertain while sitting beside our students:

1. Do they understand what they are trying to achieve?

This would usually include finding out:

1. What they think the learning goal and the success criteria are (see Chapter 4)

1. Setting the Scene

2. Which success criteria they believe are the most important

Assessment has its roots in the Latin verb assidere, meaning "to sit beside."

Here are some questions to ask when "sitting beside" students:

- I. Do they understand what they are trying to achieve?
- 2. How much progress do they think they've made already?
- 3. What are some of the things they are thinking of doing next?

- 3. Which parts of the learning journey are the most challenging and why
- 4. Whether there are any success criteria they think could be added to help them reach their learning goal

2. How much progress do they think they've made already?

It would be good to find out what your students think of the following:

- 1. How much progress they think they've made so far
- 2. How "far" from their learning goal are they at the moment
- 3. How satisfied they are with the steps they've already taken
- 4. Whether they think they've covered all the success criteria as well as they might have done

3. What are some of the things they are thinking of doing next?

The following questions should help your students identify for themselves what they might do next:

- 1. What is one thing you could do to improve what you've already done?
- 2. What could you add to what you've already done that will improve the quality of your learning so far?
- 3. Which parts of the success criteria do you still need to attend to so that you reach your learning goal?
- 4. Is there a different way of looking at what you're trying to do or a different strategy that you could use that would help you make even more progress?
- 5. What attitudes, skills or knowledge could you take from this task that could help you with future learning?

Things to Notice About These Questions

Education comes from the Latin verb educere, meaning "to draw out." This fits nicely with these questions and with the process of sitting beside our students to draw out their ideas and understanding.

Asking your students what *they* think rather than telling them what to do next should, over time, help them become more assessment capable (see Chapter 7).

We have included questions related to strategy and process as well as to content.

1.3 • FOUR LEVELS OF FEEDBACK

John Hattie and Helen Timperley (2007) classified feedback in terms of four levels, noting how the different types of feedback interacted with particular types of tasks.

Level 1: Task-Related

Task-related feedback is the most common form of feedback in schools. It generally relates to specific criteria within the task. For example:

"The task was to measure the length of all three sides of the triangle, but you have only shown one measurement so far."



"Check sentences 2, 4 and 7 as they're missing capital letters and/or periods."

"Munich is not the capital of Germany and the population is much higher than 1.4 thousand! Check these stats before continuing."

Task-related feedback is often known as "corrective feedback." It is particularly useful for beginners to help them build (or correct) surface-level knowledge. It can also be the springboard for higher forms of feedback such as process or self-regulation feedback.

Beware, however, of using task-related feedback indiscriminately! Most feedback to whole classes is at this task-related level, and yet, because it tends to be specific (and therefore not particularly generalizable), many students frequently dismiss it as irrelevant to them.

Level 2: Process-Related

Process-related feedback is much more effective than task-level feedback for deepening learning and creating understanding. It generally relates to the process of learning:

- · reassessment of the approach being used
- thinking of alternative strategies for task analysis or completion
- · trying different methods of error detection
- · more efficient or more comprehensive methods for information gathering
- · strategies for making tasks more manageable or achievable

Level 3: Self-Regulation

Self-regulation feedback comes from students monitoring their own thoughts and actions. It is the feedback they give themselves in terms of reaffirming what their goal is and whether they are still on course, considering whether there is a better process they could use, seeking feedback at appropriate moments, deciding how to deal with feedback information and so on.

Self-regulation feedback can do the following:

- · enhance self-evaluation skills
- generate greater confidence to engage further in the task
- · help decide what to do for the best outcome

When your students self-regulate their own learning, they will become more independent learners. Self-regulation requires students to be metacognitive, self-motivated and active in their own learning.

Level 4: Self-Related

The final type of feedback—related to self—does not build on the other forms of feedback, so we've referred to it simply as "another" level. Furthermore, this self-feedback can impact negatively on learning, whereas the other three can create a positive progression toward deeper understanding.

Feedback directed to the self refers to comments about the individual, for example, "you're very clever" or "you're not very good at this." Comments such as these can put students into what Carol Dweck calls a *fixed mindset*.

Hattie and Timperley (2007) found four types of feedback:

- 1. Task-related
- 2. Processrelated
- 3. Selfregulation
- 4. Self-related

Feedback that is related to the person can have a negative impact on learning and thus should be avoided.

1.4 • MATCHING FEEDBACK TO LEVELS OF UNDERSTANDING (USING THE SOLO TAXONOMY)

The SOLO taxonomy provides a useful framework for matching feedback to a student's stage of learning.

The SOLO taxonomy is a model that was proposed by John Biggs and Kevin Collis in 1982. SOLO stands for the Structure of Observed Learning Outcomes. It is a means of classifying learning in terms of its complexity, which in turn helps to identify the quality and depth of students' understanding.

The SOLO taxonomy is covered in depth in Chapter 6. For now, Figure 1 presents a brief overview of how feedback can be matched to levels of understanding.

▶ Figure 1: Verbs Associated With the SOLO Taxonomy

SOLO Level	Feedback Verbs
Prestructural Has no idea	Too soon for feedback, as direct instruction is needed first.
Unistructural Has one idea	find, match, label, name, list
Multistructural Has many ideas	describe, define, combine, follow, identify a pattern
Relational Understands the whole	classify, analyze, relate, apply, explain, organize
Extended Abstract Predicts and invents	evaluate, prioritize, hypothesize, create an analogy

1.5 • PRAISE VS. FEEDBACK

Praise is not the same as feedback.

Praise is not the same as feedback. Feedback answers all three of the questions mentioned before: What am I trying to achieve? How much progress have I made so far? What should I do next? Praise, on the other hand, tends only to focus on what students have done well so far.

That is not to say that praise is a bad thing. Praise might put students in a better mood or give them an indication that we appreciate them. However, it is very rarely converted into a desired outcome such as more engagement, commitment to learning, enhanced self-efficacy or understanding about the task.

That is also not to say your students won't like praise: they almost certainly will. P. R. Sharp (1985) reported that 26 percent of the adolescent students in his sample preferred to be praised loudly and publicly when they achieved on an academic task, 64 percent preferred to be praised quietly and privately and only 10 percent preferred teachers to say nothing at all.

Paul Burnett (2002) reported similar results among younger students and found that students preferred praise for trying hard rather than for having a high ability (especially when the praise was public) and for achievement rather than for behavior.

On the other hand, if the culture of the peer group is "it's not cool to try," then that very same praise can be seen as punishment.

Furthermore, praise might be counterproductive and have negative consequences on students' self-evaluations of their ability. Wulf-Uwe Meyer (1982) found that older students perceived praise after success or neutral feedback after failure as an indication that the teacher perceived their ability to be low. When given criticism after failure and neutral feedback after success, they perceived that the teacher had estimated their ability to be high and their effort low.

It is important, however, to distinguish between praise that directs attention to the student and praise directed to the effort, self-regulation, engagement or processes relating to the learning. This latter type of praise can assist in enhancing self-efficacy and can therefore help with the learning process.

Part of the reason for the unpredictability of praise is that students often adopt "reputational lenses" to seek or evaluate feedback. For example, some students might want to be seen as good students, whereas others might want to achieve the exact opposite. According to Goethals, Messick and Allison (1991), "Students do a lot of 'in the head' comparisons and it is likely that such comparisons are selected, interpreted and/or biased. Strengths and positive performances are seen as unique and self-created, whereas weakness and negative performances are seen as common in others and possibly caused by others."

With all that said, feedback *is* more powerful when it is personalized. That is not to say it should be focused on the person (for example, "You are a clever student" or "Good boy, you've done well"). But when you engage personally with your students, then you acknowledge them as fellow human beings with things to say and thoughts and interests of their own.

Phrases such as these might help:

- · What you did there was very powerful.
- That was a moving performance.
- · What you've written here is interesting.
- · You make a significant point.
- This made me laugh/think/wonder.
- · I learned something about this topic from you.
- I learned something about your interests.
- · I never thought about that before.
- It's interesting that you think X. Have you ever thought about Y?

1.6 • DOES GRADING COUNT AS FEEDBACK?

When we give students a grade, the learning stops. When we give students specific feedback and an extending question, the learning goes deeper.

Sometimes praise can have a negative effective on learning. This is particularly true if students perceive it as an indication that their teachers are surprised by the students' success.

It is a well-rehearsed argument that grades do very little for the learning process. Indeed, as Ruth Butler and others have pointed out, grades often diminish the power of feedback to the point that giving feedback together with grades is the equivalent of giving no feedback at all.

Butler (1997) split 132 eleven-year-olds into three groups. The first group was given comments only, the second group was given grades only and the third group was given what most students are given: grades and comments. She then looked at how much additional gain each group made as a result of this information they had been given.

Figure 2: The Effect of Grades on Learning Outcomes

Group	Feedback	Sometimes Shown	Mostly Shown
А	Comments only	30% Gain	Positive
В	Grades only	No Gain	Top 25% - Positive Bottom 25% - Negative
С	Grades and Comments	No Gain	Top 25% - Positive Bottom 25% - Negative

As Figure 2 shows, the group that received only comments made an additional 30 percent gain in their learning. The group that received only grades made no additional gain. The worrying part, though, is that the students who received grades and comments made no additional gain!

Remember that feedback should tell your students what they have done well *and* what they should do next. Grades alone cannot tell them this. But when you put grades with comments, too many students will look at their grades first and, if it is a good grade, think to themselves, "Why do I need to improve?" And if they've got a bad grade, then they think, "Why try to improve? I'm no good at this anyway!"

This theme is also explored by Black and Wiliam in "Working Inside the Black Box" (Black, Harrison, Lee, Marshall & Wiliam, 1990). Teacher-feedback should normally avoid giving marks. Research experiments have established that while pupils' learning can be advanced by feedback through comments, the giving of marks, or grades, has a negative effect in that pupils ignore comments when marks are also given.

And yet, like so many teachers, I was expected, when I was a teacher, to give marks or grades whenever I responded to a pupil's work. When I stopped this practice, many of my students questioned whether something was wrong. Some of their parents complained I wasn't marking properly—and even one or two heads of department advised me to return to standard practice as soon as possible.

Over time, though, my students did begin to read my comments and feedback more thoroughly. When I asked them why this was, they reported that previously, if they got 10 out of 10 or an A or B grade, then there was no point reading my comments because they knew they'd done well. Or, if they'd got a low grade or score, then they knew that they were useless, so what was the point in reading any further? (Black & Wiliam, 2002)

In the Seven Steps to Feedback we show you how you can make grading more useful. We show you that keeping grades separate from the comments and getting your students to

Black and Wiliam found that grades have a negative effect on students' learning.

If you feel obliged to give grades, then keep them separate from feedback. The Seven Steps to Feedback in Chapter 7 go into this in depth.

grade their own work will have a much greater impact than grading usually does. Indeed, if you tell your students at the beginning of a task that they will be expected to grade their own work at the end, then they will probably take much more notice of the success criteria! So perhaps grading can be put to good effect after all?

We will explore the Seven Steps to Feedback in depth in Chapter 7.

1.7 • OTHER TYPES OF FEEDBACK

Deciding on the best form of feedback will depend on context, but using the types that follow, when appropriate, will enrich your lessons.

1.7.1 • Coaching

Coaching is a form of intensive, planned encouragement and guidance targeted at developing essential skills, positive attitudes and other personal resources for life and learning. It is based on the principle of one person actively seeking feedback from a person they trust, respect and want feedback from and then receiving it in the form of guided dialogue.

1.7.2 • Dialogue

Dialogue is the most immediate and collaborative way of giving feedback to your students. It provides both a stimulus and a model for their own reflections on learning as well as their strategies for understanding.

Dialogue is more than just speaking and listening—it is the very foundation for thinking. Lev Vygotsky, George Herbert Mead and, more recently, Matthew Lipman, have all argued in broad terms:

- Tasks we can jointly accomplish by talking together are gradually internalized so they become tasks we can achieve independently through our own thinking.
- Thinking is rather like an internal dialogue. If we are exposed to rich, reflective dialogue, then characteristics of dialogue such as question and response manifest themselves in our own thinking, helping us become more reflective.
- Recognizing the significance of this internal dialogue is an important step in improving the quality of feedback and, therefore, of learning.

This is explored far more in *Challenging Learning Through Dialogue* (Nottingham, Nottingham & Renton, 2016).

1.7.3 • Editing

Feedback is not the same as editing. Feedback to your students should provide them with a clear message about how to improve their performance without simply doing it for them (as editing might).

Feedback is about guidance. Diagnosis of what is wrong can be part of the process, but it should be accompanied by clear suggestions for improvement, for example, "Here's what's wrong and here are some suggestions for ways to fix it."

Feedback too often leaves students unsure about exactly what they have done well and what they can do to improve.

1. Setting the Scene

Compare this with a study by Melanie Weaver (2006) in which she found that most students complained the feedback they received was too general and vague with no suggestions for improvement. The students reported that they were often left not knowing what they had done well, what they needed to change and why they had achieved the grade they had.

1.7.4 • Feedback and Feedforward

Feedback is not just about looking back. It is also about looking forward and thinking about possible next steps. Some people like to use the term feedforward. The problem is that this suggests feedback does not include looking forward, but it does and it should. Indeed, this book will show that feedback has to look forward as well as back if it is to be the hugely powerful influence on learning that research tells us it can be.

Having said that, Deirdre Burke (2009) discovered that many students "interpret the term 'feedback' literally and use it only to look back on work they have completed, and are not aware or able to use teacher comments to 'feed-forward' and contribute to their on-going development."

This makes it even more important to emphasize to your students that feedback needs to answer all three questions: What am I trying to achieve? How much progress have I made so far? What should I do next?

1.7.5 • Formative and Summative Assessment

Formative assessment is feedback that provides explanation, diagnosis, prompting and/or elaboration to your students in response to their efforts. Formative assessment enables them to make further progress. Usually, a complete form of feedback is dialogue.

Summative feedback identifies only what the students have done right and what they have done wrong. It usually involves a grade or exit rating.

Figure 3 shows the main differences.

► Figure 3: Different Types of Formative and Summative Assessment

Confimation	Your answer was right/wrong. Your answer was incorrect. The right answer is	Summative Assessment
Explanatory Diagnostic	Your answer was incorrect because Your answer suggests you forgot to Next time, concentrate on the following before answering.	Formative Assessment
Elaborative	Your answer was spot on. A key to this was your decision to focus on To improve even more next time, I suggest you	

Formative feedback helps to form the next steps. Summative feedback gives a summary of what has been achieved so far. An example of formative assessment would look something like this:

Learning goal: To make better use of examples and counter-examples in writing so that the conclusion is more considered.

Teacher's comments: "Well done, Craig. You have made significant progress toward reaching the learning goal. There are now far more wide-ranging and thought-provoking examples to support your conclusions than in your earlier work. I particularly like the example you used in line 7 that suggests common sense isn't always right. What I'd like to see more of now is the use of counter-examples, as these will help to create a less biased tone to your conclusion."

Questions to think about: "Can you think of two or three counter-examples that would persuade you to rethink your conclusion? Which one is the most persuasive? Where would that best fit within your answer? What would be some of the benefits of using counter-arguments in your writing?"

(Martin Renton) When I first started working on feedback in my classroom, trying to understand the difference between formative and summative assessment was vital in order to make any changes to my practice. But it was a longer process than I expected.

My colleagues who initially explained it described summative feedback as "coming at the end," whereas formative feedback would happen "during the lesson." This simplistic definition was easy to understand initially but, like all simple definitions, is actually rather misleading and therefore difficult to implement. As I found out, it is not really about when to assess; it is more about *how* you assess and, of course, *why* you are assessing.

Traditionally the teacher has been perceived as the expert, having all the answers. When students are working on a task, it is too easy to give feedback on what they have done right or wrong and then tell them what the answer really is. Even if this happens in the middle of a lesson, it is still summative assessment, as it prevents the continuation of learning.

Equally, there were countless occasions in my early teaching career when I collected in the final piece of work at the end of a module, graded it, explained why that grade was given and then set a target on how to improve it next time. When of course there is no next time! And so the feedback was meaningless.

Angela Stockton (2015) defines formative assessment as a verb, rather than a noun. It is not a "thing that students are given to complete at the beginning, in the middle, or at the end" of the learning experience (para. 3), it is an action performed throughout it. Because of this, she describes feedback as the "by-product of formative assessment done right," whereas grades are the "by-product of formative assessment gone horribly wrong" (para. 11).

From these early experiences, I learned two things:

- 1. Feedback will have more impact when it is focused on helping your students learn for themselves rather than if you tell them what is right and what is wrong.
- 2. When we grade formative assessments (during the learning process), rather than asking the three important questions, we are effectively penalizing students for having not mastered something they are still learning about.

The following analogy has helped me picture the difference between formative and summative assessment and helped me make changes to my practice over time:

Imagine you plant a sunflower and wish it to grow to a meter tall. You plant the seed in a pot and water it every few days for three months.

Formative feedback is better thought of as a verb rather than a noun. In other words, it should involve action rather than an award or penalty.

Summative assessment would mean that at the end of the three months, you would measure the sunflower and report if it has achieved or failed to reach the desired height.

Formative assessment would mean that you would constantly check on the flower's progress throughout the three months, support its growth by adding new soil, water more or less regularly according to its need, add plant feed, move the pot to give it more light and so on.

Summative assessment tells you what has been achieved in the past. Formative assessment underpins your decision making to enable you to best help it to flourish.

1.7.6 • Peer and Self-Reviews

Graham Nuthall (2007) conducted extensive in-class observations and noted that 80 percent of the verbal feedback students receive on a day-to-day basis comes from their peers and most of it is incorrect!

That said, students *can* be taught how to give better feedback to their peers. To do this, they need to be aware of their learning goals, understand success criteria and recognize good performances. Furthermore, receiving feedback from peers can lead to positive effects relating to reputation as learners, success and reduction of uncertainty, but it can also have the opposite effect if done badly. This is explored in Chapters 3 and 7.

1.7.7 • Student-to-Teacher Feedback

Learning is more powerful when you welcome feedback from your students about what they have understood, where they are conscious of making mistakes and when they are engaged. Such openness will make it clear to your students that feedback is important for everyone, teachers included (see also Section 2.3.7).

feedback
that students
receive during
the day comes
from other
students, and
most of it is
wrong! This
makes it vitally
important
to teach

students how

to generate high-quality,

accurate

feedback.

Most of the

1.8 • REVIEW



This chapter has covered the following main points:

- Feedback is central to student learning. This has been confirmed by a number of influential meta-analyses, including those by Hattie et al. (1996), Black and Wiliam (1998) and Hattie and Jaeger (1998).
- Some myths about feedback continue to be pedaled, whereas the truth of the
 matter is that not all feedback is good, feedback should not only occur at the end
 of the lesson or piece of work, feedback does not require a grade and feedback
 does not need to be written down.
- 3. Feedback is *any* message—formal or informal, verbal or nonverbal, written or spoken—that helps shape the receiver's next response.
- 4. Graham Nuthall (2007) noted that 80 percent of the verbal feedback students receive comes from their peers, and most of it is incorrect.
- 5. Feedback is most powerful when it is part of a dialogue between teacher and student. Indeed, the etymology of assess is "to sit beside."
- 6. Hattie and Timperley (2007) classified feedback in terms of four levels: task-related, process-related, self-regulated and self-related. They noted each type had a particular relevance at different stages in the learning process.

- 7. Feedback should help students (1) understand the goal or learning intention, (2) know where they are in relation to the goal and (3) realize what they need to do to bridge the gap between their current position and the goal they are striving for.
- 8. Different feedback is needed at different levels of understanding. The SOLO taxonomy can help to determine what is appropriate.

1.9 • NEXT STEPS



Here are some suggestions to help you with your reflections on feedback:

- 1. Pay attention to the types of feedback that take place in your classroom. Which interactions would you class as most useful to your students?
- 2. How do your students react to feedback? Are they generally positive and proactive toward it?
- 3. Are there some common features of feedback within different disciplines? For example, between feedback on written assignments compared to feedback toward active learning?
- 4. How often do you give personalized feedback to each of your students?
- 5. What are the benefits?
- 6. What problems do you encounter?