Evidence Based Education

FEEDBACK

A short guide to delivering effective and meaningful feedback to students

INTRODUCTION

Feedback: marking, coloured pens, grades, workload... if we were to play a word association game around feedback, what would you think of?

Effective feedback can impact powerfully on a learner's attainment, but whether that is positive or negative is down to the context and content.

There is conflicting research around what effective feedback looks like in the classroom. This is partly because feedback variables interact with so many other factors: student achievement, the difficulty of the task, student's prior knowledge, motivation, classroom ethos, and culture all affect how effective feedback can be.

This short guide summarises research to help you consider the form and content of feedback. It is neither meant to be exhaustive nor prescriptive; the most important thing about feedback is what the student does with it.

A one-size-fits-all approach to feedback is not practically applicable, and sometimes practising feedback feels like a tick-box exercise:

In my school, we are encouraged to mark books in purple pen, the students self-mark in red and peer mark in green. It's a lot to keep track of, a lot of work, and I'm not sure if it actually benefits my students at all.

I was really pleased when we were asked to reduce the time marking books to give 'live feedback', but what has happened in reality is that we have to go around with a 'verbal feedback given' stamp to prove I've spoken to my pupils.

So, what do we know about effective feedback, and how can it be used well in the classroom?

WHAT IS THE PURPOSE OF FEEDBACK?

The aim of feedback in the classroom is to move the learner closer to a goal (Sadler, 1989; Ramprasand, 1983). To achieve the goal, students can employ two strategies:

1. Lower the goal; or
2. Increasing effort and honing learning strategies.

Similarly, teachers have two options:

1. Providing more appropriate goals; or
2. Providing the required content or learning strategies.

Hattie and Timperley (2007) suggest **effective feedback should address three questions**:

- **Where am I going?** (i.e. What are the goals?)
- **How am I doing?** (i.e. What progress is being made toward the goal?)
- **Where to next?** (i.e. What activities need to be undertaken to make better progress?)

We talk a lot about the importance of purpose in assessment, a concept that can also be applied to Hattie and Timperley's questions. Very generally, **the purpose of feedback should always be to improve the learner in some capacity**, and these questions should help take steps towards whatever goal the teacher has in mind.

FOUR LEVELS OF FEEDBACK

Hattie and Timperley (2007) defined four different levels of feedback in the classroom:

1. Feedback about the task;
2. Feedback about the processing of the task;
3. Feedback about the learner's self-regulation;
4. Feedback about the self.

Choosing the most effective type or form of feedback is not an exact science so these are not hard-and-fast rules, but rather guidelines and considerations.

1. Feedback about the task

The most direct level is feedback about the task, which can include identifying correct and incorrect responses. It is most effective when the learner's knowledge is faulty, rather than missing.

$5 \times 8 = 30$ 5 x 8 = 40, not 30

The exclamation 'I defy you, stars!' demonstrates that Juliet refuses to accept Romeo's death. As the Prologue references the lovers' "star-crossed" fate, every subsequent reference to the stars, or to the heavens in general, reminds the audience of the sad fate awaiting the lovers, and their inability to avoid it, try though they might.

This quote was said by Romeo, not Juliet.

A major drawback is that if the learner doesn't know why they have got the answer wrong, or how to check their answer, then this type of feedback becomes unhelpful.

2. Feedback about the processing of the task

This type of feedback focuses on the approaches needed to complete a task, as well as related tasks. It highlights how to complete it better, how to detect errors, or build the relationships between knowledge.

5 x 8 = 30
Check your answer by doubling 5 x 4

The exclamation 'I defy you, stars!' demonstrates that Juliet refuses to accept Romeo's death. As the Prologue references the lovers' "star-crossed" fate, every subsequent reference to the stars, or to the heavens in general, reminds the audience of the sad fate awaiting the lovers, and their inability to avoid it, try though they might.

Examine the characters' timelines to figure out who said this quote.

Using cues or prompts to help direct the learner's attention to building strategies means that this type of feedback can be better at improving learning than feedback about the task.

Processing-level feedback can be more effective than task-level feedback as it encourages the learner to engage and consider their approach.

3. Feedback about the learner's self-regulation

This type of feedback encourages meta-cognitive processes to encourage learning from feedback.

$5 \times 8 = 30$ X

Which multiplication techniques worked well for you today? Why?

The exclamation 'I defy you, stars!' demonstrates that ~~Juliet~~ refuses to accept ~~Romeo~~'s death. As the Prologue references the lovers' "star-crossed" fate, every subsequent reference to the stars, or to the heavens in general, reminds the audience of the sad fate awaiting the lovers, and their inability to avoid it, try though they might.

What could you do differently next lesson to check the accuracy of your work?

Feedback at this level can shift the agency in learning from the teacher to the learner but can be the most difficult, both for students to implement and for teachers to provide.

It can be particularly powerful linked with the previous levels of feedback.

4. Feedback about the self

The final level of feedback is about the learner as a person rather than the task performance.

5 x 8 = 40   Clever girl!.

The exclamation 'I defy you, stars!' demonstrates that Romeo refuses to accept Juliet's death. As the Prologue references the lovers' "star-crossed" fate, every subsequent reference to the stars, or to the heavens in general, reminds the audience of the sad fate awaiting the lovers, and their inability to avoid it, try though they might.

You're so smart!

This sort of praise is generally ineffective at improving student learning and may even be counterproductive.

However, praise linked with effort can still have a positive effect.

The exclamation 'I defy you, stars!' demonstrates that Romeo refuses to accept Juliet's death. As the Prologue references the lovers' "star-crossed" fate, every subsequent reference to the stars, or to the heavens in general, reminds the audience of the sad fate awaiting the lovers, and their inability to avoid it, try though they might.

This is excellent – you have worked on identifying theme in this passage.

The key is ultimately focusing the attention back to the task and learning processes.

If your goal is to maximise the benefit to learning rather than build self-esteem then give feedback on the work, not the learner.

THINKING ABOUT YOUR FEEDBACK

Is it simple and focused?

Research has found that feedback that is specific on the "what, how, and why of a problem" has been more effective than simply providing the answer.

This may seem contradictory, as this is still quite detailed feedback, but it is focused on specific aspects for improvement.

Do you vary when you deliver it?

Deciding when to provide feedback to students is important, especially when deciding whether to intervene when a student has made an error. Immediate feedback seems to be best when a learner is early in acquiring information, is low-attaining, or if the task is very complex.

Do you consider culture?

It's important to consider cultural implications with certain types of feedback. For example, whole-class feedback can be perceived differently by learners from different cultures: students from Asian and South Pacific nations tend to prefer feedback that is indirect, implicit, and whole-group focused feedback, whereas students from 'individualist cultures' (e.g. the UK) tend to prefer direct, personalised feedback.

Do you treat boys and girls the same?

Teachers' in-class feedback to boys tends to be in relation to effort (or more often, a lack of effort) and behaviour. Conversely, feedback to girls tends to focus on attributions of their ability. Gender differences also seem to extend to learners' perceptions on the amount of feedback. Perhaps more important than how feedback is given is the consideration of how it is received.

How confident are your students?

Learners' own confidence in their own work can affect how they receive feedback. When they have high confidence that their response to a task is correct, but are informed they are actually wrong, they demonstrate more learning gains, and, if they have low confidence in their original answer, corrective feedback may have less of an effect.

GENERAL GUIDELINES

A summary of considerations for the form and content of feedback. Adapted from Shute (2008).

1 Focus feedback on specific features of the task, with suggestions on how to improve. Do not focus on the learner themselves.

2 Provide elaborated feedback: the what, how, and why of a problem. This is more effective than simple verification of results.

3 Provide elaborated feedback in manageable units, small enough that it is not overwhelming.

4 Be specific and clear with the feedback message.

5 Keep feedback as simple as possible - just enough to help students.

6 Simple feedback relies on just one cue; complex feedback relies on multiple cues.

7 Remove uncertainty for learners; be clear about the gap between the performance and the goal.

8 Give unbiased, objective feedback.

9 Promote a focus on learning rather than performance e.g. by emphasising the role of effort and that mistakes are part of learning.

10 Provide feedback after learners have attempted a solution.

11 Do not give normative comparisons with other learners.

12 Be cautious about providing overall grades.

13 Do not discourage the learner or threaten their self-esteem.

14 Use praise sparingly, if at all.

15 Avoid hints that always directly lead to the correct answer; use prompts and cues, instead, to encourage thinking.

FINAL THOUGHTS

The best available research on feedback indicates that there is still a lot that we don't know about it; as such, teachers and leaders should focus on implementing feedback practices for which there is strong evidence. That is, the most effective feedback is focused on the learner's task, their processing of it, and their self-regulation; it is clear, specific, purposeful, and meaningful.

If you'd like to explore the topic of feedback in more detail then we recommend the Improving Teaching blog by Harry Fletcher-Wood.

In this blog, 'What kind of feedback moves students on?', Harry reflects on Hattie and Timperley's four levels of feedback in more depth.

Feedback and assessment are two sides of the same coin. Assessment gives us information which we can use to give feedback to the student. To learn more about the fundamentals of classroom assessment and feedback, take a look at Assessment Essentials - a great-value ten-week course for teachers.

It will support you to question and improve existing practices, and maximise the power of assessment as a tool for learning.

Find out more at www.evidencebased.education/assessment-academy

REFERENCES

Hattie, J., Gan, M., 2011. "Instruction Based on Feedback." In Handbook of Research on Learning and Instruction, 263–85. Routledge.

Hattie, J., Timperley, H., 2007. "The Power of Feedback." Review of Educational Research 77 (1): 81–112. https://doi.org/10.3102/003465430298487.

Kulhavy, R.W., White, M.T., Topp, B.W., Chan, J.A., 1985. "Feedback complexity and corrective efficiency." Contemporary Educational Psychology 10 (3): 285-291

Metcalfe, J., and Finn, B., 2011. "People's Hypercorrection of High-Confidence Errors: Did They Know It All Along?" Journal of Experimental Psychology. Learning, Memory, and Cognition 37 (2): 437–48. https://doi.org/10.1037/a0021962.

Narciss, S., and Huth, K., 2004. "How to Design Informative Tutoring Feedback for Multimedia Learning." Instructional Design for Multimedia Learning 181195

Ramprasand, A., 1983. "On the Definition of Feedback." Behavioral Science 28 (1):4-13.

Sadler, D.R., 1989. "Formative assessment and the design of instructional systems." Instructional Science 18:119-144

Shute, V.J., 2008. "Focus on Formative Feedback." Review of Educational Research 78 (1): 153–89. https://doi.org/10.3102/0034654307313795.

Evidence Based Education