

Cost **E**EEEE

Evidence strength

Impact (months)

Effect size

+6

0.48

What is it?

Feedback is information given to the learner about the learner's performance relative to learning goals or outcomes. It should aim to (and be capable of producing) improvement in students' learning.

Feedback redirects or refocuses the learner's actions to achieve a goal, by aligning effort and activity with an outcome. It can be about the output or outcome of the task the process of the task the student's management of their learning or self-regulation, or about them as individuals (which tends to be the least effective).

This feedback can be verbal or written, or can be given through tests or via digital technology. It can come from a teacher or someone taking a teaching role, or from peers (see Peer tutoring).

Key Findings

- 1. Providing feedback is a well-evidenced and has a high impact on learning outcomes. Effective feedback tends to focus on the task, subject and self-regulation strategies: it provides specific information on how to improve.
- 2. Feedback can be effective during, immediately after and some time after learning. Feedback policies should not over specify the frequency of feedback
- 3. Feedback can come from a variety of sources studies have shown positive effects of feedback from teachers and peers. Feedback delivered by digital technology also has positive effects (albeit slightly lower than the overall average).
- 4. Different methods of feedback delivery can be effective and feedback should not be limited exclusively to written marking. Studies of verbal feedback show slightly higher impacts overall (+7

months). Written marking may play one part of an effective feedback strategy – but it is crucial to monitor impacts on staff workload.

5. It is important to give feedback when things are correct – not just when they are incorrect. High-quality feedback may focus on a task, subject, and self-regulation strategies.

How effective is the approach?

Feedback studies tend to show high effects on learning. However, there are a wide range of effects and some studies show that feedback can have negative effects and make things worse.

There are positive impacts from a wide range of feedback approaches – including when feedback is delivered by technology or peers. Impacts are highest when feedback is delivered by teachers. It is particularly important to provide feedback when work is correct, rather than just using it to identify errors.

Many studies of feedback also include other practices. For example, mastery learning approaches combine feedback with additional support for pupils that are falling behind, while approaches like formative assessment also include work to understand specific gaps in learning that need to be addressed and how the teacher wants the pupil to progress.

Feedback has effects across all age groups. Research in schools has focused particularly on its impact on English, mathematics and, to a lesser extent, science.

Embedding formative assessment explicitly can be a key component of laying the foundations for effective feedback. The EEF has trialled <u>'Embedding Formative Assessment'</u> in English schools and found a positive impact, on average.

Evidence of feedback in the Arab world showed the powerful impact of teachers' written feedback on students' writing skills. Studies in Iraq, Jordan, Oman, and Saudi Arabia reported that whenever teachers provide students with optimistic and constructive written feedback, they become more encouraged to write and the quality of their writing improved. Peer feedback in UAE and Kuwait significantly improved students writing skills in English but also increased student's interaction and collaborative learning.

However, researchers have highlighted some potential barriers for teachers to use feedback as a teaching approach to correct students' errors. Examples include lack of teacher training on constructive feedback and large classroom size which delay teachers from following students' progress and providing suitable feedback for each leaner.

To date, research in computer-mediated corrective feedback is limited in this region despite the few reported benefits. More research is needed in this area, including using different methods and software packages, and examining different writing aspects.

Behind the average

Feedback appears to have slightly greater effects for primary school age pupils (+7 months) than for secondary (+5 months).

Effects are high across all curriculum subjects, with slightly higher effects in mathematics and science

Low attaining pupils tend to benefit more from explicit feedback than high attainers.

Although some studies have successfully demonstrated the benefits of digital feedback, effects are typically slightly smaller (+ 4 months).

Closing the disadvantage gap

There is evidence to suggest that feedback involving metacognitive and self-regulatory approaches may have a greater impact on disadvantaged pupils and lower prior attainers than other pupils. Pupils require clear and actionable feedback to employ metacognitive strategies as they learn, as this information informs their understanding of their specific strengths and areas for improvement, thereby indicating which learning strategies have been effective for them in previously completed work.

How could you implement in your setting?

Feedback may have a positive impact through supporting pupils to focus future learning on areas of weakness, through identifying and explaining misconceptions, through supporting them in taking greater responsibility for their own improvement or through increasing pupils' motivation to improve.

Implementing feedback successfully will require:

- communicate with pupils, teachers, and parents, about practices and expectations that relate to feedback policies,
- assessing pupil understanding, so that you know what needs to be improved,
- consider the 'opportunity cost' associated with different feedback practices,
- ensuring that feedback can be acted upon, for example through including specific information on what a pupil has done successfully or not, assisted with an explanation as to why,

- carefully considering how feedback will be received, including impacts on self-confidence and motivation,
- providing opportunities for pupils to act-upon the feedback after it has been given, evaluating how effective the feedback has been.

Feedback interventions vary in length. Some function as short, targeted approaches that address pupil misconceptions within the space of weeks or even days. Alternatively, others are used as more extended methods of tracking and supporting pupil progress over many months.

When introducing new approaches, schools should consider implementation. For more information see **Putting Evidence to Work - A School's Guide to Implementation.**

What does it cost?

The average cost of feedback and feedback interventions is very low. The cost to schools is largely based on training.

Implementing feedback and feedback interventions will also require a moderate and sustained amount of staff time, compared with other approaches.

Alongside time and cost, school leaders should consider how to maximise teacher professional development in supporting them to deliver effective feedback and avoid approaches that increase teacher workload without providing pupils with the necessary information to improve performance.

As yet there is no information about local costs.

How secure is the evidence?

The security of the evidence around feedback is rated as high. 155 studies were identified that meet the inclusion criteria of the Toolkit. Overall, the topic lost one padlock because a large percentage of the studies are not randomised controlled trials. While other study designs still give important information about effectiveness of approaches, there is a risk that results are influenced by unknown factors that are not part of the intervention.

As with any evidence review, the Toolkit summarises the average impact of approaches when researched in academic studies. It is important to consider your context and apply your professional judgement when implementing an approach in your setting.

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