



Chapter 3

Effective feedback

Key points

- Feedback is information provided to students that aims to communicate the gap between present and desired performance or understanding, as well as how to close this gap. It can serve to stimulate students' reflections on their learning, communicate teachers' expectations to students, and engage students in their learning.
- Feedback is an integral component of teaching, learning and assessment, with research suggesting it is one of the most powerful influences on student learning and achievement.
- Engaging with feedback requires a trusting and safe learning environment.
- Feedback that focuses on tasks, processes and student self-regulation is the most effective.
- All students should receive high-quality and timely feedback and understand how the feedback they are given is helpful for their learning.
- Feedback can only positively impact learning if students engage with it.

What is effective feedback?

Feedback is information provided to students that aims to communicate the gap between current and desired performance or understanding, as well as how to close this gap (Sadler 1989; Hattie and Clark 2019). This information can serve to stimulate students' reflections on their learning (Nicol and Macfarlane-Dick 2006; Brookhart 2012), communicate teachers' expectations to students, and engage students in their learning. Feedback comes in many forms – for example, formal, informal, formative and summative – and modes of delivery – for example, verbal or written. It can be provided individually or to the whole class.

Effective feedback is timely, actionable and culturally responsive. It should align with the learning intention and success criteria of a task (Hattie and Clark 2019). It should also focus on students' performance on a specific task, clearly identifying (Wisniewski et al. 2020; Mandouit and Hattie 2023):

- what was done well when performing the task
- where and why mistakes were made, and how to avoid them in the future
- how to improve their learning – 'where to next'.

What is 'timely' feedback?

Research on the relationship between feedback timing and performance suggests that results are largely task-dependent (refer to Kulik and Kulik 1988; Metcalfe et al. 2009; Yourstone et al. 2011; Arroyo and Yilmaz 2018; Butler and Woodward 2018; Canals et al. 2021; Lu et al. 2021).

In a literature review that explores the arguments for and against delayed and immediate feedback respectively, Shute (2008) posits that the timing of feedback should align with the outcome desired and the task at hand. **Immediate feedback** should be used for difficult tasks (relative to students' capabilities) to reduce cognitive load and ensure that students do not get frustrated, to promote the retention of procedural or conceptual knowledge, and to correct errors in real time (Shute 2008; Hattie and Clark 2019). In contrast, **delayed feedback** should be used for relatively simple tasks and to promote transfer of learning (Shute 2008; Hattie and Clark 2019).





What the evidence says

Why effective feedback matters

Feedback is an integral component of teaching, learning and assessment, with research consistently highlighting its importance to student outcomes. Several meta-analyses over the years have reported that feedback can lead to medium to high learning gains (for example, Hattie and Timperley 2007; Hattie 2009; van der Kleij et al. 2015; Wisniewski et al. 2020).

Effective feedback is a core strategy of explicit teaching, which supports student motivation and engagement (CESE 2024a; refer to Chapter 2: Explicit teaching). Recent research has found that effective feedback also contributes to other factors that positively impact student learning. For example, effective feedback:

- promotes **high academic expectations**, which supports the development of self-efficacy and provides motivation for continued effort and engagement (The Education Hub 2018; CESE 2020c; refer to Chapter 1: High expectations)
- is a central element of **growth goal setting** by supporting students to set personally relevant and challenging goals (Burns et al. 2021; CESE 2021c)¹
- fosters **everyday resilience** by increasing students' sense of control and self-efficacy (Anderson et al. 2020; CESE 2022b).²

The literature on feedback and self-efficacy suggests a bi-directional relationship. Feedback can positively or negatively impact one's self-efficacy; similarly, one's existing self-efficacy can impact how one views and responds to feedback (for example, refer to Karl et al. 1993; Nease et al. 1999; Hattie 2012; Akkuzu 2014; Brown et al. 2016; Adams et al. 2019; Hattie 2023). In addition to feedback, self-efficacy can be impacted by, and/or impact upon, other factors such as teacher-student relationships and teacher collective efficacy.

1 For more information, refer to [Growth goal setting - What Works Best in practice](#) (CESE 2021c).

2 For more information, refer to [Everyday resilience - What Works Best in practice](#) (CESE 2022b).

Engaging with feedback requires a trusting and safe classroom environment

For students to be actively engaged in their learning, it is important to build a learning culture where feedback is sought and welcomed (Brooks et al. 2021b). As such, it is important to foster a safe learning environment where mistakes are seen as learning opportunities, and feedback seen as an important part of growth and understanding (Brooks et al. 2021b; Hattie et al. 2021).

Underpinning this is the cultivation of trust between teachers and students, as well as among students (Hattie and Clark 2019). Carless (2013) identifies ‘competence trust’ and ‘communication trust’ as particularly relevant in feedback exchanges. Competence trust refers to students’ beliefs in a person’s ability to provide quality and useful feedback, and communication trust refers to students’ beliefs in a person’s willingness to tell the truth, admit mistakes, provide and receive feedback, and speak with good purpose. A lack of trust can negatively impact students’ feedback uptake. Students in low trust environments may perceive critical feedback as a personal attack and thus discount or refuse to engage with the feedback (Carless 2013; Yang and Carless 2013; Hattie and Clark 2019; Telio et al. 2016). Students may also be reluctant to seek and provide feedback, as well as ask for help or reveal what they do not fully understand (Carless 2013; Yang and Carless 2013).

To foster trust, teachers should establish positive teacher–student relationships by getting to know and understand their students, valuing their input and accomplishments, and using culturally responsive practices (Perso and Hayward 2020; Merrill O’Brien et al. 2022). In developing trust and positive relationships, it is also important for teachers to employ effective classroom management practices to create a positive and culturally inclusive environment for students (Perso and Hayward 2020; Merrill O’Brien et al. 2022; State et al. 2022; refer to Chapter 6: Classroom management).



Effective feedback need not be time-consuming

Verbal feedback can be a time-efficient mode of feedback delivery as it can be delivered in the moment and offers the opportunity for students to ask questions and teachers to adapt their feedback accordingly (Elliot et al. 2020). It can also be provided individually, to the whole class, or to a specific group with shared needs (Hattie and Clark 2019; Collin and Quigley 2021). For example, instead of giving individual feedback on a writing task or maths homework, verbal feedback can be provided to the whole class on areas of strength, common pitfalls or ways to improve that are relevant to the whole class.

Written feedback can be time-intensive, so careful consideration should be given to when it is needed and how it is delivered. Where written feedback is the most appropriate mode of delivery, in-the-moment feedback and coded annotations have been suggested as time-efficient strategies (Collin and Quigley 2021). In-the-moment feedback (also referred to as ‘live marking’) involves the teacher reviewing work as they move about the room, providing instant verbal feedback and only writing on student work where necessary. Coded annotations (also referred to as ‘coded marking’) involve teachers applying a letter or symbol ‘code’ to common student misconceptions and areas for improvement, rather than using whole words when providing written feedback.

Feedback that focuses on tasks, processes and student self-regulation is the most effective

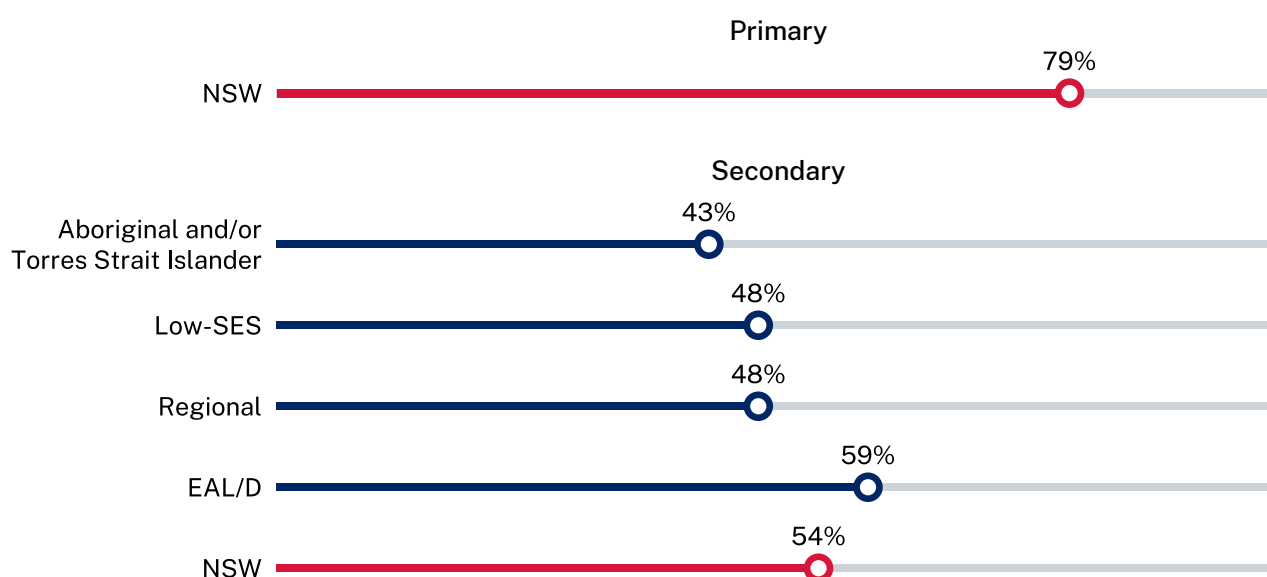
Feedback that is focused on the task level (“Please include more examples to support your argument”) is particularly useful during the early stages of learning. However, as students become more proficient, 2 types of feedback are more effective (Brooks et al. 2019; McPherson et al. 2022). The first type is feedback that focuses on students’ process or effort (“I can see you tried hard to improve X. The result is much better than last time because you did Y”). The second type is feedback that encourages students’ self-regulation (“You already know the key features of the opening of an argument. Check to see whether you have incorporated them in your first paragraph”). Feedback at the self-regulation level aims to help students manage their own learning through strategies such as self-monitoring, self-evaluation and help seeking. Teacher-provided self-regulation feedback encourages students to use metacognitive skills to determine the extent to which they understand a task, the strategies they have used and their progression towards learning goals (Merrill O’Brien et al. 2022).

Forms of feedback that are less effective include providing extrinsic rewards (such as stickers) and praising a student’s innate intelligence or talents. While praise can help create trust and positive teacher–student relationships, it offers little value for enhancing student learning if it does not also provide useful information about how to improve (Wisniewski et al. 2020; McPherson et al. 2022; Merrill O’Brien et al. 2022).

All students need to receive high-quality feedback

Research suggests there is variability in students’ perceptions about the amount of feedback they receive and whether such feedback is helpful (for example, Sortkaer 2018; Sortkaer 2019; van der Kleij and Adie 2020). NSW student survey data also shows differences in student perceptions of feedback. In NSW, secondary students report markedly lower amounts of helpful feedback (54%) on average compared with primary students (79%) (Figure 3.1). Equity gaps are also present among secondary cohorts, with Aboriginal and/or Torres Strait Islander, low-SES and regional students reporting lower levels of helpful feedback compared to the state average. However, secondary students learning English as an additional language or dialect (EAL/D) report experiencing above-average levels of helpful feedback. These sub-group differences are not seen in primary school cohorts.

Figure 3.1
 Percentage of students who report receiving helpful feedback, by student contextual factors, NSW public schools, 2024



Source: CESE analysis of Tell Them From Me data, collected from 153,159 primary students and 176,831 secondary students across 1,650 NSW public schools in 2024.

The research is not clear on whether these gaps are caused by teachers providing more feedback to certain students over others, students’ perceptions of receiving feedback, or a combination of both. Nonetheless, it is important for teachers to ensure that they provide feedback to all students and that all students perceive the feedback they are given as helpful for their learning.

Research exploring student perspectives on feedback has found that students strongly value forward-looking feedback that includes suggestions for future improvement (as opposed to ‘only’ corrective action) (William 2011; Hattie and Clark 2019; Walker et al. 2021; Mandouit and Hattie 2023). Students also value feedback that is personalised (Ferguson 2011; Walker et al. 2020) due to its perceived ability to inform future development.

Students should be supported to engage with feedback and improve their learning

To realise the benefits of feedback, it is important that students are supported to actively engage with feedback by making sense of the comments provided about their performance and using it to improve their learning.

Teachers should first ensure that students are able to recognise and understand the feedback they receive. In a study on secondary teachers and students' perceptions of verbal feedback, van der Kleij and Adie (2020) reported that students did not recognise around one-third of teacher feedback provided during lessons. Additionally, even when feedback was recognised, students did not understand its intent the majority of the time. The study also found differences in feedback perceptions among students – at no point did all students recognise the same interaction as feedback, and some students perceived feedback in a similar way to the teacher while other students did not. As such, it is important that teachers follow up to check on students' understanding of feedback. Hattie and Clark (2019) suggest teachers can use the following questions to check student understanding: “What did you understand from what I just said? How would you use this feedback in your next learning step? Is there more you want from me right now to help you in your learning?”

Students can be supported to engage with feedback through processes that position them as active participants in their learning. Outlining a student-centred feedback model, Brooks et al. (2021a, 2021b) identify 3 processes that combine to create a feedback loop that develops self-regulation skills. The first process is clarifying what success looks like, which can be achieved by discussing exemplars and establishing shared understanding of success criteria with students. The second and third processes are checking in on progress and promoting improvement, which involve developing student self-assessment skills and supporting students to identify how to improve, respectively. Brooks et al. (2021a, 2021b) suggest this can be facilitated through practices such as class discussions and bump-it-up walls.³ To support student agency, teacher-provided feedback should contain suggestions that are specific enough that students can recognise next steps without prescriptively telling them what to do (“Think about the multiplication strategy we practised yesterday. If one of the numbers is 10, what can you do to multiply the numbers?”).

³ Bump-it-up walls, also known as ‘improvement walls’, are a resource co-constructed by teachers and students that display work samples of differing quality mapped against the success criteria. To ensure transfer of learning, the work models are from a different context to the task at hand.

Peer assessment can help develop self-assessment skills as it provides an opportunity for students to internalise learning goals and success criteria, as well as identify strategies for improvement (Wiliam 2011; Carless and Boud 2018; Hattie and Clark 2019).⁴ However, similar to self-assessment, peer-assessment requires substantial support and coaching to be effective (Topping 2009; Brookhart 2017; Carless and Boud 2018; Hattie and Clark 2019). Students may also have problems trusting that their peers can provide useful feedback or may view providing comments as ‘not their job’ (Panadero 2016).

4 For the purposes of this chapter, peer assessment refers to formative peer assessment which involves students providing feedback on drafts before final submission. It does not refer to summative peer assessment (that is, peer grading).

Other What Works Best 2025 resources on effective feedback



- What Works Best 2025 practical guide – Effective feedback
- What Works Best 2025 illustration of practice – Effective feedback at Cabramatta High School



This is an extract from the **What Works Best 2025 – Evidence guide for excellent schools.**

The full evidence guide provides an overview of the evidence that underpins each of the 8 themes: high expectations, explicit teaching, effective feedback, using data to inform practice, assessment, classroom management, wellbeing and collaboration. It also includes the references for the sources cited in this chapter.

For the full suite of What Works Best 2025 resources, including practical guides and illustrations of practice, scan the QR code or visit [education.nsw.gov.au/about-us/education-data-and-research/what-works-best](https://www.education.nsw.gov.au/about-us/education-data-and-research/what-works-best).



Centre for Education Statistics and Evaluation
GPO Box 33, Sydney NSW 2001, Australia

✉ info@cese.nsw.gov.au

🌐 [education.nsw.gov.au/cese](https://www.education.nsw.gov.au/cese)

🗨️ yammer.com/det.nsw.edu.au

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