



Chapter 2

Explicit teaching

Key points

- Explicit teaching consists of a set of principles that inform a range of dynamic and responsive teaching strategies.
- It involves teachers clearly explaining, demonstrating and modelling to students, and students being given opportunities to show their understanding, ask questions, practise using skills and knowledge they have learnt, and receiving clear, timely feedback.
- When implemented effectively, explicit teaching leads to improved learning outcomes. It works because it aligns with how students process, store and retrieve information.
- Explicit teaching can benefit all students irrespective of background or learning needs because it allows for teachers to be responsive to students' prior knowledge, and to the differences in time, repetition, pacing and guidance that different students may require.
- The clear, structured and interactive learning environment created by explicit teaching has been found to improve student motivation and engagement.
- Explicit teaching does not exclude the use of other teaching strategies, but it should be used in most lessons, particularly when learning is new or complex.



What is explicit teaching?

Explicit teaching consists of a set of principles that inform a range of dynamic and responsive teaching strategies. It involves:

1. teachers clearly explaining, demonstrating and modelling to students:
 - why they are learning something
 - what their learning goals are
 - how it connects to what they already know
 - what they are expected to do
 - how to do it
 - what it looks like when they have succeeded.
2. students being given opportunities and time to:
 - show their understanding of what has been taught
 - ask questions to clarify and build understanding
 - practise using skills and knowledge they have learnt
 - receive clear, timely, effective feedback.

Explicit teaching does not involve:

- students engaging in independent learning activities and problem-solving before teachers provide the necessary explanations, demonstration or modelling
- teachers making instructional choices without adjusting to what students know, understand and can do
- teachers being required to use scripts
- the teacher spending most of the lesson talking, and students not having the time to practise and action feedback
- removing opportunities for students to engage in creative or imaginative tasks.

A note on ‘explicit teaching’, ‘explicit instruction’ and ‘direct instruction’

The terms ‘explicit teaching’, ‘explicit instruction’ and ‘direct instruction’ are often used interchangeably in the literature. While all refer to structured teaching approaches that move from modelled to guided to independent work as students demonstrate understanding and mastery, the choice of terminology varies across different researchers and institutions. This chapter uses the department’s preferred term ‘explicit teaching’ while referencing external resources that may use ‘explicit instruction’ and/or ‘direct instruction’.

What does the evidence say?

Why explicit teaching matters

Extensive research in both cognitive science and classroom practice suggests that, when implemented effectively, explicit teaching leads to improved learning outcomes, particularly for students who are learning new or complex material (refer to Clark et al. 2012; Evans and Martin 2023). Hattie’s (2023) synthesis of research concludes that explicit teaching strategies can improve learning more than other teaching practices. By structuring content in a careful sequence, teachers help students manage cognitive load while progressively building knowledge. This sequenced approach also facilitates retention of learning as students regularly revisit prior material and integrate new knowledge with what they already know.

Explicit teaching strategies can benefit students across a range of year groups, backgrounds, ability levels and subjects when learning new or complex concepts or skills (Martin 2016). The benefits of explicit teaching have been found across key learning areas. For example, explicit teaching is an effective practice in reading (Castles et al. 2018; Buckingham 2020), spelling (Robinson-Kooi and Hammond 2020), writing (Finlayson and McCrudden 2020), mathematics (de Bruin et al. 2023), science (Cairns and Areepattamannil 2022) and visual arts (van de Kamp et al. 2016). Explicit teaching can also be used to effectively teach and model classroom rules and routines (Epstein et al. 2008, Alter and Haydon 2017).

The positive relationship between explicit teaching and student outcomes is also found in NSW public schools. CESE research, drawing on the perspectives of over 16,000 secondary students, examined whether explicit teaching improves achievement.¹ The research investigated this effect over and above student characteristics such as prior achievement and socioeconomic status (SES), and independently of any other What Works Best practices used at the same time.

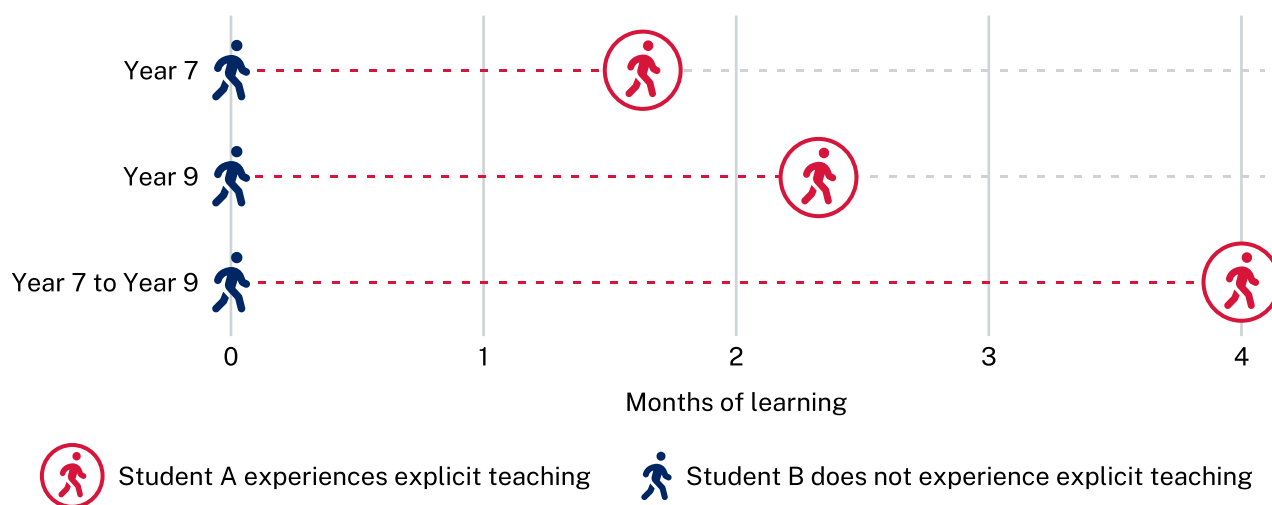
¹ This analysis used responses from the Tell Them From Me survey. The survey measured experiences of explicit teaching by asking students about everyday classroom practices such as their teacher setting clear goals, asking questions to check for understanding and providing useful feedback. Most items measure how often students recall teachers using specific strategies in the classroom. For further information refer to CESE’s (2024b) [Explicit teaching drives student motivation, engagement, and achievement in NSW public schools – a What Works Best research update](#).

This research calculated the difference in NAPLAN score points between 2 hypothetical students within the same hypothetical school.² These students were identical in a range of measurable attributes (for example, SES and prior academic performance) except for their responses to questions about explicit teaching: Student A reported having a teacher who uses explicit teaching practices; Student B did not. The results showed that explicit teaching contributes to improved learning gains (in terms of NAPLAN scores) in both the short and long term (CESE 2024b; Figure 2.1):

- In the short term, explicit teaching has a positive effect on NAPLAN results. In Year 7, a student who reports receiving explicit teaching practices is, on average, 1.8 months ahead in learning than a peer who does not report receiving explicit teaching. In Year 9, this increases to 2.4 months of learning.
- The benefits of explicit teaching are long lasting – when a student reports receiving explicit teaching practices in Year 7, they are on average 4 months ahead in learning by Year 9, even if they do not continue to receive explicit teaching after Year 7.

Figure 2.1

Relative learning gains reported by students who report receiving explicit teaching compared to those who do not



Source: CESE (2024b)

² One way of reporting the differences in NAPLAN scores between these hypothetical students is to use a months-of-progress approach to understanding relative student progress and learning gaps (Goss et al. 2016). This approach measures the months of learning it would take the typical NSW Year 7 or Year 9 student to move from one NAPLAN score to another.

Explicit teaching works because it aligns with how students process, store and retrieve information

Explicit teaching works because its structured and systematic approach aligns with how students learn (Clark et al. 2012; Evans and Martin 2023). When they are learning something, students process new information in working memory and ultimately store it as knowledge in long-term memory (refer to CESE 2017a). However, when working memory is overloaded, there is greater risk that the content being taught will be misunderstood or misinterpreted by the learner and so will not be effectively encoded in long-term memory (Martin 2016). Explicit teaching strategies such as chunking and sequencing effectively manage the cognitive load students experience when learning new or complex concepts and skills, optimising their ability to process and retain information (CESE 2017a; AERO 2023e).

The effectiveness of explicit teaching also depends on teachers knowing their students and building on their students' prior knowledge. It requires teachers to have sufficient subject matter expertise so they know the knowledge and skills students need to succeed in a unit of learning. This includes recognising and meaningfully incorporating the diverse linguistic, cultural and experiential backgrounds of learners (Perso and Hayward 2020; CESE 2021b; Eacott et al. 2021; AERO 2024a).

Explicit teaching can benefit all students

Explicit teaching is a versatile approach that can support students across all year groups and ability levels (Martin 2016). The fundamental mechanisms of learning that underpin explicit teaching – namely, transferring information from working memory into long-term memory to build knowledge and understanding – apply to all students. However, the time, repetition, pacing and guidance required can vary between individuals (AERO 2023d). To accommodate these differences, explicit teaching strategies such as chunking and sequencing of learning, scaffolding during modelling, guided and independent practice, and feedback can be used responsively to meet the learning needs of a wide range of students. For example, explicit teaching is beneficial for learners who might struggle in less-structured environments (AERO 2023d) and can support those with difficulties in memory capacity and language processing navigate cognitively demanding tasks (Therrien et al. 2017). Explicit teaching also plays a vital role in supporting high potential and gifted students learn new skills and content (Carroll 1994; Martin 2016). Practices like modelling and guided practice allow these students to transition more rapidly to independent work once they have gained sufficient expertise (Yeung et al. 1998; Leslie et al. 2012).

Explicit teaching supports motivation and engagement

When implemented effectively, explicit teaching is not the same as lecturing or rote learning. Rather, it is a highly interactive, engaging teaching practice (for example, refer to the case studies for [Blue Haven Public School \[CESE 2019a\]](#) and [Balgowlah Boys Campus \[CESE 2022a\]](#)). A growing body of empirical research suggests that explicit teaching practices may help maintain or even potentially increase student motivation and engagement (Likourezos and Kalyuga 2017; Martin and Evans 2018; CESE 2021c; also refer to AERO 2023e).

Illustrations of interactive and engaging explicit teaching in the classroom

- AERO's video series showcasing case studies of [Explicit instruction in English, maths and science](#) and at [Loxton Primary School](#) (AERO 2022a–d)
- AITSL's illustrations of practice of explicit instruction in a [composite class](#), for [language learning](#), [physical education](#), [number fluency](#) and [numeracy](#) (AITSL 2017a–e)

Explicit teaching practices can positively impact motivation and engagement by reducing extraneous cognitive load, that is, the mental effort spent on non-essential elements that do not contribute to learning (Martin 2016). Studies show that when students experience extraneous cognitive load during a task, they are less likely to believe that they can successfully perform such tasks, accomplish goals and overcome challenges, independent of their actual performance in the task (Likourezos and Kalyuga 2017; Feldon et al. 2018).

Explicit teaching practices also provide students with structure which allows them to feel a sense of competence, recognise their growing competence, and get support when they are yet to achieve competence. When students understand what is expected of them in both content and the classroom environment, they are less likely to switch off, showing higher levels of attention, effort and persistence and lower levels of misbehaviour (Jang et al. 2010; Vansteenkiste et al. 2012; Evans and Martin 2023).

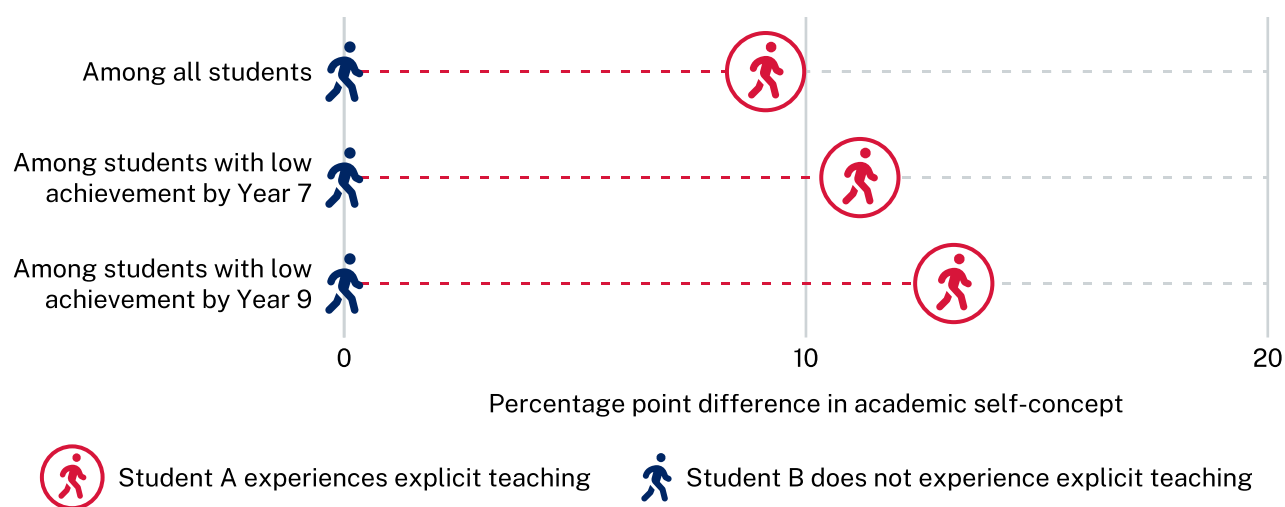


In NSW public schools, CESE research suggests that explicit teaching practices can increase student motivation and engagement. This, in turn, is likely to contribute to improved learning outcomes. Explicit teaching supports motivation, engagement, and improved learning outcomes in the following ways:

- Explicit teaching fosters students’ self-confidence in their academic abilities, their growth goal setting and perseverance, particularly among students with lower prior achievement (CESE 2021c; CESE 2024b). On average, a student who reports receiving explicit teaching has academic self-concept levels that are 9 percentage points higher than those of a student who does not. When a low performing student in Year 5 (bottom 2 NAPLAN bands) reports receiving explicit teaching in Year 7, their academic self-concept is 11 percentage points higher than a student who does not receive explicit teaching. This effect increases to 13 percentage points in Year 9 (Figure 2.2).
- Explicit teaching practices – particularly those involving instructional relevance – contribute considerably to low-SES students’ academic agency – that is, their ability to take an active and self-directed role in their own learning and educational experiences (CESE 2024d).
- Explicit teaching supports students’ adjustment to their new learning environment when transitioning to secondary school (CESE 2024e).

Figure 2.2

Impact of explicit teaching on student motivation and engagement



Note: The figure compares Student A, who experiences explicit teaching, with Student B, who does not. The percentages indicate the relative increase in motivation and engagement levels associated with explicit teaching across different student cohorts. The scale reflects relative differences in motivation and engagement, not absolute measures. While all students have some level of motivation and engagement, those who experience explicit teaching report higher levels than those who do not.

Source: CESE (2024b)

Explicit teaching should be used in most lessons, particularly when learning is new and complex

Explicit teaching does not exclude the use of other teaching strategies, but the sequence and frequency of their application are crucial. Research suggests that when explicit teaching principles are thoughtfully embedded in complex and open-ended tasks (such as research) it helps students navigate problems by reducing cognitive load (Therrien et al. 2017).

A widely recognised approach – summarised as ‘I do (modelling), we do (guided), you do (independent)’ – facilitates the gradual release of responsibility. This approach transitions students from teacher-led demonstrations to teacher-guided practice and, ultimately, to independent application of their learning. Structuring learning in this way allows teachers to provide scaffolding that is responsive to students’ readiness and needs. The 3 phases (modelling, then guided and independent practice) can be iterative, and teachers may need to move between modelling and guided practice, and between guided and independent practice numerous times within a lesson or over several lessons. This will depend on factors such as student age and stage of learning, the complexity of the content, the key learning area and the needs of individual students.

Explicit teaching supports the automation of foundational skills that provide the basis for creative, problem-solving and critical thinking processes (CESE 2019b; Evans and Martin 2023). For example, in visual arts, explicit teaching of metacognitive skills increases originality (van den Kamp et al. 2016). In mathematics, attaining fluency in basic facts for addition, subtraction, multiplication and division can support students by freeing up working memory, making complex mathematical problem-solving tasks more manageable. While not a strict prerequisite for working mathematically, fluency plays an important role in reducing cognitive load and enhancing problem-solving efficiency (AERO 2023c).

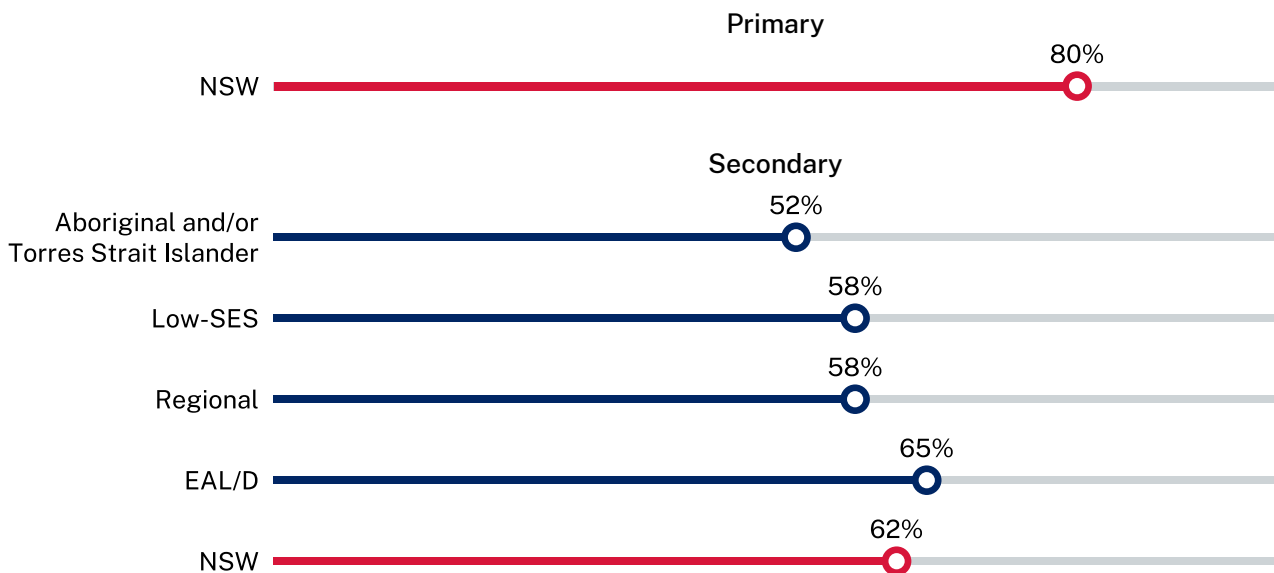
As students develop familiarity and confidence with the skills and knowledge of a subject, guidance can be reduced, enabling more independent practice and engagement with complex problem-solving tasks (Pearson & Gallagher 1983; de Jong et al. 2023; Sweller et al. 2023). The ‘expertise reversal effect’ describes the interaction between the knowledge of the learner and the optimal amount of guidance. Students with low knowledge or skill of a topic respond best to a high level of guidance while learning, while students with high knowledge or skill respond best to a lower level of guidance. This effect – and the importance of adaptive teaching – becomes greater as students progress through school (Tetzlaff et al. 2025).

Students report receiving varying regularity of explicit teaching across different stages of schooling and contextual factors

In NSW public schools, most students report receiving explicit teaching regularly, though it is reported by considerably fewer secondary (62%) than primary students (80%) (Figure 2.3). As secondary students continue to learn new and complex skills, they too should receive explicit teaching in most lessons. Equity gaps are also more pronounced in secondary school than in primary school. For example, when compared with the state average, fewer students from low-SES backgrounds, Aboriginal and/or Torres Strait Islander backgrounds, and regional, rural and remote schools report receiving explicit teaching.

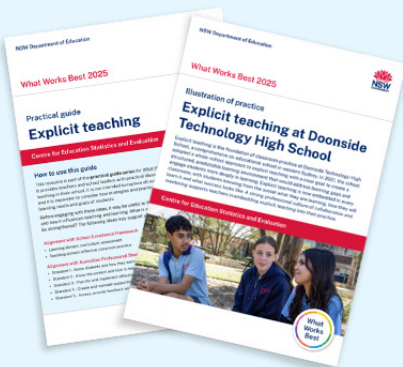
Figure 2.3

Percentage of students reporting explicit teaching 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.

Other What Works Best 2025 resources on explicit teaching



- [What Works Best 2025 practical guide – Explicit teaching](#)
- [What Works Best 2025 illustration of practice – Explicit teaching at Doonside Technology 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.



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