

Chapter 5

Assessment

Key points

- Assessment is a key source of information for teachers to monitor student progress, inform next steps in teaching, determine the effectiveness of teaching strategies, and provide evidence of student understanding.
- The primary role of assessment is to establish where individuals are in their learning so that teaching can be adjusted and further learning progress can be monitored over time.
- Assessment is most effective when it is an integral part of teaching and learning programs. It should have a clear purpose that aligns with student learning, measures what it intends to, and considers how the data will be used.
- Accurate conclusions about student learning are reliant on tasks that are rigorous, valid and reliable, and teachers making consistent and comparable judgements.
- Explicit success criteria help students to understand and actively engage in their learning.
- Assessment capability is an essential teaching skill, and professional learning has a key role in strengthening assessment practices.

What is assessment?

Assessment is the process of identifying, gathering and interpreting information about student achievement (NESA 2024). In other words, it is a means to gather evidence to determine what students know, understand and can do (Perso and Hayward 2020). Assessment encompasses a variety of methods that teachers can use to evaluate, measure and gauge student understanding to inform teaching and learning. It can be used to document students' academic readiness, learning progress, skill acquisition and educational needs. Assessment also provides feedback on teaching practice and instructional effectiveness.

There are a variety of methods available to educators to interpret the quantity and quality of student learning (Hattie 2023). These include the informal questions, teacher judgements and observations that occur in classrooms, as well as formal examinations, standardised tests, class tests, work samples and analysis of student portfolios. The department's <u>Assessment modes</u> advice (Figure 5.1) conceptualises this variety of forms of assessment into 4 modes of assessment that range from less formal to more formal: unstructured (general classroom observations), slightly structured (pre-planned observation opportunities), more structured (pre-programmed class assessment) and most structured (large-scale standardised assessment).

Figure 5.1

Modes of assessment (NSW Department of Education 2024b)

Less formal

- Assessed frequently
- Fewer outcomes assessed (targeted)

More formal

- Assessed infrequently
- More outcomes assessed (broad)

Modes	Unstructured General classroom observation	Slightly structured Pre-planned observation opportunities	More structured Pre-programmed class assessment	More structured Large-scale standardised assessment
Examples	For example: • unplanned observations and questioning of: • skills • dispositions • content understanding	For example: • quizzes • hinge questions • planned observations • reviewing student work • peer and self-assessment	For example: • scheduled in-school assessments • on-demand assessments • practical assessments • reviewing work samples against criteria	For example: NAPLAN Check-In Assessments VALID Science HSC examinations

Embedded timely, effective feedback

The different modes of assessment each provide valuable information to assist teachers in making on-balance judgements of student learning.

Assessments can be formative, summative or both formative and summative, depending on their purpose and how the information they generate is used. Formative assessment 'involves the ongoing use of information about students' knowledge, understanding and skills to target teaching and address student learning needs' (NESA 2025a). It occurs throughout the teaching and learning process, allowing opportunities for feedback. This feedback serves to refine teaching strategies and guide students' future learning. Summative assessments occur at specific points in time and indicate a student's achievement level against curriculum standards, learning progressions, population norms and other defined learning objectives. Summative assessment can also be used formatively to provide information about student learning to a given point in time and to monitor learning progress over time (NESA 2025b).

What the evidence says

Why assessment matters

High-quality student assessment enables teachers to effectively monitor student progress, identify appropriate next steps, evaluate the impact of their teaching strategies on both learning and engagement, and measure student understanding of a unit of work (Stronge 2002). Assessment does not just apply to learning at the micro level, but also serves a larger purpose. As Tognolini and Stanley (2007) note, it is an essential element in the development of human capital and capability building in education, involving the evaluation of learning for a purpose.

A carefully considered combination of formative and summative assessment tasks can significantly impact learning culture. Assessment tasks provide teachers with invaluable information to assist students in identifying and overcoming barriers to their learning and enrich the overall learning experience (Graham et al. 2018). Studies show that substantial learning gains are possible when teachers use a range of assessment strategies in their classroom practice (Ponte et al. 2009). In their influential work on assessment, Black and Wiliam (1998) analysed over 250 studies and found that formative assessment leads to significant learning gains. They also found that improved formative assessment helps 'low attainers' more than other students. However, improvements in student outcomes as a result of formative assessment initiatives can take time (Dobson and Fudiyartanto 2023).

Assessment provides information so that teaching can be adjusted and learning progress can be monitored

Assessments provide teachers with information about what students know and can do at a point in time, which informs professional judgements about the next steps in learning. Masters (2013) states that assessments should be based on an understanding that learners can be at very different points in their learning, but that all are capable of progress if motivated and provided with appropriate learning opportunities. As such, the primary role of assessment is to establish where individuals are in their learning so that teaching can be adjusted and further learning progress can be monitored over time. Sometimes all students in a class or cohort will be assessed at the same time, but it is not always necessary. At other times, only an individual student or a group of students will need to be assessed.

Less structured assessments (for example, observations and questioning) provide valuable information for teachers to make in-the-moment professional judgements. However, more structured assessments also serve important purposes to inform teaching and learning. The following table presents examples of these types of assessments and their intended purpose.

Example assessment types and their teaching and learning purpose

Example assessments	Teaching and learning purpose	
NAPLAN, Progressive Achievement Tests (PAT) and other standardised tests These are typically administered under strict protocols at a specific time of year, and are not intended to be used frequently.	To compare achievement between groups of students or against benchmarks to ensure student achievement is on track in comparison with expected outcomes both against their peers in other schools and over time.	
Best Start Kindergarten, the Year 1 Phonics Screening Check (and forthcoming Number Screening Check) and annual Check-In Assessments These and other low-stakes, standardised assessments are typically administered at specific time points.	To screen all students to identify and then provide greater assistance to students who are not yet meeting expected outcomes.	
Formal diagnostic assessments (for example, Wechsler Individual Achievement Test III [WIAT-3]) These are standardised assessments mostly administered by allied education and health professionals, such as psychologists and speech pathologists.	To generate a diagnosis and/or identify specific strengths and weaknesses in the learning abilities of individual students for whom more detailed information is required than general assessments provide.	

Assessment is most effective when it is an integral part of teaching and learning programs

Assessments need to provide curriculum-relevant information for teachers to view them as informative for teaching and learning (Timperley 2009). Incorporating a variety of assessment modes into teaching and learning programs helps to create clear connections between the curriculum and assessment information. A variety of assessment modes are needed because more formal and structured assessments often provide information too late to be useful for making adjustments to day-to-day teaching (Leahy et al. 2005). Embedding less formal assessments throughout a unit of learning allows for assessment information to be used to make responsive adjustments to instruction. For example, assessment is integral to effective explicit teaching as teachers frequently check for student understanding and make on-the-spot judgements to determine when concepts or skills need to be retaught or remodelled, when and what types of scaffolding students need, and when students are ready to progress to more independent practice.

Wiliam (2011) and Black (2016) have described models of effective assessment and instruction in similar terms.

Wiliam (2011:46) articulates the following elements of effective assessment practice:

- clarifying and understanding learning intentions and criteria for success
- engineering effective classroom discussions, questions and tasks that elicit evidence of learning
- providing feedback that moves learners forward
- activating students as instructional resources for each other
- activating students as owners of their own learning.

Black (2016) proposes a slightly different model that incorporates assessment at various stages:

- Step 1 formulating clear aims
- Step 2 planning learning activities
- Step 3 implementation of planned learning activities
- Step 4 review of learning
- Step 5 formal summative assessment.

Step 3 and Step 4 of this model include using a range of assessment modes to check for student understanding (for example, informal teacher observations, reviewing student classwork and evaluating written responses to daily reviews).

Both models recognise that assessment is most effective when it is part of the broader teaching and learning program, rather than just an 'add-on' at the end of a unit of work. These models also both recognise that assessment for formative purposes benefits from planning. Van der Steen et al. (2023) suggest that a successful formative assessment plan will accommodate for individual class contexts, incorporate data collection and allow flexibility for adjustment as the teaching period progresses.

Effectively embedding assessment in teaching and learning programs can also encourage active engagement of students in their own learning (for example, by creating opportunities to engage with feedback) (Alonzo et al. 2023). Teachers can also incorporate self- and peer-assessment into teaching and learning programs to engage students and support their agency in evaluating their own learning (Arnold 2022). For example, a Hong Kong-based study exploring the effects of self-assessment diaries on Grade 7 students' performance found that they significantly enhanced students' academic achievement, with results suggesting that students with lower prior achievement benefited more from the diary than students with higher prior achievement (Yan et al. 2020).

When implementing peer assessment, it may be beneficial to first strengthen students' skills through simulated tasks to help mitigate potential negative aspects such as issues of poor-quality feedback, inconsistent feedback due to social networks within a class, or students' apprehension towards peer assessment (Scott 2016).

Accurate conclusions about student learning are reliant on rigorously-constructed assessment tasks, and teachers making consistent judgements

Less formal modes of assessment enable teachers to continually check for understanding and assess students' progress. However, for teachers to draw accurate conclusions about student learning, careful consideration needs to be given to the construction of pre-planned and pre-programmed assessments (for example, student work samples, essays, presentations, assignments and projects). Masters (2013) identifies 4 attributes of high-quality assessment tasks:

- Validity: the degree to which an assessment accurately measures those things the teacher is attempting to measure.
- **Reliability:** the extent to which an assessment produces stable and consistent results over time, and with different learners and assessors.
- **Objectivity:** the conclusions drawn from assessments not being dependent on which specific assessment task is used or who does the assessing.
- Inclusiveness: the ability of an assessment to provide useful information about the achievements and progress of all students, and not underestimate nor overestimate achievement or progress because of student gender, physical ability, cultural background, socioeconomic status or geographical location.

Perso and Hayward (2020) note that cultural validity is an essential component of assessment design in Australian schools. Students' interpretation of assessment content and how they respond in assessment contexts can be shaped by the influence culture can have on aspects of students' perception, thinking and behaviour.



The consistency of teacher judgements also influences the accuracy of assessments. Consistent teacher judgement requires teachers to have a shared understanding of what is being assessed and then apply that understanding consistently when making judgements about student learning. Shared understanding can be supported by using well-constructed marking rubrics, success criteria, or guidelines. Research into the emerging comparative judgement method of writing assessment suggests it is a reliable and efficient alternative to rubrics for assessing and rating writing quality (Pinot de Moira et al. 2022). Masters (2013) notes that collaboration (for example, moderation activities) can also increase consistent and comparable teacher judgements. Furthermore, consistent teacher judgements are central to the objectivity of assessment:

For example, when teachers judge student progress against the levels of a developmental continuum in writing, and when their judgements are consistent across different samples and kinds of student writing, and are consistent with the judgements of their colleagues, then writing assessments can be said to be made 'objectively'. (Masters 2013:40)

For more information and resources refer to the NSW Department of Education Consistent teacher judgement webpage.

Explicit success criteria help students to understand and actively engage in their learning

Communicating success criteria is important for student understanding of learning goals and reflection on their learning. Well-constructed rubrics can be a useful tool for teachers to communicate and clarify the targets of instruction and can provide rich information about the extent to which the success criteria have been achieved by individual learners (Lyna et al. 2016). Multiple studies have also shown that welldeveloped and implemented rubrics help students understand, apply and generalise the success criteria, which leads to improved student outcomes. A meta-analysis of 23 studies found an overall significant positive effect of using rubrics on student academic performance (Panadero et al. 2023). Further analysis of the studies found that the best results were obtained when teachers clearly explained the content of the rubric and how to use it, as well as the use of rubrics in a sequence of production and revision that led to incremental improvements (a form of guided practice). Lower results were achieved when rubrics were not sufficiently aligned to the specific task with respect to skill development and the subject knowledge required (Jonsson et al. 2025). Clear success criteria can also support more accurate student self-assessment. For example, using assessment rubrics resulted in higher accuracy and a reduction in bias and cognitive load for students conducting selfassessment of their progress (Krebs et al. 2022).

A well-constructed rubric should contain criteria aligned to the learning intention(s), a performance scale (typically with 3 or 4 levels) and clearly articulated descriptors of the key aspects of understanding, proficiency or quality that provide distinctions between each level of the scale (McTighe and Frontier 2022; McTighe et al. 2024).

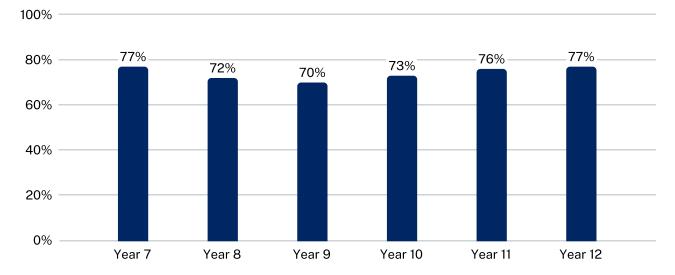
From a student equity perspective, Love and Crowell (2018:37) note that having clear and explicit success criteria is important as they:

'level the playing field by making explicit what success looks like ... so students don't have to guess what's on the teacher's mind – a phenomenon that tends to privilege students whose backgrounds are similar to teachers'.

Survey data from NSW public schools indicates that student perceptions of receiving clear expectations for assessments varies at different stages of schooling (Figure 5.2). When asked if teachers give expectations before an assessment, 77% of Year 7 students report this occurs in most or all lessons. This decreases to 70% of Year 9 students, before increasing in the senior years (76% and 77% of Year 11 and Year 12 students respectively). It is not clear if these differences are caused by teachers explaining their expectations more frequently to some year cohorts compared to others, student perceptions of receiving explanations, or a combination of both. However, regardless of the underlying cause, the data suggests there is an opportunity for teachers to check that their students – especially those in the middle years of secondary school – recognise and understand the expectations they give for assessments (including success criteria, work samples and exemplars).

Figure 5.2

Percentage of students reporting their teachers explain their expectations before an assessment by year level, NSW public schools, 2024



Source: CESE analysis of Tell Them From Me data, collected from 176,831 secondary students in 2024.

Assessment capability is an essential teaching skill, and professional learning has a key role in strengthening assessment practices

Assessment capability is an important but complex part of effective teaching practice. A wide range of skills and knowledge contribute to a teacher's assessment capability, enabling them to gather accurate information about student learning and use that information to make judgments about next steps and to reflect on the effectiveness of their practice. To support teachers in building this capability, systems are needed to ensure they have multiple opportunities to deepen their understanding of effective assessment and related pedagogical considerations (Timperley 2009). A professional learning plan may be helpful for identifying and progressively building the skills and knowledge needed for assessment capability, although any plan should acknowledge that development needs will change throughout a teacher's career (Coombs et al. 2018:135).

Professional learning and development can positively influence teachers' assessment capabilities and can contribute to improved student learning. For example, Yan (2021) identified that professional development enhanced Hong Kong teachers' skills in formative assessment, which enabled them to implement formative assessment more frequently and appropriately – especially when on-site support by professional learning facilitators was also provided (for example, classroom observations and consultation). There is some evidence to suggest that supportive professional communities have an important role to play in enhancing teachers' assessment capability. Speckesser et al. (2018) investigated a UK-based trial of a whole-school professional development program of monthly teaching and learning communities to implement formative assessment strategies. Across the 140 schools involved, significant progress towards Stage 4 equivalent learning outcomes was observed in groups of lower-attaining students. In addition, teachers reported an overall positive experience from engaging in valuable dialogue and experimentation with formative learning strategies.

Other What Works Best 2025 resources on assessment



- What Works Best 2025 practical guide Assessment
- What Works Best 2025 illustration of practice Assessment at Warrimoo Public 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 <u>education</u>. nsw.gov.au/about-us/education-data-and-research/what-works-best.



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