

What Works Best 2025

Practical guide

Using data to inform practice

Centre for Education Statistics and Evaluation

How to use this guide

This resource is part of the **practical guide series** for What Works Best 2025. It provides teachers and school leaders with practical ideas for using data to inform practice in their school. It is not intended to capture all aspects of using data to inform practice, and it is important to consider how strategies and practices should be responsive to the learning needs and goals of students.

Before engaging with these ideas, it may be useful to first consider your current practice, and how it influences teaching and learning. What is working well, and which areas could be strengthened? The following ideas may support you when planning next steps.



What is ‘using data to inform practice’?

‘Using data to inform practice’ in this document refers to the process of leveraging information about student learning or wellbeing to guide decision-making to improve student outcomes. For example, data may be used to:

- identify starting points and next steps for teaching and learning
- monitor and evaluate student learning progress, achievement and wellbeing
- guide decisions about adjusting teaching strategies in response to individual student and cohort strengths and needs
- strengthen the effectiveness of feedback given to students about their learning
- evaluate the effectiveness of teaching and learning programs
- inform ongoing school improvement efforts.

Data can take many forms and may come from a range of sources, including informal teacher observations, student work samples, class tests, on-demand diagnostic assessments, formal assessments and examinations. It can also include surveys and interviews, as well as feedback from students, teachers, families and the community.¹

Data may be quantitative or qualitative. Quantitative data is information that can be presented as a set of numbers from which averages, counts, percentages, differences or totals can be created. Quantitative data can be useful to answer questions about ‘how many/much’, ‘how often’ or ‘to what extent’. Qualitative data is information that tends to include thoughts, observations, feelings, opinions and/or experiences. It can be useful to answer questions about ‘what’, ‘how’ and ‘why’ (CESE 2018).

To use data effectively, it is important to have a clear purpose for collecting data and to identify how it will be used to inform teaching and learning. Collecting too much data, or collecting data without a clear purpose, makes it harder to find meaningful information in the data and can impose additional workload.

Why does using data to inform practice matter?

Teachers need to monitor learning over time to understand what impact their teaching is having and to ensure that every student is making sufficient progress (Goss et al. 2015; AERO 2024). The effective use of data is a critical foundation for high expectations, explicit teaching, effective feedback and assessment. It underpins the teaching and learning cycle, where each phase is supported by ongoing monitoring and assessment. Goss et al. (2015) assert that timely access to relevant information about student learning is essential for teachers to target their teaching effectively. This includes:

- access to specific baseline data to establish where each student is starting from and what they are ready to learn next

1 For the purposes of this and other What Works Best practical guides and illustrations of practice, ‘families’ includes biological parents, adoptive parents, step-parents, legal guardians, kin carers, out-of-home (foster) carers, extended family members and other significant adults with caring responsibilities.

- frequent feedback to ascertain whether students are learning what teachers are trying to teach them
- awareness of when learning has stalled, so that teachers can take prompt action to get the student back on track.

The relationship between using data to inform practice and explicit teaching

Coupled with effective assessment practice, the analysis of well-chosen sources of student data provides guidance for teachers' decisions about planning and programming for explicit and systematic teaching.

Data privacy and management

Data collected by schools should be stored securely and used, accessed, disclosed and/or disposed of in accordance with relevant privacy legislation and department policies. For more information on how to implement effective data management practices, refer to the department's [Information management webpages](#) (🔒 staff only).

Culturally responsive and inclusive use of data

When planning for and working with data, it is important to consider the goals and aspirations of all students and to work in partnership with students, their families and the local community.

This is particularly important when working with data to support Aboriginal and/or Torres Strait Islander student outcomes as it is essential to understand what is and is not valued, as well as what is or is not working for students, their families and their communities.

The [Re-imagining Evaluation Framework](#) provides advice on 6 guiding principles that can be used to ensure culturally responsive and inclusive decisions and processes in schools:

1. Our Students and Aboriginal Family Sovereignty
2. Relationships
3. Place
4. Yarning
5. Responsibility and Credibility
6. Empowering Change.

The guiding principles of the framework are interconnected, with Our Students and Aboriginal Family Sovereignty at the core. For these principles to be applied meaningfully and authentically, it is important that they are considered upfront before data is collected, analysed or actioned. Example 4 in this practical guide explores one way of applying the culturally responsive principles by looking at using data to develop effective personalised learning pathways (PLPs).

Using data in your teaching practice

This section outlines key considerations when using data to enhance teaching and learning. It sets out the main steps involved in collecting and transforming data as described in [What Works Best 2025 evidence guide](#) – Chapter 4: Using data to inform practice. These steps are:

1. identify a clear purpose for collecting data
2. collect the relevant data
3. analyse and interpret the data
4. take action based on the data.

The next section, ‘Examples of using data to inform practice’, provides examples of how these steps can be implemented in a variety of school settings.

Step 1: Identify a clear purpose for collecting data

What it looks like in practice

Identify key questions that you need answered to support your practice. Having a clear question in mind will inform what data needs to be collected and when it needs to be collected. Being clear about the purpose of data collection ensures that time and resources are used effectively and efficiently and that data is not collected unnecessarily.

Key considerations

- Consider what key questions need to be answered and how this information will support decision-making. For example, will you be looking at individual student and class data to guide lesson planning? Or are you more interested in understanding what is happening at a stage level or across a specific group of students to inform programming decisions? Specifically, some of the questions you might be asking could include:
 - How have students progressed in their learning relative to specific syllabus outcomes?
 - Which students are struggling with what skills?
 - How effective are my teaching methods?
- Ensure that any data to be collected will provide the information needed.
- Consider how data collection could align with key phases of the [teaching and learning cycle](#).
- Consider whether data is already available that could be used to answer the key questions identified.
- If new data is to be collected, consider the time and resources required to collect and analyse the data relative to the benefit to be derived from the data.
- Reflect on what data might not be available and how this might shape the picture formed. For example, it can be hard to access meaningful data on students’ cultural or racial identity and disability, as well as other factors that impact student experiences and outcomes.

Step 2: Collect the relevant data

What it looks like in practice

Collect data that will provide information about the key questions identified. Data sources can include teacher observations, in-class quizzes, feedback forms, family feedback, formative and summative assessments, and attendance and wellbeing data. Where feasible and relevant, collect multiple sources of data – not just assessment data – to provide more accurate findings and a more rounded picture of each student’s learning, engagement and wellbeing (Datnow and Park 2018).

Key considerations

- Consider what tools are available that could assist with the data collection process.
- Consider the validity of the measures that will be used. How well do the data collection strategies measure what they are meant to measure?
- Consider how the data collection tools and method(s) might influence the reliability of the data. How likely are the data collection tools and method(s) to give the same results on repeated trials?
- When using data from assessment tasks, ensure that the tasks are high quality (valid, reliable, objective and inclusive) and that the information collected aligns with the identified purpose for collecting data.²
- Where appropriate, include student voice when collecting data. For example, students could fill in a feedback form to provide information on what they found easy and challenging in a particular lesson and identify areas of learning they think they need to focus on. Student voice can be a valuable source of data to inform school improvement.

Step 3: Analyse and interpret the data

What it looks like in practice

Use a range of analysis techniques such as contextualising, categorising, calculating, connecting and/or summarising data to establish a clear understanding of what the data could indicate.³ These actions are about looking at the data in ways that help to draw out wider trends and answer the questions of interest. For example, student assessment data could be grouped by class to look at learning growth across different classes and contextualised by considering the circumstances and environment in which the assessments took place. Relevant contextual factors may include the school context, the timing and conditions under which the data was gathered (such as assessment type) and characteristics of the students (such as socioeconomic background). Student data could also be compared across years or classes to identify wider trends by using resources such as [Scout](#) (🔒 staff only) or the [Results Analysis Package \(RAP\)](#).

2 Refer to Chapter 5: Assessment in the [What Works Best 2025 – Evidence guide for excellent schools](#) for more information on attributes of high-quality assessments.

3 Refer to the department’s [Analysis of data and evidence](#) (🔒 staff only) webpage for explanations and examples of these analysis techniques.

Interpreting data may involve triangulation, which is the practice of using multiple sources of data to provide a comprehensive understanding on a topic or question. For example, a teacher can use triangulation by looking at students' in-class assessments, classroom participation and NAPLAN results to understand how well the students are learning. Comparing multiple sources helps the teacher to get a clearer and more accurate picture of students' progress.⁴

Another method for analysing and interpreting data for learning and teaching is forming an on-balance judgement. This approach supports a holistic professional judgement of learning that considers what the teacher knows about the student in relation to performance standards. This can be informed by observations from the classroom and students' work, as well as more formal assessment information. It is frequently used in assessment practice to determine a fair judgement of what a student knows, understands and can do at a point in time.⁵

When interpreting what the data means, key questions to consider include:

- Are the patterns consistent across all data sources? If not, what does this tell me?
- What is the key message from the data?
- Do I need more information to interpret the data accurately?

Key considerations

- Ensure that the analysis strategy is appropriate for the types of data you have collected and the questions you want to answer.
- Apply an equity lens when analysing and interpreting data – teachers and school leaders can refer to the Equity for excellence guide for schools (🔒 staff only).

For example:

- foster a high-expectations mindset when analysing and interpreting data by critically reflecting on existing beliefs and assumptions about students and their capability⁶
- consider the unique factors, diversity, strengths and challenges that might affect the data in a regional, rural or remote learning community using the department's Regional, rural and remote lenses (🔒 staff only)
- keep in mind that broad trends and observed correlations can be useful to identify barriers and inform strategies and programs, but they do not address the experience of individual students – it is important to not assume students within a demographic grouping are homogenous and have the same strengths or support needs.
- Consider how you might collaborate with colleagues to enhance your analysis and interpretation of data.⁷

4 Refer to the department's Data types – strengths and limitations webpage for more information on data triangulation.

5 Refer to Chapter 5: Assessment in the What Works Best 2025 – Evidence guide for excellent schools for more information on effective assessment practices.

6 Refer to the What Works Best 2025 practical guide – High expectations for more information on how to foster high expectations in the classroom and across the school.

7 Refer to Chapter 8: Collaboration in the What Works Best 2025 – Evidence guide for excellent schools for more information on effective collaboration practices.

Step 4: Take action based on the data

What it looks like in practice

Identify and implement practices that address key findings from the data. For example, if the data identifies areas where students need support or improvement, plan targeted strategies to address these needs.

Consider what decisions can be made based on the data findings and what type of action is needed to ensure that all students are challenged and successful. For example:

- modifying teaching and learning programs
- adjusting learning materials and the school or classroom environment
- providing additional support for individual students and/or the whole class
- collaborating with colleagues, families and/or the community
- determining if additional data is required.

Key considerations

- Where appropriate and feasible, consider including students and their families in key decision-making. For example, when gathering data and information to develop PLPs for Aboriginal and/or Torres Strait Islander students, meet with students and their families to identify key goals they would like to achieve.
- Consider how you might collaborate with school leaders and other colleagues to develop targeted strategies that address the trends or gaps identified in the data.
- Regularly monitor the impact of actions taken and consider any adjustments, additional actions or future data use required to support student needs.

Examples of using data to inform practice

This section provides 4 examples of how the steps outlined in the previous section can be implemented across primary, secondary, school for specific purposes (SSP) and central school settings. The examples illustrate how data can be used to enhance achievement of teaching and learning goals.

Example 1: Primary school – improving mathematical vocabulary

Step 1 – Identify a clear purpose for collecting data

Recent mathematics assessments indicate that mathematical vocabulary is an area for improvement for Year 5 students. Specifically, school leaders and teachers notice a gap in student understanding when it comes to language related to addition and subtraction.

The teachers decide to collect more data, recognising that gaps in students' mathematical vocabulary often indicate deeper gaps in their understanding of key mathematical concepts.

The teachers also want to better understand the language learning needs of their students learning English as an additional language or dialect (EAL/D) and how they can best support these students in this.

Step 2 – Collect the relevant data

The teachers collect information on students' knowledge of key mathematical vocabulary from the syllabus. They plan to assess usage and understanding of vocabularies related to the Stage 3 Mathematics syllabus outcome: selects and applies appropriate strategies to solve addition and subtraction problems (MA3-AR-01). They use:

- quizzes
- exit slips
- classroom observation notes
- Newman's error analysis (🔒 staff only)
- vocabulary knowledge scale for assessment (🔒 staff only)
- conversations with the EAL/D teacher about students' understanding of mathematical vocabulary, including when using their first language or dialect.

Step 3 – Analyse and interpret the data

Teachers come together to examine the data in a fortnightly stage meeting. The teachers triangulate data from the different sources of information listed in step 2. They notice there is a range of vocabulary that most students in the class are missing and that this is consistent across the different data sources. The variance in misunderstood terms is greater for EAL/D learners, highlighting that each EAL/D learner has a different level of English language proficiency and different previous experiences of mathematics instruction.

The teachers use a shared spreadsheet to enter the key vocabulary, categorising the words into tier 1 words (everyday spoken words), tier 2 words (academic words that occur across a variety of domains and subjects and often have multiple meanings based on the context they are used in) and tier 3 (low-frequency words that are often limited to specific topics and domains). This allows the teachers to map usage and understanding of vocabulary for each student.

The teachers work together to analyse the data in the spreadsheet. They look for patterns and notice that most students appear to be having greater difficulty with understanding tier 1 and tier 2 vocabularies than tier 3 vocabularies in the context of worded addition and subtraction problems.

They consider how the gaps in students' understanding of tier 1 and 2 vocabularies might be a barrier to their ability to meet the syllabus outcome, and the action they as teachers need to take. For example, they identify that most students seem to be mixing up 'increase' and 'decrease' and decide it is an area that needs revisiting in class. They also notice that 4 students have consistently shown gaps in their understanding across all vocabulary tiers and determine that these students need more intensive support.

For the EAL/D learners, the teachers look in more detail at what support students might need to develop and consolidate how language is used in numeracy contexts. They notice that their EAL/D learners are frequently misunderstanding ‘false friends’.⁸ Grouping by EAL/D phase, the teachers review the data for their EAL/D learners against the [EAL/D learning progression](#) and have conversations with the EAL/D teacher to determine what additional support each student may require. The EAL/D teacher recommends [Supporting EAL/D learners with numeracy \[PDF 238KB\]](#) (NSW Department of Education 2025) as a supporting resource.

Step 4 – Take action based on the data

Teachers determine the action they will take based on the data, including:

- planning explicit teaching that builds tier 2 vocabulary, consolidates tier 1 vocabulary in context (such as ‘take away’, ‘off’, ‘in all’ and ‘plus’) and breaks down the common numeracy phrases in which tier 1 and 2 vocabularies are found – the explicit teaching does not solely focus on what the words mean, but also how they work and how students can use them effectively to meet the syllabus outcome
- planning opportunities to model, appropriate and recast tier 1 vocabulary in context for EAL/D learners
- using [additive strategies](#), adapting where appropriate to ensure contextual teaching of vocabulary
- introducing a glossary journal with examples and non-examples for tier 1 and 2 words and common numeracy phrases
- creating multiple opportunities for students to demonstrate their knowledge of mathematical vocabulary, such as through drawings or the use of concrete materials, to enable ongoing monitoring
- adjusting learning goals and teaching support for individual students as needed, providing high-support and high-challenge learning environments⁹
- meeting with the EAL/D teacher to plan and adjust support for individual students as appropriate
- planning and programming for frequent and appropriately spaced opportunities for students to retrieve key vocabulary – for example, through the use of vocabulary maps, [Frayer diagrams](#) (🔒 staff only) or [think boards \[PDF 98KB\]](#) (NSW Department of Education 2025).

Teachers monitor student progress and update the spreadsheet to track student growth. They also continue to use the EAL/D learning progression to monitor EAL/D learner progress in language proficiency. They use insights gathered from ongoing monitoring to continue refining their teaching strategies.

⁸ A ‘false friend’, in a numeracy context, is a word that looks or sounds similar to an everyday English word, but has a separate, specialised meaning related to a mathematical or numerical concept. Examples include ‘mean’, ‘odd’, ‘positive’ and ‘difference’.

⁹ Refer to the department’s [Planning for teaching](#) webpage for more detailed resources on planning differentiated support for EAL/D learners, including curriculum and lesson adjustment.

Example 2: Secondary school – identifying student skill level for programming and extension

Step 1 – Identify a clear purpose for collecting data

In a small, rural high school, the Year 11 visual arts teacher wants to better match programming to student skill level and explore opportunities for High Potential and Gifted Education (HPGE) extension.

Being a small school, the teacher has had the chance to get to know the students well, particularly in terms of personalities and individual needs. There are 6 students in the class. The teacher knows there are varying levels of artistic skill and understanding of art concepts, but she would like to determine this for each student more precisely.

Step 2 – Collect the relevant data

At the beginning of Term 1, the teacher assesses students’ preliminary artmaking to evaluate their abilities in their choice of material practice: drawing, painting, printing or digital media. Before conducting the assessment, she considers the most appropriate methods. As the only visual arts teacher at the school, she uses the Creative Arts Statewide Staffroom to seek advice and input on approaches to assess individual students’ needs.¹⁰ She also organises a video meeting with a critical friend who is a visual arts teacher at another rural public school in NSW.

The teacher develops a rubric with criteria for creativity, technique, composition and use of materials, as well as conceptual practice to support the intention of the artmaking, to provide a comprehensive overview of each student’s strengths and areas for improvement.

The teacher holds one-on-one sessions with each student to gather students’ perceptions of their own skills, interests in different art forms and their preferred media.

Step 3 – Analyse and interpret the data

When collating and cross-referencing the skills assessment data with students’ self-reported data, the teacher looks for patterns, gaps and students’ confidence in their art practices to identify where to support further development.

She holds a video call with her critical friend to discuss her initial analysis and sense-check the data.

After bringing together the various points of data, the teacher identifies that several students are interested in printmaking and demonstrate great creativity but lack the technical skill to reach their potential. She also identifies that one of her students – who has so far not presented as very engaged in class – has high potential in digital media, but little experience. This is based on the student demonstrating that they express themselves in creative ways and are very quick to learn new techniques but sometimes feel frustrated and disengaged when their other skills are slower to develop.

¹⁰ Statewide Staffrooms are online collaborative spaces where teachers can access high-quality resources and expert advice, as well as connect with colleagues from across NSW.

Step 4 – Take action based on the data

Using this knowledge, the teacher adjusts a unit on traditional and experimental methods in printmaking, with a view to hosting a local arts showcase of the work produced upon completion of the unit. The showcase will be part of the region’s annual spring festival and will highlight the strong connections the school has with its community. It will also include visual arts work by students from other grades, as well as work and performances by students from other subject areas, including technology and applied science (TAS), music and dance.

The teacher works with the student who displays high potential in digital media to develop promotional materials in digital media for the art showcase. The student plans, designs and creates a suite of materials, including posters, flyers, tickets and signage. The student also creates a short film and photography collection documenting the other students in their printmaking artistic process.

The teacher approaches other teachers from the creative and performing arts (CAPA) and TAS faculties to coordinate the showcase.

Example 3: School for specific purposes – assessing phonological awareness

Step 1 – Identify a clear purpose for collecting data

Primary teachers from an SSP want to assess students’ phonological awareness skills to determine next steps for phonics instruction, both for individual students and the whole class.

Step 2 – Collect the relevant data

Teachers use classroom observations and planned activities to assess students’ phonological awareness skills and establish baseline data.

They use the [Literacy and Numeracy Precursors tool](#) in ALAN (Assessing Literacy and Numeracy), focusing on the phonological awareness sub-element to record:

- each student’s indicator status
- the interactional prompts that were needed to support the student
- any additional information that may be useful in the ‘comments’ section.

Teachers make any adjustments that students need to demonstrate the skills being assessed.

Step 3 – Analyse and interpret the data

During a K–6 staff meeting, teachers are given time to analyse and interpret the data.

They look for patterns and trends and use students’ indicator statuses to determine the next steps for instruction in phonological awareness for each student.

They also consider any movement in the level of interactional prompting required for each student. The teachers notice that for several students, although their indicator status has not changed, the number of interactional prompts they require has reduced, moving from needing lots of additional prompts to a few. One student has progressed from needing a lot of prompting to being able to demonstrate a skill independently. These movements indicate that all students are making some progress in their capability.

The teachers agree the data suggests that their instructional approach is on track and decide to continue with a focus on differentiated phonics instruction.

Step 4 – Take action based on the data

Recognising the development and progress achieved by all students, the educators in the SSP provide individual feedback to each student that acknowledges and celebrates their achievements.

The teachers determine that they will continue to provide literacy instruction that strengthens phonological awareness skills. This includes:

- planning systematic, point-of-need explicit teaching that is differentiated to address each student's individual learning requirements
- developing activities and resources that are engaging and accessible for students
- supporting students to use their preferred mode of communication to develop their phonological awareness skills
- using the Literacy and Numeracy Precursors to determine goals and discuss them with families
- using data and insights for consultation and collaboration in the planning and review of student support
- reassessing the skills identified and explicitly taught to identify any gaps in students' understanding and determine next steps in phonics instruction.

Example 4: Central school – developing school-wide, consistent practice for personalised learning pathways

Step 1 – Identify a clear purpose for collecting data

A central school in rural NSW identifies that they want to develop a consistent, localised and relational approach to PLPs for their Aboriginal and/or Torres Strait Islander students.

To focus their efforts, the principal, Aboriginal Education Committee (AEC),¹¹ Aboriginal education staff, relevant teachers and PLP mentors read and engage with the personalised learning pathways guidelines.

The school's AEC, including relevant school leaders, meets and works with their local Aboriginal Education Consultative Group (AECG) and Junior AECG to develop a bespoke, whole-school PLP template that meets the unique needs of their students, school, families and community.

¹¹ Refer to the department's [Guide to establishing an effective Aboriginal Education Committee \[PDF 147KB\]](#) for more information on the purpose, composition and responsibilities of an AEC.

The template identifies key PLP data sources: previous PLPs, academic measures, work samples and attendance figures. Other relevant sources include insights from conversations and yarning with the student as well as people who know the student well – this can include Aboriginal Education Officers (AEOs), Aboriginal school learning support officers (ASLSOs), school learning support officers (SLSOs), teachers and families. The team chooses these data sources in consultation with students, families and community. They also make sure the data sources respect the 6 culturally responsive principles contained within the Re-imagining Evaluation Framework: Our Students and Aboriginal Family Sovereignty, Relationships, Place, Yarning, Responsibility and Credibility, and Empowering Change. Working collaboratively from the outset, the team ensures decisions are not made **for** Aboriginal and/or Torres Strait Islander students and families, but **with** them.

Step 2 – Collect the relevant data

To empower change and support responsibility and credibility, the principal sets a deadline for when PLPs need to be prepared and creates space in the school timetable for the team – that is, the teachers, Aboriginal education staff (for example, AEOs) and PLP mentors – to get it done.

The team engages with students, their families and their teachers to build relationships of mutual trust and respect, making sure to centre and honour connection to place and Country in their interactions. They prioritise time for ongoing yarning, listening and co-planning with Aboriginal and/or Torres Strait Islander students, families and communities in a culturally responsive environment.

Teachers, PLP mentors and Aboriginal education staff respect the culturally responsive principle of Our Students and Aboriginal Family Sovereignty by proactively communicating with students and families so that they understand that they have a right to decide what data is collected and why, as well as how their data and information are collected, stored, accessed and used.¹² They discuss and agree on who has access to this data.

The PLP template supports teachers and PLP mentors to collaboratively, strategically and purposefully gather and collate data from multiple sources.

Collating the data in the PLP template supports effective information sharing, which enables consistency, continuity and progression of students' goals through transitions. This could be formal transitions, such as high school students with multiple teachers, Year 6 students moving into Year 7, or even starting a new school year in a new grade. It could also include supporting transitions that are less structured, such as when students are required to attend family or cultural obligations, or transitioning back into school from extended absences for reasons such as Sorry Business.

12 Our Students and Aboriginal Family Sovereignty is a guiding principle within the Re-imagining Evaluation Framework that honours the centrality of family, which encompasses the kinship structures that exist in Aboriginal people's lives. The guiding principle recognises the inclusion of Aboriginal families in decision-making processes where culturally responsive consultation is a right, not a privilege or concession. Refer to the department's [What does Our Students and Aboriginal Family Sovereignty mean?](#) webpage for more information on how this principle can be implemented.

Step 3 – Analyse and interpret the data

Using the PLP template allows teachers to contextualise, categorise, calculate, connect and summarise the data consistently. This helps teachers to build a holistic understanding of their students, including their strengths, challenges and what motivates them to succeed at school and beyond. Such an understanding, in turn, supports high expectations when guiding students towards achievable PLP goals.

Teachers, PLP mentors and Aboriginal education staff identify any gaps in students' data. They spend time getting to know and understand the students, as well as yarning with students about their aspirations, to understand the bigger picture behind the data. They use the department's [Student voice through yarning](#) resource to support and guide this process.

The team notices that some students are less confident articulating their aspirations, so they consider alternative ways of supporting students to identify their goals. They focus on building strong relationships in which students feel safe to confidently articulate their own aspirations. They observe that deep, authentic insights emerge from sustained relationship building, not one-off engagements.

Step 4 – Take action based on the data

Teachers and PLP mentors assist students to identify specific, measurable, achievable, realistic, time-bound, evaluative and rewarding (SMARTER) goals.¹³ Crucially, they make sure Aboriginal and/or Torres Strait Islander voices shape the teaching and learning priorities through joint planning sessions and decision-making processes where open, ongoing dialogue is promoted.

As they are getting close to agreeing on goals, teachers and PLP mentors conduct yarns to provide students and families with the opportunity to confirm, adjust or challenge proposed actions. Together, they identify negotiable and non-negotiable goals, giving the students more ownership and clarity on responsibility. The students know they can always talk to their teacher, Aboriginal education staff and/or PLP mentor to adjust negotiable goals as they go, empowering them to identify challenges early and proactively create solutions. This iterative approach builds credibility and shows responsibility by ensuring decisions truly reflect what Aboriginal and/or Torres Strait Islander students and families want.

After goals have been agreed, teachers and PLP mentors make sure students and families know how to access the PLP and feel comfortable approaching them to discuss any questions or concerns. They continue to meet and work with students and their families, using insights gathered and the data in the PLP template to plan for informal yarning and regular check-ins, and to keep conversations focused and track progress.

At the end of each term and school year, the school decides to host celebration afternoons that showcase students' achievements, highlight community contributions and reinforce the collective effort. This empowers ongoing cycles of change where students, families, staff and the community can celebrate success together and refine next steps for their PLPs.

¹³ Refer to the NSW Department of Education's (2025) [Personalised learning pathways guidelines](#) for more information on SMARTER goals.

School leaders play an important role in promoting and facilitating effective data use in schools

Creating the conditions for consistent and sustainable practice

School leaders can help ensure whole-school consistency, accuracy and sustainability in the use of data to inform practice. This includes implementing quality assurance processes to provide systems and structures for recording collected data. This helps to minimise data entry errors and inaccurate conclusions, which can impact significant decisions based on that data. Regularly reviewing data collection routines and systems is a helpful way to ensure that data sources continue to be relevant and do not contribute to unnecessary work for teachers. School leaders can also provide guidance on what data sources teachers should be collecting to ensure priority student cohorts are accurately represented and ensure consistency across the whole school. Using consistent sources and types of data over time helps establish a clear baseline of where each student is starting from and how they are progressing.

Providing professional learning opportunities

School leaders can enhance teachers' data literacy through professional learning opportunities. This could include providing opportunities that focus on building teachers' capacity to obtain detailed information about student learning, as well as teachers' capacity to tailor their teaching to address individual students' needs (Datnow and Hubbard 2016).

Monitoring and supporting implementation

School leaders can also work with teachers to regularly monitor and reflect on the implementation of strategies to enhance effective data use as part of an ongoing improvement cycle. For example, time could be dedicated in staff meetings to discuss the actions taken and the impact on teaching, learning and wellbeing outcomes.

Creating the conditions for the effective use of data to inform practice

School leaders can also build and facilitate a school culture that values quality assessment and is responsive to the effective use of data. This includes providing teachers with access to data and ensuring that they are involved from early in the process so that the relevance to students in their classes is clear and they are able to contribute to key decision-making.

Further, school leaders can promote teacher collaboration in assessment practices and the effective use of data by facilitating the establishment and operation of data teams. In regional, rural and remote settings – where schools may have fewer students or small teaching teams – forming data teams across a cluster of similar schools can be a useful approach. Data teams have the potential to reduce isolation, enhance individual teachers’ professional growth and lead to increased data use in schools, which in turn can lead to school improvement (Schildkamp and Handelzalts 2011 as cited in Schildkamp and Lai 2013). Teachers who work together can leverage their colleagues’ expertise and test their interpretations of the data, reducing the potential for inaccuracies and inconsistencies that may be associated with individual teacher judgements (Goss et al. 2015). Refer to the department’s [Consistent teacher judgement](#) webpage for more information.

Other What Works Best 2025 resources on using data to inform practice

- [Evidence guide](#) – Chapter 4: Using data to inform practice
- [Illustration of practice – Using data to inform practice at Lucas Gardens School](#)

Additional resources

- Centre for Education Statistics and Evaluation (CESE) (2023) [Glossary of data and evaluation terms](#)
- CESE (2019) [Data collection and analysis for evaluation – reference guides for teachers](#)
- NSW Department of Education (2025) [Analysis of data and evidence](#) (🔒 staff only)
- NSW Department of Education (2025) [Equity for excellence guide for schools](#) (🔒 staff only)
- NSW Department of Education (2024) [Data analysis resources – guiding advice](#)
- NSW Department of Education (2024) [Digital learning centre](#) (🔒 staff only)
- Australian Education Research Organisation (AERO) (2025) [Using data in MTSS: progress monitoring](#)
- AERO (2025) [Using data in MTSS: screening](#)
- Australian Institute for Teaching and School Leadership (AITSL) (2020) [Using learner data](#)
- AITSL (2017) [Analysing data to improve student learning](#)

Reflection questions

Teachers

- What sources of data do I use to identify my students' learning, wellbeing and engagement needs? What are the strengths and limitations of these data sources?
- What strategies do I use to analyse and interpret data? How can I collaborate with colleagues to do this more effectively?
- How do I ensure I apply an equity lens when analysing and interpreting data?¹⁴ What opportunities do I provide for family and student voice when using data to inform practice?
- How do I take action based on the data? How do I monitor the impact of the actions taken?
- How do I know I am using data effectively? Am I collecting the most relevant, accurate and timely data? What assumptions might I be making about the data?
- Do I need to seek out professional learning opportunities to use data more effectively?

School leaders

- What professional learning opportunities are provided in our school to build teachers' capability to engage with data and use it accurately, strategically, inclusively and meaningfully?
- Is data in our school collected and used for a clear purpose? How do we know? Is there any data that we should stop collecting?
- What consistent processes and systems are in place to record data in our school? How do these support teachers' use of data to modify teaching practices? How do they support consistent use of data across the school excellence cycle?
- How do our systems and processes support privacy and security of data?¹⁵
- How does our school's use of data support wellbeing and inclusion?¹⁶
- What opportunities are provided for teachers in our school to collaborate on the use of data to inform practice?
- Are there any relevant opportunities to collaborate with students, families and communities on the use of data?
- What actions could we take to strengthen our data practices as a school?

14 Refer to the [Equity for excellence guide for schools](#) (🔒 staff only).

15 Refer to the department's [Information management webpages](#) (🔒 staff only) for guidance on a range of data management topics, such as what data can be shared and with whom, as well as links to data standards policies and procedures.

16 Refer to the department's [Achieving school excellence in wellbeing and inclusion tool](#) for examples of successful inclusion and wellbeing practice that integrate key documents such as the School Excellence Framework and the NSW Wellbeing Framework for Schools.

References

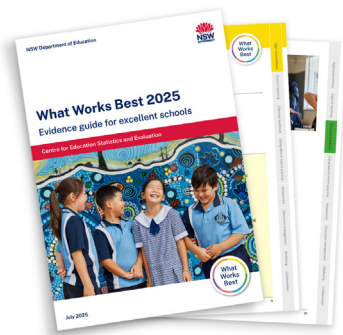
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Access the full suite of What Works Best resources

What Works Best 2025 is a suite of resources for teachers and school leaders that outlines 8 effective practices that are known to improve student learning and wellbeing:

- high expectations
- explicit teaching
- effective feedback
- using data to inform practice
- assessment
- classroom management
- wellbeing
- collaboration.

The resources can be used individually or in conjunction with one another to implement evidence-based, quality teaching and learning practices and inform school excellence planning.



The What Works Best 2025 – Evidence guide for excellent schools provides an overview of the evidence that underpins each of the 8 themes.



The What Works Best practical guides translate evidence into practice by providing teachers and school leaders with practical ideas for implementing each of the themes in their classrooms and schools. The guides unpack not only ‘what’ should be done to successfully implement a theme, but also the ‘how’ and ‘why’.



The What Works Best illustrations of practice provide teachers and school leaders with examples of how some of our great schools from across NSW have implemented the themes.

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