

Data literacy for teachers – A Deep Dive

Teachers as expert evaluators of their *practice effectiveness* – Overcoming the ‘assessment to practice’ gap

Overview: Modern education is literally awash with data, be it: formative or summative, qualitative or quantitative, achievement or progress, demographic or perception based. Our collective challenge is to utilise this information skillfully and deliberately, to make a difference for students.



When teachers collaboratively analyse valued data, using this to reflect on the effectiveness of their practice, this then informs their next steps in teaching and student learning outcomes are enhanced.

Teachers who develop this level of data literacy are on the very edge of innovation as they tackle one of the greatest challenges facing 21st century education, ‘How did I go?’ This new way of thinking positions data as an assessment of teacher effectiveness rather than the traditional view of a demonstration of ‘what students know’.

From the research: ‘One of the greatest shifts to have occurred in educational assessment theory and practice in recent years is recognition that assessment is most effective when it is integrated with teaching and learning.’ *Reassessing assessment*, NSW Education Department (2015)



“Assessment serves a dual purpose, to prove and improve.” (Watanabe-Crocket, 2019, Future proofing our learners)

“Teachers need a variety of ways of assessing their students’ progress, ways that included but go beyond standardised testing. These include interviews with students about their learning, systematic analysis of student work, and classroom observations.” (Timperley, 2008, Teacher professional learning and development)

Across the day: Participants learn how to make informed decisions about what data to gather, how to gather it effectively and most importantly, how to use it to guide teaching decisions. We start by introducing innovative ways to engage with data common to schools including PAT Reading and PAT Mathematics, before extending teacher skills to include the ability to convert any pre/post data sets to an effect size. As a result, teachers are now able to engage with data the focuses on student progress, as well as the traditional perspective of achievement. The final step is engagement with our teacher data analysis protocol; [Assessment 2 Practice Collaboration Cycle](#), where teachers learn how to use data to collaboratively inquire into their effectiveness, and then identify their next teaching steps, providing them with an evidence informed basis for their development.



This professional learning experience will be successful when you leave with:



- an understanding of the place of assessment tools that identifies achievement and progress
- the ability to measure the effectiveness of your teaching based on student learning outcomes and feedback
- a willingness to make critical decisions about ‘what needs to be learnt next’ and the teaching strategies that will be employed, as a result of pre-post data analysis
- an in-depth understanding of the data analysis protocol for teacher teams, Assessment 2 Practice Collaboration Cycle, that provides a structure to the process of teacher reflection and guides teaching strategy selection and development