

# TeachWise

RESEARCH FOR EDUCATORS

Research for educators: what the studies found, and what it means for practice

EDITION 4 · OCTOBER 2026

IN THIS EDITION

## Why Learners Leave and What Keeps Them

The Evidence on VET Completion and Retention

### Assessment Research

Validity and Reliability in Competency-Based Education

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### Learners With Disability in Tertiary Education

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What the Research Shows

Edited by Sukh Sandhu | teachwisemag.com

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EDITORIAL

# Edition 4: October 2026

**By Sukh Sandhu, Editor-in-Chief**

5 articles on what the research says, and what it means for the people who teach and train.

Welcome to Edition 4 of TeachWise. Each article in this edition reads a body of research on education and training, sets out what it found using the reports' own figures, notes its limits, and ends with what it might mean for practice, labelled as our interpretation.

## In this edition

- Why Learners Leave and What Keeps Them: The Evidence on VET Completion and Retention
- Assessment Research: Validity and Reliability in Competency-Based Education
- Teacher Professional Development: What Makes It Work
- Learners With Disability in Tertiary Education: The Data
- First Nations Learners in VET: What the Research Shows

Research rarely gives simple answers, and evidence from one setting does not always transfer to another. Where that matters, we say so.

Thank you for reading. Tell us which research you would like us to read next.

Warm regards,
**Sukh Sandhu**
Editor-in-Chief, TeachWise

TEACHWISE

# Why Learners Leave and What Keeps Them: The Evidence on VET Completion and Retention

**By Sukh Sandhu**

Roughly half of the VET qualifications started in Australia are completed within four years. For non-trade apprentices and trainees the figure has now fallen below 43%. Behind those headline numbers sits a more useful story: who leaves, when, and for what reasons, and what the providers with strong completion rates do differently. This article brings together NCVER's 2025 and 2026 completion and outcomes releases, NCVER research on student support, and European evidence from Cedefop on early leaving from VET, with the data that trainers and leaders need.

| Report | Publisher | Year | Method | Sample |
|---|---|---|---|---|
| *VET qualification completion rates 2025* | NCVER | Published 29 September 2026 | Administrative data, longitudinal tracking via USI | All nationally recognised qualification commencements, 2016 to 2023 |
| *Apprentice and trainee completion rates 2025* | NCVER | Published 26 July 2026 | National Apprentice and Trainee Collection, data to 31 December 2025 | All apprenticeships and traineeships (rates for individuals, apprenticeships and contracts) |
| *Apprentice and trainee outcomes 2025* | NCVER | Published 25 March 2026 | National Student Outcomes Survey | 24,291 apprentices and trainees |
| *VET student outcomes 2025* | NCVER | Published 17 December 2025 | National Student Outcomes Survey | 276,304 VET students |
| *Student support: enabling the learner journey* (Andrahannadi and Griffin) | NCVER | May 2025 | Qualitative case studies | 8 RTOs; 34 staff and 25 students |
| *Leaving education early: putting VET centre stage, Volume I* | Cedefop | 2016 | Microdata analysis, literature review, interviews, workshops | 409 interviews in eight countries |

## How completion is measured

Before reading any completion figure it helps to know what it counts. NCVER's qualification completion rates follow every nationally recognised qualification that a

student commences and report the share completed within four years. NCVER uses the Unique Student Identifier, introduced in 2015, to track learners across providers and years, so 2016 is the first cohort with reliable commencement data. Two kinds of rate are published: observed rates for cohorts that have had the full four years, and projected rates for more recent cohorts still in training.

Two exclusions matter for interpretation. Short courses and stand-alone subject enrolments, which made up 53.4% of total VET student activity in 2021, are outside scope. And the rates say nothing about why students did or did not finish; NCVER collects reasons through the National Student Outcomes Survey instead. NCVER lists the factors that influence completion as including job requirements, student intention and circumstances, training quality, timetable flexibility, learner support, economic conditions and policy settings.

Apprenticeships are reported separately, at three levels (individuals, apprenticeships and contracts of training). NCVER recommends a six-year window for trade apprenticeships, which often take longer than four years, and a four-year window for non-trade apprenticeships and traineeships.

## The headline: about half finish

The four-year completion rate for qualifications that began in 2021 was 48.9%, down slightly from 49.5% for the 2020 cohort but higher than every cohort before that.

| Commencing year | Commencements | Completion rate after four years |
|---|---|---|
| 2016 | 1,807,515 | 43.7% |
| 2017 | 1,672,035 | 45.7% |
| 2018 | 1,511,195 | 48.2% |
| 2019 | 1,564,110 | 48.3% |
| 2020 | 1,446,920 | 49.5% |
| 2021 | 1,525,695 | 48.9% |

*Source: NCVER 2026, VET qualification completion rates 2025, Figure 1.*

Completion is higher at higher levels: 56.7% for diploma and above, 41.3% for Certificate I. Funding source matters too. Government-funded qualifications completed at 48.9%, domestic fee-for-service at 44.8% and international fee-for-service at 62.6%, the last partly because most international enrolments are at diploma level or higher. Projected rates suggest improvement is coming: 50.9% for 2022 starters and 54.7% for 2023 starters, although the 2023 projection is less certain because 7.2% of that cohort were still training.

NCVER attributes some of the 2021 dip to COVID-19. Victoria, with repeated lockdowns, saw declines, while South Australia, Western Australia and the Northern Territory reached their highest rates since 2016. A strong late-2021 labour market may also explain why the completion rate for unemployed learners fell 2.6 percentage points to 43.3%: some likely left study for jobs.

### Who completes

Priority groups showed mixed results for the 2021 cohort. Regional and remote learners reached 45.1%, their best since 2016. Indigenous learners reached 37.6%, also their highest, but still more than 11 percentage points below non-Indigenous learners. Women were about 3 percentage points more likely than men to complete, and learners aged 25 and under outperformed those 45 and over.

Completion also varies sharply by qualification. Here are the ten largest qualifications by 2021 commencements.

| Qualification (2021 commencements) | Rate, 2020 cohort | Rate, 2021 cohort |
|---|---|---|
| Certificate III in Individual Support (53,135) | 59.1% | 58.2% |
| Certificate III in Business (46,640) | 50.5% | 47.8% |
| Certificate II in Skills for Work and Vocational Pathways (35,735) | 44.8% | 48.1% |
| Certificate III in Early Childhood Education and Care (35,105) | 46.0% | 44.1% |
| Certificate IV in Training and Assessment (26,035) | 63.6% | 61.1% |
| Certificate II in Hospitality (23,035) | 37.9% | 36.4% |
| Diploma of Early Childhood Education and Care (22,150) | 56.8% | 59.4% |
| Diploma of Leadership and Management (21,675) | 48.6% | 50.9% |
| Certificate III in Fitness (20,620) | 59.0% | 57.6% |
| Certificate IV in Real Estate Practice (20,230) | 43.6% | 34.5% |

*Source: NCVER 2026, VET qualification completion rates 2025, Table 1.*

By training package, Health and Sport, Fitness and Recreation completed highest among the ten largest packages (55.9% and 55.7%), while Resources and Infrastructure (21.7%) and Transport and Logistics (18.3%) were persistently low. NCVER suggests the low rates partly reflect learners who enrol in a qualification but only ever intend to complete one or two units for licensing or compliance. That is a reminder that "non-completion" is not always failure.

Time to completion is also stretching. For 2016 starters, 58.2% of completions within four years happened in the commencing year; for 2021 starters it was 50.1%.

## Apprentices and trainees: trades up, non-trades down

The 2025 apprentice and trainee release shows two diverging trends.

- **Trades.** The six-year completion rate for trade apprentices who began in 2019 was 58.7%, up slightly from 58.3% for the 2018 cohort. Trade rates have risen for every commencing cohort since 2015.

- **Non-trades.** The four-year completion rate for non-trade apprentices and trainees who began in 2021 was 42.7%, down from 48.8% for 2020 starters and the third consecutive decline. NCVER links this to changes in government incentives and the occupational mix.

Two warning signs sit inside the trade data. The four-year attrition rate for 2021 trade starters was 42.1%, the highest reported across cohorts. And trade apprenticeships are taking longer: the share still in training after four years rose from 8.9% (2012 cohort) to 15.9% (2019 cohort), and the average time to complete rose from 2.8 to 3.5 years.

> *Attrition is concentrated early. Close to one-third of non-trade apprenticeships and traineeships, and almost one-fifth of trade apprenticeships, ended without completion within the first 12 months.*

| Trade occupation, 2019 commencing cohort | Six-year completion rate |
|---|---|
| Electricians | 71.7% |
| Mechanical engineering trades workers | 67.2% |
| Carpenters and joiners | 63.7% |
| Hairdressers | 47.6% |
| Cooks | 40.6% |

*Source: NCVER 2026, Apprentice and trainee completion rates 2025, Figure 6.*

The setting matters as well. Six-year trade completion ranged from 55.3% with micro employers (up to four staff) to 65.9% with large employers (200 or more). Group training organisations achieved 61.5%, rising over four cohorts, and government employers 80.4%. By training provider, enterprise providers reached 75.3% and TAFE 59.9%. Regional and remote apprentices had the highest completion among priority groups (61.6%). In non-trades, school-based apprentices and trainees completed at 60.9%, well above the 42.7% average. NCVER cautions that provider and employer differences reflect the occupations, learners and employers each type serves, so they are associations, not proof that one setting causes better outcomes.

## Why they leave: what learners say

### Apprentices and trainees

The 2025 Apprentice and Trainee Outcomes survey asked people who cancelled or withdrew why they left and what might have kept them.

| Non-completers, 2025 survey | Trade | Non-trade |
|---|---|---|
| Main reason: pay too low, or unhappy with working conditions or workplace | 27.7% | 24.7% |
| Main reason: personal reasons (total) | 19.8% | 26.3% |
| of which illness or health | 8.7% | 7.9% |
| of which family reasons | 5.4% | 7.9% |
| Change needed: their work situation | 34.6% | 31.7% |

| Non-completers, 2025 survey | Trade | Non-trade |
|---|---|---|
| Change needed: their personal situation | 21.5% | 22.3% |
| Nothing could have changed | 15.6% | 15.2% |

*Source: NCVER 2026, Apprentice and trainee outcomes 2025, Figures 2 and 3.*

So the leading reasons are about the job and personal circumstances rather than the classroom, and only about one in six said nothing could have helped. The off-the-job training still shows up in the satisfaction gap: 85.9% of trade completers and 88.9% of non-trade completers were satisfied with their off-the-job training, compared with 71.3% and 63.5% of non-completers. Leaving is not always a dead end: 80.8% of trade non-completers and 70.4% of non-trade non-completers were employed after training, though about two-thirds were with a different employer.

## Other VET students

For learners outside apprenticeships, the survey asks qualification part-completers why they stopped. The 2024 results, as published in NCVER's student support study, show a mix of reasons that support could and could not influence.

| Main reason for discontinuing, qualification part-completers, 2024 | Share |
|---|---|
| Personal reasons | 21.9% |
| Changed job or started a new job | 17.6% |
| Training was not as expected | 12.8% |
| Completed all intended training | 8.1% |
| Training no longer related to plans | 7.7% |
| Started other training | 6.8% |
| Problems with the work placement | 5.5% |
| Learnt skills needed for the job | 5.0% |
| Training timetable not flexible enough | 3.3% |

*Source: Andrahannadi and Griffin 2025, Table 1, p. 11, from NCVER National Student Outcomes Survey 2024.*

Andrahannadi and Griffin draw the practical line clearly. Changing jobs, finishing intended training or getting the skills needed suggest a learner unlikely to complete whatever support is offered. Personal reasons, training not meeting expectations, placement problems and inflexible timetables are where support can make a difference. The 2025 survey confirmed that personal reasons were still the most common (led by illness, pressure on time and family reasons), that nearly a tenth left because they had got what they wanted, and that 38.4% of part-completers named a training-related change, namely better support, flexibility or workload, that would have encouraged them to finish. Part-completers also reported the lowest satisfaction of any group, with overall satisfaction falling 2.4 percentage points to 75.4%.

## What keeps them: evidence from high-completion providers

Andrahannadi and Griffin studied eight RTOs nominated by state training authorities for high completion rates or high satisfaction with student support (eight agreed out of 25 invited). They interviewed 34 staff and 25 students across TAFE, private, community and industry association providers. Six elements of effective support recurred:

1. A whole-of-institution commitment, so support is everybody's job and staff are themselves supported.
2. Early engagement with learners and, where relevant, parents, employers and external services.
3. High-quality training delivered by skilled staff who genuinely care and act before learners disengage.
4. Continuity of support across the learner journey.
5. Holistic and individualised support, including wellbeing, financial, LLN and peer support.
6. Strong relationship-building.

The researchers mapped support to stages of the journey: pre-enrolment and enrolment, commencement, ongoing study, assessment, work placement and nearing completion. They also recorded the barriers RTOs face, including staff shortages, time and funding, along with learner barriers and unsupportive workplaces. Importantly, the study did not measure whether these practices raise completion; the authors note that high completion rates do not prove good support, and low rates do not prove poor support, especially among providers serving disadvantaged learners.

The link to teaching is direct. NCVER's 2026 study of VET teachers found that 79% of teachers said undeclared learner needs disrupted their planned teaching at least weekly, and participants criticised pre-enrolment screening as too narrow and poorly shared with teaching staff. Early identification is a theme on both sides of the classroom.

## The international picture: Cedefop on early leaving from VET

Europe frames the issue as "early leaving from education and training": young people aged 18 to 24 with at most lower secondary education who are not in education or training. The EU rate fell from 11.0% in 2015 to 9.1% in 2025 (Eurostat dataset edat_lfse_14), close to the EU's 2030 target of under 9%. That indicator, though, cannot isolate VET, and Cedefop's two-volume study set out to examine the VET-specific picture.

Volume I combined analysis of PIAAC and Adult Education Survey microdata, longitudinal datasets from France and the Netherlands, a literature review, 409 interviews with policymakers and practitioners in eight countries, and two expert workshops. Its key findings:

| Cedefop finding (longitudinal national data) | General or school-based | Vocational or work-based |
|---|---|---|
| France: students who qualified, by track | 93% (general) | 76% (VET) |
| Netherlands: students who qualified, by track | 96.5% (general) | 79.5% (prevocational) |
| France: VET students who | 77% (school-based) | 73% (work-based) |

| Cedefop finding (longitudinal national data) | General or school-based | Vocational or work-based |
|---|---|---|
| qualified, by mode | | |
| Netherlands: VET students who qualified, by mode | 84% (school-based) | 77% (work-based) |

*Source: Cedefop 2016, Volume I, executive summary, pp. 11 to 12.*

The work-based result runs against expectation, since workplace learning is thought to build motivation. Cedefop suggests selection may explain it: work-based tracks attract more older and disadvantaged learners. It also found that countries with higher VET enrolment tend to have lower early leaving overall, because VET can re-engage those who have left general education.

Cedefop's interviews identified reasons for leaving that are specific to VET, beyond background risk factors such as prior failure, low socioeconomic status, migration and disability:

- VET as a reluctant second choice, entered half-heartedly;
- no positive picture of where training leads;
- low confidence rooted in past failure;
- a mismatch between expectations of an occupation and its reality;
- disappointment when tuition is more academic than practical;
- for apprentices, readiness for work, finding a placement, and workplace conflict;
- labour market pulls: hard working conditions, and unqualified jobs that pay better now.

The parallels with the Australian apprentice data, where pay and conditions top the list for trade apprentices, are hard to miss. Cedefop also stresses that the same monitoring systems that identify at-risk learners are rarely used to evaluate whether interventions work, a gap that applies equally in Australia.

## Limits of the evidence

- **Completion is a narrow measure.** It ignores learners who gain the skills they wanted, those who move to other training, and the more than half of activity that sits outside qualifications.
- **Cohort data lag.** The latest observed rates describe people who began in 2021 and 2019; recent policy changes are not yet visible, and Fee-Free TAFE activity is not separately identified in the data.
- **Survey reasons are self-reported, single-choice and retrospective.** "Personal reasons" is broad, and respondents may give the most acceptable answer.
- **Associations are not causes.** Differences by employer size or provider type reflect who those organisations serve.
- **The support research is qualitative.** It describes what high-performing providers do, not what effect each practice has.
- **Cedefop's comparisons are dated and limited.** Its national comparisons come from just two countries, and the authors themselves describe data gaps that prevent a robust estimate of early leaving from VET.

## What this means for your practice

The points below are our interpretation of the evidence, not recommendations from NCVER or Cedefop.

1. **Front-load support in the first year.** Close to a third of non-trade apprenticeships and almost a fifth of trade apprenticeships end in the first year. Early check-ins, attendance follow-up and a named contact matter most at the start.
2. **Make pre-enrolment a real conversation.** Many early leavers face a mismatch between what they expected and what the training or job involves. Honest information about workload, placement and the occupation, plus a genuine suitability discussion, addresses a reason learners themselves name.
3. **Separate "lost" from "finished early".** Record why each learner leaves. Someone who got the skills they needed is a different case from someone who left for personal reasons or because training disappointed them, and only the second group tells you what to fix.
4. **Talk to employers about the workplace, not only the training.** For trade apprentices, pay, conditions and the workplace are the top reason for leaving, and they are second for non-trade apprentices and trainees. Trainers who visit workplaces are well placed to spot trouble early and connect apprentices and employers with mentoring or group training support.
5. **Build flexibility in where you can.** Timetable and delivery flexibility, workload and better support are the changes part-completers say would have kept them. Even small options, such as catch-up sessions or adjusted assessment schedules, can help.
6. **Treat support as a whole-of-RTO job.** The six elements from high-completion providers depend on systems, not individual heroics. Clear referral pathways, shared learner information and support for staff stop the load falling on individual trainers.
7. **Watch your priority cohorts in your own data.** Indigenous learners complete at rates more than 11 points below others nationally. Disaggregate your own completion data and compare it with NCVER's national figures through DataBuilder.

## Sources


- NCVER, *VET qualification completion rates 2025*, 2026, https://www.ncver.edu.au/research-and-statistics/publications/all-publications/vet-qualification-completion-rates-2025
- NCVER, *Apprentice and trainee completion rates 2025*, 2026, https://www.ncver.edu.au/research-and-statistics/publications/all-publications/apprentice-and-trainee-completion-rates-2025
- NCVER, *Apprentice and trainee outcomes 2025*, 2026, https://www.ncver.edu.au/research-and-statistics/publications/all-publications/apprentice-and-trainee-outcomes-2025
- NCVER, *VET student outcomes 2025*, 2025, https://www.ncver.edu.au/research-and-statistics/publications/all-publications/vet-student-outcomes-2025
- NCVER (Andrahannadi U and Griffin T), *Student support: enabling the learner journey*, 2025, https://www.ncver.edu.au/research-and-statistics/publications/all-publications/student-support-enabling-the-learner-journey

- NCVER, *Strengthening teaching practice and psychosocial support*, 2026, https://www.ncver.edu.au/research-and-statistics/publications/all-publications/strengthening-teaching-practice-and-psychosocial-support-report
- Cedefop, *Leaving education early: putting vocational education and training centre stage. Volume I: investigating causes and extent*, Research paper 57, 2016, https://www.cedefop.europa.eu/files/5557_en.pdf
- Cedefop, *VET toolkit for tackling early leaving*, https://www.cedefop.europa.eu/en/tools/vet-toolkit-tackling-early-leaving
- Eurostat, *Early leavers from education and training by labour status* (edat_lfse_14), updated 30 October 2026, https://ec.europa.eu/eurostat/databrowser/view/edat_lfse_14/default/table

TEACHWISE

# Assessment Research: Validity and Reliability in Competency-Based Education

**By Sukh Sandhu**

A competency-based qualification is only as good as the judgement behind each "competent" decision. Yet the research on how valid and reliable those judgements are is patchy, and much of it sits outside VET, in medical education, occupational psychology and school examinations. This article brings together the main Australian studies of assessment practice from NCVER, England's four-year research programme on outcome-based vocational qualifications, Ofqual's work on marking consistency, and two meta-analyses that put numbers on how much trained judges agree. The picture that emerges is consistent: assessors' judgements of performance are moderately, not highly, reliable; reliability rises with more observations and more judges; and the systems built to assure quality in VET are often busy documenting compliance rather than checking whether assessors would reach the same decision. For trainers and assessors, the practical message is not that judgement is untrustworthy, but that a single judgement on a single task carries more uncertainty than our paperwork implies, and that the most effective safeguards are cheap: more observations, a second assessor on borderline cases, and regular conversations about what the standard looks like.

## At a glance

| Report | Publisher | Year | Method | Sample |
|---|---|---|---|---|
| *Quality assessments: practice and perspectives* (Misko, Halliday-Wynes, Stanwick and Gemici) | NCVER | 2014 | Interviews, document analysis, survey data | 41 practitioners in aged care, electrical and business; students; employers |
| *Begin with the end: RTO practices and views on independent validation of* | NCVER | 2021 | Literature timeline, international desk review, semi-structured interviews | TAFEs in four jurisdictions, two community colleges, four private providers, sector |

| Report | Publisher | Year | Method | Sample |
|---|---|---|---|---|
| *assessment* (Beddie) | | | | bodies |
| CASLO research programme (Newton, Curcin, Clarke, Brylka and Lockyer) | Ofqual | 2022 and November 2024 | Document analysis, literature taxonomy, structured interviews | 14 awarding organisations; stakeholders of 4 qualifications |
| *Marking consistency metrics* (Rhead, Black and Pinot de Moira) | Ofqual | November 2016 | Analysis of live marking monitoring data | GCSE, AS and A level components |
| "A systematic review of the reliability of objective structured clinical examination scores" (Brannick, Erol-Korkmaz and Prewett) | *Medical Education* 45(12) | 2011 | Meta-analysis | 188 reliability estimates from 39 studies |
| "Meta-analytical estimates of interrater reliability for direct supervisor performance ratings" (Speer and colleagues) | *Journal of Applied Psychology* 109(3) | 2024 (online October 2023) | Meta-analysis | 22 independent samples |

## Two words that carry the weight

Validity asks whether an assessment supports the decision we make from it: that this person can perform to the standard in the workplace. Reliability asks whether the decision would be the same if a different assessor judged it, on a different day, using a different but equivalent task. A judgement can be reliable without being valid (two assessors can agree on the wrong thing), but it cannot be valid if it is unreliable, because then the result depends on who did the assessing.

In Australian VET, as NCVER's 2021 timeline of policy reviews puts it, confidence in the system is compromised by a false positive, "deeming someone competent who is not". The regulatory answer has been two quality processes defined by ASQA: moderation, which aims to bring assessment judgements into alignment before results are finalised, and validation, a review of the assessment process, generally after it has been completed. Under clause 1.10 of the Standards for RTOs 2015, each training product had to be validated at least once every five years, with at least 50% of products validated in the first three years of each cycle (cited in Beddie 2021, p. 13).

## What Australian practitioners told NCVER

NCVER's 2014 study examined certificate III qualifications in aged care, electrotechnology and business, interviewing 41 practitioners as well as students and employers. Its key messages were frank. Practitioners understood the requirement to gather sufficient

evidence of practical skills and knowledge against performance criteria, but found applying it harder. They expressed "low confidence in making fair, reliable, consistent and valid judgments", particularly about not-yet-competent performance.

The study also found confusion about the basic quality processes.

| Finding | Result |
|---|---|
| Practitioners who described validation in the commonly accepted way | 85% |
| Practitioners who aligned moderation with consistency of marking or comparability of results | 56% |
| Practitioners unclear about moderation, confusing it with validation, or unable to answer | 44% |
| Practitioners who had received assessment guidance or professional development | almost 60% |
| Practitioners relying on self-directed training to keep up | 40% |
| Respondents who said it was easy to involve employers | 56% |
| 2008 NQC survey respondents with concerns about consistency of assessment | 59% |

*Sources: Misko and colleagues, NCVER 2014; the 2008 National Quality Council figure is reported in Beddie, NCVER 2021, support document.*

Practitioners put more effort into making assessment instruments clear and relevant than into moderating results, on the reasoning that rigorous validation up front reduces the need for moderation. Students, by contrast, were broadly satisfied: about 90% of graduates of the three qualifications in the 2012 Student Outcomes Survey were satisfied with how they were assessed, with the lowest rating (83%) for the amount of feedback received.

The report also described ASQA's 2013 strategic review of aged care training, which audited 20 randomly selected RTOs plus 53 undergoing re-registration. It found over-reliance on third-party reports, often checklists, rather than direct observation by assessors, online assessment of interpersonal skills that needed to be observed at work, and employers signing off competency without assessors verifying it. Of the 53 audited organisations, 86.8% were judged compliant once rectification had been completed.

## Validation as compliance

Seven years later, Francesca Beddie's interviews for NCVER found that validation was valued in principle but driven by regulation in practice. The first key message of *Begin with the end* is that this "can generate a compliance mentality, leading to over-assessment, but not necessarily better assessment practices or improved training". One TAFE manager is quoted as saying students were "being over-assessed and undertrained"; a private provider described assessment tools growing from six to 45 pages.

Three further findings bear directly on reliability:

- Where moderation happened, it was used mainly to benchmark assessments across an organisation, much less often externally, and rarely in response to a student querying a result.
- Terminology was used idiosyncratically, including variants such as "pre-validation" and "post-validation".
- Interviewees saw value in validation for governance and continuous improvement, but described the evidence and reporting burden as onerous, and wanted more professional development and chances to share practice in assessment.

The report concluded that a one-size-fits-all model of independent validation would not suit a sector of over 4,000 providers, and that assessment and certification should be brought "to the fore" in training package development. Its sample was purposive and qualitative, and it did not measure assessor agreement directly.

## England's outcome-based qualifications

Ofqual's research programme on what it calls CASLO qualifications (those designed to Confirm the Acquisition of Specified Learning Outcomes) is one of the most thorough recent analyses of competency-based qualification design, and it maps closely onto Australian training packages. Ofqual defines the family by three core characteristics: content specified as learning outcomes; a standard specified through assessment criteria for each outcome; and a "mastery requirement" that a learner must achieve every outcome to pass a unit. The model dominated vocational qualifications in England from the 1980s, through NVQs and the Qualifications and Credit Framework, until the framework was withdrawn in 2015.

The programme's authors were candid that vocational qualifications of this kind are "extremely poorly documented, theorised, and researched" compared with traditional exams, whose technical literature dates back more than a century. Their critical strand built a taxonomy of problems from the academic literature, grouped as assessment problems (such as inaccurate judgements and ineffective standardisation), teaching and learning problems, and delivery problems such as burden. Fourteen awarding organisations then discussed each problem in structured interviews about a qualification they nominated.

Two problems stand out for VET assessors. The first is "atomistic assessor judgements": assessing elements of knowledge or skill one by one, so that a learner who cannot integrate them in real work can still be judged competent. The second is its teaching counterpart, a lack of holistic learning. Awarding organisations often cited synoptic or holistic assessment tasks as the mitigation, for example a single complex, authentic performance task covering three learning outcomes. Ofqual's final report argues that judgements made against a checklist are far safer to generalise from when each criterion is demonstrated within an integrated performance. Where assessment took place in complex, real-life settings, awarding organisations saw that as built-in protection against atomised assessment.

The research also found that quality assurance in these qualifications works differently from exams: a "hands-on partnership" between the awarding body and the centres doing the assessing, rather than a hands-off subcontracting model. Ofqual emphasises the

programme's limits. It is descriptive, not evaluative; it records what awarding organisations believe works and does not test whether their mitigations are effective.

## How reliable are expert judgements?

Because VET has almost no published studies of assessor agreement, the closest quantitative evidence comes from fields where similar judgements are made at scale.

The first is clinical skills assessment. The objective structured clinical examination (OSCE) is a circuit of observed, simulated tasks marked against checklists or rating scales, much like a practical assessment in a VET workshop. Brannick, Erol-Korkmaz and Prewett pooled 188 reliability coefficients from 39 studies.

| Measure | Pooled reliability (alpha) | 95% confidence interval |
|---|---|---|
| Across stations (consistency of a candidate's performance from task to task) | 0.66 | 0.62 to 0.70 |
| Within stations, across items (consistency within one task) | 0.78 | 0.73 to 0.82 |

*Source: Brannick, Erol-Korkmaz and Prewett 2011, abstract.*

Their conclusion was that overall OSCE scores "are often not very reliable". Reliability was better with more stations and more examiners per station, and interpersonal skills were assessed less reliably across stations than clinical skills. The practical lesson is that a single observed task tells you less about a person's competence than it seems to, because performance varies from task to task as much as from assessor to assessor.

The second is workplace performance rating. Much VET assessment relies on supervisors' third-party reports. Speer and colleagues argued that earlier meta-analyses underestimated supervisors' reliability by correlating ratings from people in different roles. Restricting their analysis to 22 independent samples in which two raters both directly supervised the employee, they found:

| Rating context | Average observed interrater reliability |
|---|---|
| All direct supervisor samples | 0.65 |
| Ratings made in operational settings | 0.60 |
| Ratings made for research purposes | 0.67 |

*Source: Speer, Delacruz, Wegmeyer and Perrotta 2024, abstract.*

The authors argue these are the best available estimates of direct supervisor reliability, and higher than earlier meta-analyses suggested. Even so, a reliability of 0.60 to 0.65 means that a substantial share of the difference between two supervisors' ratings of the same worker reflects the raters, not the worker. Ratings made for real decisions were less reliable than those made for research.

The third is examination marking. Ofqual's 2016 report on marking consistency in GCSEs and A levels developed metrics such as the probability that a candidate receives the grade a senior examiner's "definitive" marks would produce. It found that marking quality was higher for physics components, typically short questions with an objectively correct

answer, than for more subjective English language or history components, where legitimate differences in applying a mark scheme lead to less agreement. It also showed that the design of an assessment affects grade reliability independently of the markers: the wider the mark range between grade boundaries, the more likely candidates are to receive the correct grade. A 2018 Ofqual survey of more than 18,000 examiners found 96% confident they could mark or moderate accurately and reliably, which says more about confidence than about measured agreement.

Ofqual's 2018 research programme also offers a useful vocabulary for why judges disagree. Drawing on earlier research, it grouped sources of disagreement between examiners into four categories: procedural error (mistakes or not following procedure), attentional error (lapses in concentration), inferential uncertainty (uncertainty in drawing inferences from what the candidate produced) and definitional uncertainty (uncertainty about what exactly is being assessed). The first two are errors that better processes can reduce. The last two arise in responses where more than one judgement is legitimate, and they can only be narrowed by clearer standards, better exemplars and shared discussion among assessors. Ofqual found the mix varied by subject: inferential uncertainty was more common in biology, definitional uncertainty in English language.

The same programme compared traditional marking with two alternatives for extended responses: paired comparative judgement, in which judges repeatedly decide which of two pieces of work is better, and rank ordering. The three methods produced very similar rank orders of candidates, and Ofqual concluded that further research was worthwhile. For VET, where assessors judge holistic performance such as a client consultation or a finished piece of work, these categories give moderation meetings a practical agenda: was the disagreement a slip, or a genuine difference in how the criterion is understood?

## What the studies have in common

Put side by side, these sources point to four regularities:

1. **Agreement among trained judges is moderate.** Coefficients between about 0.6 and 0.8 recur across clinical, workplace and examination contexts.
2. **More observations beat better checklists.** Reliability improves most with more tasks and more judges, not with longer instruments. A 45-page tool applied once to one task may be less dependable than three short observations by two assessors.
3. **Judgement is hardest where the construct is fuzzy.** Interpersonal skills, extended responses and holistic performance show lower agreement than closed, technical tasks. These are also the skills employers value.
4. **Quality systems often check paperwork, not decisions.** The Australian studies found validation focused on tools and documentation, and moderation used mainly inside organisations. Neither routinely tests whether two assessors would reach the same decision on the same evidence.

## Limits of the evidence

There is no published Australian study that measures inter-assessor agreement on competency judgements across RTOs. The NCVER studies are qualitative, small and now five to twelve years old, and predate the 2025 Standards for RTOs. The meta-analyses

come from medicine and human resources, where tasks, rating scales and assessor training differ from VET; their reliability coefficients should be read as indicative, not as estimates for VET. Ofqual's marking metrics apply to general qualifications marked on numerical scales, and its CASLO research explicitly does not evaluate whether the mitigations it describes work. Finally, reliability is necessary but not sufficient: none of these studies tests whether "competent" decisions predict later workplace performance, which is the validity question that matters most.

## What this means for your practice

The following points are our interpretation of the research, not recommendations made by the authors.

1. **Moderate decisions, not just tools.** Periodically have two assessors independently judge the same evidence, including borderline and not-yet-competent cases, and record how often they agree. Discuss the disagreements; that is where your standard is actually set.
2. **Spread the evidence.** Base competency decisions on several observations across different tasks or occasions rather than one long assessment event. The OSCE research shows task-to-task variation is a major source of error.
3. **Assess integrated performance.** Where a unit allows, design at least one authentic task that requires learners to combine several elements of competency, then map the criteria to it, rather than ticking each criterion through a separate exercise.
4. **Strengthen third-party evidence.** Brief supervisors on what each item means, ask for specific examples rather than ticks, and corroborate with direct observation or questioning. Supervisor ratings are moderately reliable at best.
5. **Train for borderline judgements.** Practitioners report least confidence in deciding when performance is not yet competent. Use annotated exemplars of just-competent and just-not-competent work in assessor development.
6. **Trim tools that add pages but not evidence.** Over-assessment repeats the same element across units without improving the decision. Ask of each section of a tool: which judgement does this inform?
7. **Use validation to ask the validity question.** Alongside checking tools, ask employers and graduates whether people you judged competent could actually do the job, and feed the answer back into your assessment design.

## Sources


- NCVER (Misko, J., Halliday-Wynes, S., Stanwick, J. and Gemici, S.), *Quality assessments: practice and perspectives*, 2014, https://www.ncver.edu.au/research-and-statistics/publications/all-publications/quality-assessments-practice-and-perspectives
- NCVER (Beddie, F.), *Begin with the end: RTO practices and views on independent validation of assessment*, 2021, https://www.ncver.edu.au/research-and-statistics/publications/all-publications/begin-with-the-end-rto-practices-and-views-on-independent-validation-of-assessment

- NCVER (Beddie, F.), *Support document: Models for independent validation and moderation of assessment, an annotated timeline 2001 to 2020*, 2021, https://www.ncver.edu.au/sites/default/files/ncver-documents/Models_for_independent_validation_and_moderation_of_assessment.pdf
- Ofqual (Newton, P.E., Curcin, M., Clarke, L. and Brylka, A.), *The CASLO Research Programme: overview of research projects conducted between 2020 and 2024*, 2024, https://www.gov.uk/government/publications/the-caslo-research-programme
- Ofqual (Newton, P.E., Curcin, M., Clarke, L. and Brylka, A.), *Understanding Qualification Design: insights from the 2020 to 2024 CASLO qualification research programme*, 2024, https://www.gov.uk/government/publications/understanding-qualification-design
- Ofqual (Newton, P.E. and Lockyer, C.), *How "CASLO" qualifications work*, 2022, https://www.gov.uk/government/publications/how-caslo-qualifications-work
- Ofqual (Rhead, S., Black, B. and Pinot de Moira, A.), *Marking consistency metrics*, November 2016, https://www.gov.uk/government/publications/marking-consistency-metrics
- Ofqual, "Opportunities for improving quality of marking", news release, 27 November 2018, https://www.gov.uk/government/news/opportunities-for-improving-quality-of-marking
- Brannick, M.T., Erol-Korkmaz, H.T. and Prewett, M., "A systematic review of the reliability of objective structured clinical examination scores", *Medical Education* 45(12), pp. 1181 to 1189, 2011, https://doi.org/10.1111/j.1365-2923.2011.04075.x
- Speer, A.B., Delacruz, A.Y., Wegmeyer, L.J. and Perrotta, J., "Meta-analytical estimates of interrater reliability for direct supervisor performance ratings: optimism under optimal measurement designs", *Journal of Applied Psychology* 109(3), 2024 (online October 2023), https://doi.org/10.1037/apl0001146

TEACHWISE

# Teacher Professional Development: What Makes It Work

**By Sukh Sandhu**

Every training organisation spends money and time on professional development, and most trainers can name a session that changed nothing. Over the past decade a run of rigorous meta-analyses has started to explain the difference. They agree that professional development, on average, does improve learner outcomes, but by small amounts; that the average hides very large variation; and that the programmes which work share recognisable design features rather than a particular format. This article reads five of those syntheses closely, from Kraft, Blazar and Hogan's 2018 review of coaching to the Education Endowment Foundation's 2021 review of mechanisms and the journal version of that review (online 2023, in print 2025), sets out their numbers and their limits, and then asks what the much thinner VET-specific evidence adds.

## At a glance

| Report | Publisher | Year | Method | Sample |
|---|---|---|---|---|
| *The effect of teacher coaching on instruction and achievement* (Kraft, Blazar and Hogan) | *Review of Educational Research* 88(4) | 2018 | Meta-analysis of causal studies | 60 studies |
| *Strengthening the research base that informs STEM instructional improvement efforts* (Lynch, Hill, Gonzalez and Pollard) | *Educational Evaluation and Policy Analysis* | 2019 | Meta-analysis of experimental and quasi-experimental studies | 95 studies, 258 effect sizes |
| *The effects of high-quality professional development on teachers and students* (Fletcher-Wood and Zuccollo) | Education Policy Institute | February 2020 | Rapid review and meta-analysis of randomised trials | 53 trials, 42 with usable data |
| *Effective professional development* guidance report, | Education Endowment Foundation; *Review of* | 2021; online 2023, print 2025 | Pre-registered systematic review and meta-analysis | 104 randomised trials, 2002 to 2020 |

| Report | Publisher | Year | Method | Sample |
|---|---|---|---|---|
| and *Effective teacher professional development: new theory and a meta-analytic test* (Sims, Fletcher-Wood and colleagues) | *Educational Research* 95(2) | | | |
| *Promoting effective vocational education and training teacher's professional development and its transfer to practice: a systematic review* (Siliņa-Jasjukeviča and colleagues) | *Education Sciences* 15(5) | 2025 | Systematic review, thematic analysis | 24 journal articles, 2014 to 2024 |

## Why the average effect is small and still matters

The first thing the syntheses agree on is the size of the typical effect. The Education Policy Institute (EPI) review, commissioned by the Wellcome Trust, identified 53 randomised controlled trials of professional development and meta-analysed 49 outcomes from 42 of them. It estimated an overall effect on student learning of 0.09 standard deviations, with a 95% confidence interval of 0.06 to 0.13.

On its own, 0.09 sounds trivial. The EPI authors argued it should be read against realistic benchmarks rather than textbook rules of thumb, and set out the comparison in their Table 1.

| Intervention | Mean effect size |
|---|---|
| EEF and NCEE funded education trials (Lortie-Forgues and Inglis 2019) | 0.06 |
| Teacher professional development (EPI meta-analysis) | 0.09 |
| A teacher with a decade's experience compared with a novice (Kraft and Papay 2016) | 0.11 |
| One-to-one tutoring (Baye and colleagues 2018) | 0.28 |

*Source: Fletcher-Wood and Zuccollo, EPI 2020, Table 1.*

Two points follow. Well-designed professional development produces a gain close to what a decade of classroom experience produces, and it does so for every learner a teacher subsequently teaches. Tutoring has a larger effect per student but costs far more per student reached. The same review was blunt about what the trials could not show. Of the 53 trials, only seven measured effects on teachers themselves, such as satisfaction, self-efficacy or retention, and most of those found no statistically significant effect. The claim that professional development keeps teachers in the profession is plausible, the authors wrote, but the trials they examined do not demonstrate it.

The Sims review for the EEF reached a similar average. Across 104 randomised trials the mean effect on pupil test scores was 0.05 standard deviations (CEPEO Working Paper 22-02, p. 16). A related point from that review is worth knowing before reading any headline figure: effects shrank sharply in the most rigorous trials.

| Group of trials | Mean effect size | Effect sizes [studies] |
|---|---|---|
| All trials | 0.050 | 205 [104] |
| Low attrition | 0.018 | 49 [36] |
| High attrition | 0.082 | 156 [68] |
| More than 50 units randomised | 0.036 | 106 [65] |
| 50 or fewer units randomised | 0.096 | 104 [39] |
| Pre-registered | 0.005 | 32 [26] |
| Not pre-registered | 0.074 | 173 [78] |

*Source: Sims and colleagues, CEPEO Working Paper 22-02, 2022, Appendix E. Random effects robust variance estimation.*

Pre-registered trials, in which researchers commit to their outcomes before collecting data, averaged close to zero. The authors probed this and found no sign of deliberate p-hacking, but they did find that pre-registered trials used tougher outcome measures, had lower attrition and, intriguingly, tested programmes that contained fewer of the design features the review was interested in. The honest reading is that the average effect of professional development is small and positive, and that a good share of the larger numbers in the literature come from smaller, less stringent studies.

## Coaching: large effects in small programmes

Kraft, Blazar and Hogan's 2018 meta-analysis remains the most cited evidence on coaching. They restricted it to 60 studies with causal designs, most of them literacy coaching for pre-school and primary teachers in the United States. The pooled results are much larger than the averages above (Table 2).

| Outcome | Pooled effect size | Effect sizes [studies] |
|---|---|---|
| Teachers' instruction (classroom observation) | 0.49 | 186 [43] |
| Student achievement, all subjects | 0.18 | 113 [31] |
| Student achievement, reading | 0.16 | 87 [26] |
| Student achievement, mathematics | 0.04 (not significant) | 20 [5] |
| Student achievement, state standardised tests only | 0.12 | 31 [10] |

*Source: Kraft, Blazar and Hogan 2018, Table 2 and text.*

The spread was wide. Effects on instruction had an interquartile range from 0.17 to 0.92 standard deviations, and effects on achievement from 0.03 to 0.24. Content-specific coaching raised achievement by 0.20, while general coaching on pedagogy produced 0.07, which was not statistically significant, although the authors note that general programmes often aimed at social and emotional outcomes rather than test scores.

The finding that should shape any provider's plans is about scale. When the authors split studies at 100 teachers, smaller programmes improved instruction by 0.63 and achievement by 0.28, roughly twice and three times the effects of larger programmes (0.34 and 0.10). Small programmes tended to involve volunteer teachers, a handful of hand-picked coaches and best-case conditions. Large programmes had to recruit and train a coaching corps and deliver to teachers with mixed interest. The authors conclude that coaching can work at scale, but that implementation problems erode the effect as it grows.

Three of their exploratory results run against common assumptions. First, total hours of coaching, and total hours of professional development, showed precisely estimated null relationships with outcomes: the authors found no support for the idea that coaching must be high dosage. Second, they found no significant difference between in-person and virtual coaching, while cautioning that their standard errors could not rule out moderate differences. Third, pairing coaching with group training was associated with larger effects (0.31 standard deviations larger on instruction, 0.12 on achievement), which the authors interpret as teachers benefiting from baseline knowledge before working one to one with a coach. They stress these feature analyses are descriptive, not causal.

## STEM programmes: content, curriculum and implementation meetings

Lynch, Hill, Gonzalez and Pollard pooled 95 experimental and quasi-experimental studies of professional development and curriculum programmes in pre-school to Year 12 science and mathematics. The average weighted effect was 0.21 standard deviations, equivalent, they say, to a typical treated student ranking about 8 percentile points higher than a typical control student. Of 258 effect sizes, 83% were positive and 34% statistically significant.

Their caution about measurement matches the Sims review. Effects measured on standardised and state tests were about 0.27 standard deviations lower than effects on tests designed by the researchers. Like Kraft and colleagues, they found no significant relationship between contact hours and outcomes, and no threshold effect at 16 hours or other cut points.

What did matter, in their final models, were features of focus and format.

| Programme feature | Association with effect size |
|---|---|
| Focus on how to use curriculum materials | +0.12 ($p < 0.10$) |
| Focus on content knowledge, pedagogical content knowledge or how students learn | +0.09 ($p < 0.05$) |
| Same-school collaboration (final model) | +0.12 ($p < 0.10$) |
| Implementation meetings to troubleshoot classroom use | +0.12 ($p < 0.05$) |
| Summer workshop to launch the programme | +0.07 ($p < 0.10$) |
| Professional development with an online component | 0.15 smaller ($p < 0.05$) |
| Professional development plus new curriculum materials, compared with either alone | about +0.10 ($p < 0.05$) |

*Source: Lynch, Hill, Gonzalez and Pollard 2019 (Brown University working paper version), Tables 4 to 8.*

The negative association for online components is worth reading carefully. It describes programmes evaluated before 2019, mostly in American schools, and it sits alongside Kraft and colleagues' finding of no significant difference for virtual coaching. Neither study is a trial of online against face-to-face delivery.

## The EEF review: mechanisms, not formats

The most influential recent synthesis is the systematic review led by Sam Sims, Harry Fletcher-Wood and Alison O'Mara-Eves for the Education Endowment Foundation. It reviewed 104 randomised evaluations of professional development published between 2002 and 2020, and underpins the EEF's 2021 guidance report, written by Joe Collin and Ellen Smith. A revised version was published in the *Review of Educational Research* (online December 2023; volume 95, issue 2, April 2025) as "Effective teacher professional development: new theory and a meta-analytic test".

The review's starting point is that asking whether coaching, workshops or lesson study "work" is the wrong question. The guidance report distinguishes forms (such as coaching), programmes (specific branded packages) and mechanisms, which it describes as the core building blocks of professional development. The review identified 14 mechanisms in four groups.

| Purpose | Mechanisms |
|---|---|
| A. Build knowledge | 1 Managing cognitive load; 2 Revisiting prior learning |
| B. Motivate teachers | 3 Setting and agreeing on goals; 4 Presenting information from a credible source; 5 Providing affirmation and reinforcement after progress |
| C. Develop teaching techniques | 6 Instructing teachers on how to perform a technique; 7 Arranging practical social support; 8 Modelling the technique; 9 Providing feedback; 10 Rehearsing the technique |
| D. Embed practice | 11 Providing prompts and cues; 12 Prompting action planning; 13 Encouraging self-monitoring; 14 Prompting context-specific repetition |

*Source: EEF, Effective professional development guidance report, 2021, pp. 14 to 26.*

The pre-registered tests produced two results. First, each additional mechanism was associated with an increase of about 0.01 standard deviations in effect on pupil test scores. Programmes with no mechanisms had an expected effect close to zero; those with 13 had an expected effect close to 0.15, three times the sample average. Second, programmes with at least one mechanism in each of the four groups (a "balanced design") averaged 0.15, compared with 0.05 for programmes that addressed one, two or three purposes.

The authors were careful about both results. Mechanisms were not randomly assigned, so the analysis cannot establish that any one mechanism causes improvement. Only nine of the 104 programmes had a balanced design, so the 0.15 estimate has a wide confidence

interval that overlaps with the imbalanced designs (p = 0.22). The relationship between the number of mechanisms and effect size broke down entirely among pre-registered trials (b = 0.004, p = 0.32). The sample was also narrow: 70% of trials were in the United States and 24% in the United Kingdom; half targeted literacy; none was in adult or vocational education.

The EEF's own advice is that schools and further education providers should look for these mechanisms when choosing programmes and build them into programmes they design, while still paying close attention to the content being taught. Content is not optional: a programme rich in mechanisms that teaches a weak idea well is still teaching a weak idea.

## What the VET evidence adds

None of the meta-analyses above includes a vocational education trial. That is the single biggest limit on applying them to trainers and assessors. The VET-specific evidence is newer, smaller and qualitative.

A 2025 systematic review by Siliņa-Jasjukeviča, Lūsēna-Ezera, Iliško and Surikova analysed 24 journal articles indexed in Scopus or Web of Science, published between 2014 and 2024, on VET teachers' professional development. Through thematic analysis it identified ten features of effective professional development and eight attributes that support transfer to practice. The authors summarise that effective professional development and its transfer emphasise reflection, engagement in professional communities of practice, and approaches targeted at VET teachers' needs. For transfer specifically, they add the teacher's own capacity, transformative leadership, and learning experiences that are authentic and supportive. The review does not estimate effects on learners.

In Australia, NCVER's *Strengthening teaching practice and psychosocial support* (October 2026), drawing on 956 survey responses, interviews and workshops, framed its eighth key message this way: "The professional development challenge is implementation, not identification". The report found that effective practices for supporting teachers are well known, and that the difficulty is applying them consistently across a very diverse provider sector. Its description of effective professional development, which goes beyond attendance to include reflection, sharing practice, trialling new approaches and ongoing support, lines up closely with the "embed practice" mechanisms in the EEF review. The full findings of that report are covered elsewhere in this magazine.

Read together, the two bodies of evidence point the same way. The international trials say what features predict impact on learners. The VET studies say those features are rarely present in the casual, workload-squeezed, compliance-driven professional development many trainers actually receive.

## Where the reviews agree

Across the five syntheses, four findings recur.

- **Hours are not the active ingredient.** Kraft and colleagues and Lynch and colleagues both found no reliable relationship between contact hours and outcomes. A

professional development policy measured in hours per year measures the wrong thing.

- **Practice and follow-up matter.** Rehearsal, feedback, implementation meetings and prompts to repeat a technique in one's own classroom appear in every review in some form. One-off information sessions rarely contain them.
- **Content-specific beats generic.** Coaching focused on a subject outperformed general coaching on achievement; STEM programmes focused on content knowledge and curriculum use outperformed those focused on generic strategies.
- **Scale erodes effect.** Small, enthusiastic programmes produce the headline numbers. Large programmes, and rigorous trials of them, produce much smaller ones.

## Limits of the evidence

The meta-analyses measure success mainly through school pupils' test scores, a narrow outcome, and one that has no direct equivalent in competency-based VET. Most programmes studied were in American primary schools and concerned literacy or mathematics. Feature analyses in the quantitative reviews are correlational: programmes were not randomly assigned their features. The Sims review's most important result, the advantage of balanced designs, rests on nine studies. The EPI review's own finding that trials rarely measured teacher outcomes means the evidence says little about whether professional development affects retention, wellbeing or confidence, which are the outcomes VET providers often care about most. Finally, the VET-specific review is a thematic synthesis of published studies; it describes what VET teachers and researchers believe works, not measured impact on learners.

## What this means for your practice

The following points are our interpretation of the research, not recommendations made by the authors.

1. **Audit your professional development calendar against the 14 mechanisms.** For each activity ask: does it rehearse a technique, give feedback on it, and prompt staff to plan and repeat it in their own sessions? If it only presents information, add a follow-up step rather than more hours.
2. **Stop counting hours as the measure of quality.** Record what changed in practice after an activity. Two research teams found contact hours unrelated to outcomes.
3. **Build in a follow-up meeting.** A short session a few weeks later, where trainers bring what happened when they tried the technique, is the cheapest form of the "implementation meetings" that Lynch and colleagues found associated with larger effects.
4. **Make it content-specific.** Professional development tied to how to teach and assess a particular unit or trade is better supported than generic sessions on engagement or learning styles.
5. **Use coaching, but start small and protect quality.** If you introduce coaching, begin with volunteer trainers and well-prepared coaches, and expect effects to fall as you widen it. Pair coaching with a group session that builds shared knowledge first.

6. **Include casual and sessional trainers.** The features that predict impact (practice, feedback, repetition) are exactly what casual staff miss when they are paid only for delivery hours.
7. **Treat vendor effect sizes with care.** Ask whether a programme's evidence comes from a pre-registered, adequately sized trial with an independent outcome measure. The Sims review shows how much smaller effects become under those conditions.

## Sources


- Kraft, M.A., Blazar, D. and Hogan, D., "The effect of teacher coaching on instruction and achievement: a meta-analysis of the causal evidence", *Review of Educational Research* 88(4), 2018, https://doi.org/10.3102/0034654318759268
- Lynch, K., Hill, H.C., Gonzalez, K. and Pollard, C., "Strengthening the research base that informs STEM instructional improvement efforts: a meta-analysis", *Educational Evaluation and Policy Analysis*, 2019, https://doi.org/10.3102/0162373719849044; working paper version, https://annenberg.brown.edu/sites/default/files/STEM%20Meta-Analysis%20for%20Website-converted.pdf
- Fletcher-Wood, H. and Zuccollo, J., *Evidence review: the effects of high-quality professional development on teachers and students*, Education Policy Institute, February 2020, https://epi.org.uk/publications-and-research/effects-high-quality-professional-development/
- Collin, J. and Smith, E., *Effective professional development: guidance report*, Education Endowment Foundation, 2021, https://educationendowmentfoundation.org.uk/education-evidence/evidence-reviews/teacher-professional-development
- Sims, S., Fletcher-Wood, H., O'Mara-Eves, A., Cottingham, S., Stansfield, C., Goodrich, J., Van Herwegen, J. and Anders, J., *Effective teacher professional development: new theory and a meta-analytic test*, CEPEO Working Paper 22-02, UCL, 2022, https://EconPapers.repec.org/RePEc:ucl:cepeow:22-02; journal version, *Review of Educational Research* 95(2), 213 to 254, 2025 (online 2023), https://doi.org/10.3102/00346543231217480
- Siliņa-Jasjukeviča, G., Lūsēna-Ezera, I., Iliško, D. and Surikova, S., "Promoting effective vocational education and training teacher's professional development and its transfer to practice: a systematic review", *Education Sciences* 15(5), 596, 2025, https://doi.org/10.3390/educsci15050596
- NCVER (Griffin, T., Wibrow, B., Andrahannadi, U., Ackehurst, M., Waugh, J. and Schueler, J.), *Strengthening teaching practice and psychosocial support*, 28 October 2026, https://www.ncver.edu.au/research-and-statistics/publications/all-publications/strengthening-teaching-practice-and-psychosocial-support-report

TEACHWISE

# Learners With Disability in Tertiary Education: The Data

**By Sukh Sandhu**

More learners with disability are studying in Australian universities and training organisations than ever before, and more are telling their institutions about it. The data released between 2024 and October 2026 show real gains in attainment and participation. They also show gaps that have barely moved: learners with disability are less likely to complete a VET qualification, less likely to finish a trade apprenticeship, much less likely to report better employment after training, and more likely to consider leaving university. This article assembles the national figures from the ABS, AIHW, NCVER, the Department of Education, the Student Experience Survey and Jobs and Skills Australia, explains what each measures and what it misses, and draws out what the numbers imply for trainers, teachers and student support staff.

## At a glance

| Report | Publisher | Year | Method | Sample |
|---|---|---|---|---|
| *Disability, Ageing and Carers, Australia: Summary of Findings, 2022* | ABS | July 2024 | National household and cared-accommodation survey | Australian population (survey sample) |
| *People with disability in Australia 2024* | AIHW | 2024 | Compilation of national data, Australia's Disability Strategy reporting | Multiple national collections |
| *VET qualification completion rates 2025*; *Apprentice and trainee completion rates 2025*; *VET student outcomes 2025* | NCVER | September 2026; July 2026; December 2025 | Administrative data; National Student Outcomes Survey | All qualification commencements; survey of VET students |
| *2024 Higher Education Student Statistics*, including Section 16 equity performance data | Department of Education | 2025 | Administrative data | All domestic students at Table A and B providers |
| *2025 Student* | QILT, | September 2026 | National survey | Undergraduate |

| Report | Publisher | Year | Method | Sample |
|---|---|---|---|---|
| *Experience Survey* | Department of Education | | | and postgraduate coursework students |
| *Education and training divides* (Gender Economic Equality Study, Paper 2) | Jobs and Skills Australia | September 2025 | Linked administrative data (PLIDA, VET National Data Asset) | Graduates of the top 100 VET qualifications |

## First, what counts as disability

Every figure in this article depends on how disability is defined and who chooses to report it. The ABS Survey of Disability, Ageing and Carers (SDAC) defines disability as a limitation, restriction or impairment that has lasted, or is likely to last, at least six months and restricts everyday activities. In 2022 it counted 5.5 million Australians with disability (21.4% of the population), of whom 87.4% had a core activity limitation or a schooling or employment restriction. Some 10.4% of the population had a schooling or employment restriction.

Education collections rely on self-report at enrolment, which is voluntary. In higher education, a student with disability is one who indicates "one or more disability, impairment or long term medical condition which may affect their studies". In 2021 the higher education collection expanded the reportable categories to include intellectual, mental health, acquired brain injury and neurological conditions; the Department of Education warns that the resulting jump in numbers "does not reflect a real-world change". VET enrolment data have a large "not stated" group. The AIHW notes the figures reported across sources may differ because of different data sources, populations and periods. Every comparison below should be read with those caveats.

## Attainment: rising but still behind

The 2022 SDAC shows clear improvement in education among people with disability aged 15 and over living in households.

| Highest non-school qualification, people with disability aged 15+ | 2018 | 2022 |
|---|---|---|
| Bachelor degree or above | 16.1% | 19.7% |
| Advanced diploma or diploma | 9.2% | 10.4% |
| Certificate | 24.5% | 23.5% |
| No non-school qualification | 46.7% | 44.7% |
| Completed Year 12 or equivalent | 33.4% | 45.3% |

*Source: ABS, Disability, Ageing and Carers, Australia: Summary of Findings, 2022, Education section.*

These proportions cover everyone aged 15 and over, and people with disability are older on average, so they are not a direct comparison with the rest of the population. The AIHW's comparison for people aged 20 and over, from the 2018 survey, shows the size of

the gap: 34% of people with disability had completed Year 12, compared with 66% without disability, and 17% held a bachelor degree or higher, compared with 35%. Labour market outcomes follow: in 2022, 56.1% of working-age people with disability were employed, compared with 82.3% of people without disability (ABS 2022).

The AIHW also reported that, in 2018, 14% of non-school students with disability aged 15 to 64 needed support in their education but did not receive any.

## Participation in learning

Learners with disability participate in adult learning at lower rates. The final ABS Survey of Work-Related Training and Adult Learning, released in April 2026, found that 28% of people with disability or a restrictive condition had participated in study or work-related training in the 12 months before the 2024-25 survey, compared with 36% of people without one.

In higher education, reported participation has more than doubled over a decade, although part of the rise is the 2021 collection change.

| Students with disability in higher education | 2015 | 2019 | 2021 | 2023 | 2024 |
|---|---|---|---|---|---|
| Share of domestic students (participation rate) | 5.8% | 7.3% | 9.6% | 11.8% | 12.6% |
| Participation ratio (rate relative to population share) | 0.70 | 0.87 | 1.14 | 0.88 | 0.94 |
| Success rate, students with disability | 81.3% | 82.3% | 80.7% | 84.0% | 85.4% |
| Success rate, all domestic students | 87.1% | 87.6% | 87.1% | 88.7% | 89.6% |
| First-year retention, students with disability | 79.3% | 79.6% | 78.1% | 80.5% | n/a |
| First-year retention, all domestic students | 82.2% | 82.6% | 80.6% | 82.7% | n/a |

*Source: Department of Education, 2024 Section 16 Equity performance data, Tables 16.6, 16.7, 16.8 and 16.10 (national totals, Table A and B providers). Series break between 2020 and 2021.*

The participation ratio compares the share of students with disability with the share of people with disability aged 15 to 64 in the population. Its fall between 2022 and 2023 reflects a sharp rise in the population reference value used by the Department (for New South Wales, from 8.4% to 13.3%; Table 16.14), not fewer students, so the ratio should

be read as a level, just below parity, rather than a trend. The success rate, the proportion of units passed, has consistently been about 4 to 6 percentage points lower for students with disability, and retention about 2 to 3 points lower.

The Department reported 47,458 commencing domestic students with one or more disabilities in 2024, a 19.2% increase on 2021. Mental health conditions are the largest category. Neurological conditions, which currently include autism and ADHD, more than doubled between 2021 and 2024, with a 33.8% increase between 2023 and 2024 alone. The Department attributes the growth to a combination of online and hybrid options, lower barriers to disclosure, and growth in reported disability in the population.

| Commencing domestic students, by disability reported | 2021 | 2024 | Change 2021 to 2024 |
|---|---|---|---|
| Mental health condition | 17,707 | 21,613 | up 22.1% |
| Medical condition | 11,151 | 11,191 | up 0.4% |
| Neurological condition | 4,054 | 10,665 | up 163.1% |
| Specific learning disability | 4,968 | 6,759 | up 36.1% |
| Physical disability | 2,614 | 2,966 | up 13.5% |
| Hard of hearing or Deaf | 1,804 | 1,733 | down 3.9% |
| Low vision or Blind | 1,704 | 1,553 | down 8.9% |
| Intellectual disability | 788 | 1,238 | up 57.1% |
| Acquired brain injury | 579 | 503 | down 13.1% |
| All students with one or more disability | 39,829 | 47,458 | up 19.2% |

*Source: Department of Education, Key findings from the 2024 Higher Education Student Statistics, Table 3. Students can report more than one disability, so types do not sum to the total.*

The shape of this table matters for teaching. The two fastest-growing groups, neurological conditions and specific learning disabilities, together with mental health conditions, are largely invisible conditions that affect attention, processing, organisation and anxiety rather than physical access. The Department notes that mental health conditions often coexist with other reported disabilities. Support models built around ramps, captioning and alternative formats remain necessary, but they no longer describe the needs of most students who disclose.

In VET, the AIHW's reporting for Australia's Disability Strategy put students with disability at 4.1% of VET students aged 15 to 64 in 2022, against about 10% of undergraduates in 2021. Given the large share of VET students who do not state their disability status, that figure is best treated as a floor. NCVER's *Total VET students and courses 2025* reported that growth in VET in 2025 was concentrated among several groups, including students with a disability.

## Completion: a gap that has not closed

NCVER's completion rates track the proportion of qualifications completed within four years of starting. The gap for learners with disability has persisted across four cohorts.

| VET qualification completion rate (4 years) | 2018 cohort | 2019 cohort | 2020 cohort | 2021 cohort |
|---|---|---|---|---|
| All students | 48.2% | 48.3% | 49.5% | 48.9% |
| Students with a disability | 42.7% | 43.5% | 42.3% | 42.3% |
| Gap (percentage points) | 5.5 | 4.8 | 7.2 | 6.6 |

*Source: NCVER, VET qualification completion rates 2025 (published 29 September 2026), Figure 4.*

Apprenticeships show the same pattern in trades but not in non-trades. The six-year trade completion rate for the 2019 commencing cohort was 44.9% for apprentices with disability, against 58.7% for all trade apprentices, and it fell between the 2018 and 2019 cohorts. In non-trade apprenticeships and traineeships, by contrast, learners with disability completed at a rate above the overall 42.7% for the 2021 cohort, although that rate declined from the previous year (NCVER, *Apprentice and trainee completion rates 2025*).

In higher education, the AIHW reported that 51% of students with disability who began in 2016 had completed a qualification by 2021.

## The student experience

The 2025 Student Experience Survey, published in September 2026, found that undergraduates with disability rated their overall educational experience 1.7 percentage points lower than those without disability (75.1% compared with 76.8% positive), the narrowest gap since 2017. At postgraduate coursework level, ratings were similar. The larger differences lie elsewhere.

| Undergraduate experience, 2025 | No disability | Disability |
|---|---|---|
| Sense of belonging to institution (positive) | 48.5% | 44.5% |
| Considered leaving institution | 16.0% | 21.9% |
| Free from discrimination, harm or hatred (positive) | 81.5% | 76.9% |
| Negative effect of living arrangements on study | 18.4% | 24.6% |
| Negative effect of financial circumstances on study | 24.0% | 31.9% |
| Negative effect of paid work on study | 32.6% | 37.8% |

*Source: QILT, 2025 Student Experience Survey National Report, Table 1. Includes domestic and international students.*

Students with disability also rated each of the five focus areas lower: undergraduates with disability gave 68.1% positive ratings for student support compared with 71.8% for those without, and 79.8% compared with 83.8% for learning resources (Figure 31). The gap on teaching quality was smaller (78.9% compared with 80.7%). The picture is less one of dissatisfaction with teaching than of students carrying more pressure from outside the classroom and feeling less that they belong.

## After training: the largest gap

The biggest differences appear after VET. NCVER's *VET student outcomes 2025* reported that 45.1% of qualification completers with a disability had an improved employment status after training, compared with 62.4% of all qualification completers. That is the lowest result among the priority groups NCVER reports, below Indigenous completers (58.6%), those from the most disadvantaged areas (58.9%) and female completers (60.6%).

Jobs and Skills Australia's 2025 study of linked tax and VET records adds detail. It reports earlier JSA analysis showing graduates with disability had the lowest median graduate income of the groups examined, $26,100, compared with $41,900 for female graduates, $43,100 for First Nations graduates and $58,300 for male graduates. JSA suggests this may reflect higher shares of graduates with disability in lower-level qualifications (five of the ten qualifications most often completed by people with disability are Certificate II), their younger age, fewer hours worked and difficulty finding work that suits their needs.

Across the top 100 VET qualifications, females with disability had the lowest employment rate one year after training in 12 qualifications, and males with disability in 15. Some examples:

| Qualification | Employment rate, graduates with disability | Qualification median employment rate |
|---|---|---|
| Certificate III in Supply Chain Operations (females) | 46% | 75% |
| Certificate IV in Community Services (females) | 66% | 80% |
| Certificate IV in Mental Health (females) | 71% | 89% |
| Diploma of Leadership and Management (males) | 72% | 93% |
| Certificate IV in Real Estate Practice (males) | 73% | 88% |
| Diploma of Screen and Media (males) | 43% | 76% |

*Source: JSA, Education and training divides, 2025, Tables 21 and 22 (PLIDA, VET National Data Asset).*

The same analysis found pathways where graduates with disability did relatively well: females with disability in selected hospitality, veterinary nursing and early childhood education and care qualifications, and males with disability in carpentry and mechanical trade qualifications. JSA called for policy attention to IT, community services, and sport and aquatics qualifications, and to better support for males with disability training as electricians, who earned a median $69,600 one year after the qualification and had a 91%

employment rate against a qualification median of 96%. JSA also cites earlier research by Polidano and colleagues finding that completing a VET qualification strongly improved the chance of full-time work for people with disability, but did not necessarily improve job satisfaction, security or hourly wages. One more positive finding from the same JSA paper concerns the match between qualifications and jobs: people with disability who held higher qualifications and worked in higher skill level jobs had the lowest rates of skills mismatch of any cohort analysed, with little difference between men and women. When learners with disability reach skilled work, their qualifications are well used; the barrier lies in getting there.

## Limits of the evidence

Disability status is self-reported and voluntary in every education collection, so differences in disclosure, not just in outcomes, shape the figures. The 2021 change to higher education reporting means earlier and later years cannot be compared directly. VET collections have large shares of students whose disability status is not known, and NCVER excludes them from cohort comparisons. "Disability" covers a very wide range of conditions; averages hide large differences between, for example, learners with a hearing impairment and learners with a psychosocial disability, and few national publications break outcomes down by type. Several AIHW figures date from the 2018 SDAC. The JSA outcome data cover graduates of the top 100 qualifications one year after training, and earnings partly reflect hours worked. Finally, these are descriptive statistics: they show where gaps are, not what causes them or which supports close them.

## What this means for your practice

The following points are our interpretation of the data, not recommendations made by the publishers.

1. **Make disclosure safe and useful.** Learners are more likely to tell you about a disability when they can see what difference it will make. Explain at enrolment and again early in the course what adjustments are available, and follow up with those who do not disclose but appear to be struggling.
2. **Plan reasonable adjustments to assessment, not just delivery.** The completion gap of five to seven points suggests learners with disability are being lost somewhere between enrolment and certification. Check that assessment conditions, timeframes and evidence formats can be adjusted without changing the competency standard.
3. **Watch the first term closely.** Students with disability are more likely to consider leaving and less likely to feel they belong. Early check-ins, a named contact and quick responses to missed sessions are low-cost retention measures.
4. **Recognise pressures outside the classroom.** Financial, housing and work pressures weigh more heavily on students with disability. Flexible scheduling, links to financial support and realistic workload planning matter as much as teaching quality.
5. **Prepare for neurodivergent and psychosocial needs.** These are the fastest-growing and largest reported categories in higher education. Clear structure, predictable routines, written instructions and options for how learners demonstrate competence help many learners, not only those who disclose.

6. **Connect training to employment deliberately.** The weakest outcomes for learners with disability come after training. Work placements with employers briefed on adjustments, job-search support and links to Disability Employment Services can turn a qualification into a job.
7. **Use your own data.** Compare completion and outcome rates for learners who disclose disability with others in your organisation, by course. National averages tell you a gap exists; your data tell you where.

## Sources


- ABS, *Disability, Ageing and Carers, Australia: Summary of Findings, 2022*, released 4 July 2024, https://www.abs.gov.au/statistics/health/disability/disability-ageing-and-carers-australia-summary-findings/latest-release
- ABS, *Work-Related Training and Adult Learning, Australia, 2024-25 financial year*, released 9 April 2026, https://www.abs.gov.au/statistics/people/education/work-related-training-and-adult-learning-australia/latest-release
- AIHW, *People with disability in Australia 2024*, Education and skills, 2024, https://www.aihw.gov.au/reports/disability/people-with-disability-in-australia/contents/education-and-skills
- NCVER, *VET qualification completion rates 2025*, 2026, https://www.ncver.edu.au/research-and-statistics/publications/all-publications/vet-qualification-completion-rates-2025
- NCVER, *Apprentice and trainee completion rates 2025*, 2026, https://www.ncver.edu.au/research-and-statistics/publications/all-publications/apprentice-and-trainee-completion-rates-2025
- NCVER, *VET student outcomes 2025*, 2025, https://www.ncver.edu.au/research-and-statistics/publications/all-publications/vet-student-outcomes-2025
- NCVER, *Total VET students and courses 2025*, 2026, https://www.ncver.edu.au/research-and-statistics/publications/all-publications/total-vet-students-and-courses-2025
- Department of Education, *Key findings from the 2024 Higher Education Student Statistics*, https://www.education.gov.au/higher-education-statistics/student-data/selected-higher-education-statistics-2024-student-data/key-findings-2024-higher-education-student-statistics
- Department of Education, *2024 Section 16 Equity performance data*, https://www.education.gov.au/higher-education-statistics/resources/2024-section-16-equity-performance-data
- Quality Indicators for Learning and Teaching (Social Research Centre), *2025 Student Experience Survey: National Report*, September 2026, https://www.qilt.edu.au/docs/default-source/default-document-library/2025-ses-national-report.pdf
- Jobs and Skills Australia, *Education and training divides: gendered skills, pathways and outcomes* (Gender Economic Equality Study, Paper 2), 2025, https://www.jobsandskills.gov.au/research/studies/gender-economic-equality-study

TEACHWISE

# First Nations Learners in VET: What the Research Shows

**By Sukh Sandhu**

Vocational education and training is the main tertiary pathway for Aboriginal and Torres Strait Islander people, and the data released in 2025 and 2026 contain genuine good news: projected VET completion rates for young First Nations learners are the highest on record, satisfaction with training is above 90%, and First Nations graduates of some qualifications out-earn the national student base. The same data show a completion gap of more than 11 percentage points that has barely narrowed across recent cohorts, and a national tertiary attainment target that is not on track. This article reads the Productivity Commission's July 2026 Closing the Gap report, NCVER's latest completion and outcome statistics, Jobs and Skills Australia's linked-data analysis of VET outcomes, and NCVER's qualitative research on what keeps learners in training, and sets out what the evidence suggests about culturally responsive practice. Throughout, it uses the terms the sources use: "Indigenous" in NCVER and Department of Education statistics, and "Aboriginal and Torres Strait Islander" or "First Nations" elsewhere. The figures cover learners who chose to identify at enrolment or in the Census.

## At a glance

| Report | Publisher | Year | Method | Sample |
|---|---|---|---|---|
| *Closing the Gap Annual Data Compilation Report July 2026* | Productivity Commission | July 2026 | Compilation of national data against the National Agreement targets | National collections, Census 2021 |
| *VET qualification completion rates 2025*; *Apprentice and trainee completion rates 2025*; *VET student outcomes 2025* | NCVER | September 2026; July 2026; December 2025 | Administrative data; National Student Outcomes Survey | All qualification commencements; survey of VET students |
| *Education and training divides* (Gender | Jobs and Skills Australia | September 2025 | Linked tax and VET data (PLIDA) | Graduates of the top 100 VET qualifications |

| Report | Publisher | Year | Method | Sample |
|---|---|---|---|---|
| Economic Equality Study, Paper 2) | | | | |
| *Enhancing training advantage for remote Aboriginal and Torres Strait Islander learners* (Guenther, Bat, Stephens and colleagues) | NCVER | 2017 | Five case studies | 68 people interviewed: students, trainers, employers, cultural advisors |
| *Indigenous VET participation, completion and outcomes: change over the past decade* (Windley) | NCVER | 2017 | Analysis of national VET collections and survey data | National VET Provider, Apprentice and Trainee collections; Student Outcomes Survey |
| *2024 Higher Education Student Statistics*, Section 16 equity data | Department of Education | 2025 | Administrative data | All domestic higher education students |

## The national targets

The National Agreement on Closing the Gap sets 19 targets. The Productivity Commission's sixth Annual Data Compilation Report, released on 29 July 2026, found one target met, three on track, five improving but not on track and four worsening. Three targets bear directly on tertiary education and training.

| Target | Measure | Baseline (2016) | Latest (2021) | Target by 2031 | Assessment |
|---|---|---|---|---|---|
| 5 | Year 12 or equivalent attainment (20 to 24 years) | n/a in this table | 68.1% | 96% | Improving, not on track |
| 6 | Tertiary qualification, Certificate III or above (25 to 34 years) | 42.3% | 47.0% | 70% | Improving, not on track |
| 7 | Youth fully engaged in employment, education or training (15 to 24 years) | 57.2% | 58.0% | 67% | Improving, not on track |

*Source: Productivity Commission, Closing the Gap Annual Data Compilation Report July 2026, pp. 15 to 16, 72, 77 and 83. Baselines derived from the reported changes since 2016 (4.7 and 0.8 percentage points).*

All three rely on Census data, so the next assessment will use the 2026 Census and is expected in 2028. The composition of the 47.0% matters for VET: most of it, 29.5 percentage points, came from people whose highest qualification was a Certificate III or above, compared with 7.8 points for a bachelor degree and 7.4 points for an advanced diploma or diploma. VET is carrying the target.

The same is true at the school end of the pipeline. Of the 68.1% of 20 to 24 year olds counted as having attained Year 12 or equivalent in 2021, 59.5 percentage points had completed Year 12, while 8.6 points had not completed school but held a non-school qualification at Certificate III or above. For roughly one in eight of the young people counted towards Target 5, a VET qualification was the route.

The pipeline into VET is under pressure. The 2026 report found that school attendance for First Nations students has fallen in every jurisdiction since 2016: in 2025, the attendance rate was 81.1% in Years 1 to 6 (down 5.1 percentage points) and 71.3% in Years 7 to 10 (down 7.3 points). Learners arriving at VET after interrupted schooling are more likely to need foundation skills support alongside their vocational training.

There is also a gender pattern in further study. In 2024, First Nations females made 5,071 applications for undergraduate university places, 9.5% more than in 2016, while applications from males fell by 1.8% to 2,232. Males made up 30.6% of applications, down from 32.9%. For young First Nations men, VET and especially apprenticeships remain the dominant post-school pathway, which makes the trade completion gap discussed below especially consequential.

## Participation and completion

The supporting indicators in the 2026 report give a more current picture. The number of First Nations students under 35 commencing VET qualifications at Certificate III or above was 40,360 in 2024, up from 39,735 in 2016 but below the 2019 peak of 43,650. For those who commenced in 2022, 38.4% are projected to complete within four years, higher than ever before; actual completion rates for the 2016 to 2021 cohorts ranged between 34.3% and 35.6%.

NCVER's national completion rates, covering all ages, show the same modest improvement alongside a persistent gap.

| VET qualification completion rate (4 years) | 2018 cohort | 2019 cohort | 2020 cohort | 2021 cohort |
|---|---|---|---|---|
| All students | 48.2% | 48.3% | 49.5% | 48.9% |
| Indigenous students | 36.0% | 35.5% | 36.3% | 37.6% |
| Gap with all students (percentage points) | 12.2 | 12.8 | 13.2 | 11.3 |

*Source: NCVER, VET qualification completion rates 2025 (published 29 September 2026), Figure 4 and text.*

NCVER described 37.6% as the highest Indigenous completion rate since 2016, "although a gap of more than 11 percentage points remains" compared with non-Indigenous learners. In trade apprenticeships the six-year completion rate for First Nations apprentices who commenced in 2019 was 45.5%, against 58.7% overall; it increased from the previous cohort. In non-trade apprenticeships and traineeships, First Nations learners also completed below the overall rate (NCVER, *Apprentice and trainee completion rates 2025*).

This is not a new problem. NCVER's 2017 review of the previous decade by Georgina Windley found Indigenous participation in VET was high and shifting towards Certificate III and above, and Indigenous people had higher participation in both trade and non-trade apprenticeships than non-Indigenous people. But completion rates "remain lower", and the report concluded there had been little improvement in program completion and in graduate employment outcomes over ten years.

## Higher education, for comparison

Higher education participation has grown slowly. First Nations students made up 1.59% of domestic higher education students in 2015 and 2.30% in 2024, against 3.8% of the population at the 2021 Census. Commencements reached a record 10,840 in 2024.

| Higher education indicator | First Nations students | All domestic students |
|---|---|---|
| Share of domestic students, 2024 | 2.30% | 100% |
| Participation ratio (rate relative to population share), 2024 | 0.76 | 1.00 |
| Success rate (units passed), 2024 | 78.9% | 89.6% |
| First-year retention, 2023 | 73.4% | 82.7% |

*Source: Department of Education, 2024 Section 16 Equity performance data, Tables 16.6, 16.7, 16.8 and 16.10.*

The Productivity Commission reports that 21.4% of First Nations students who commenced a bachelor degree in 2023 did not return the following year, the lowest attrition since 2016. Of those who began in 2016, 27.2% had completed within four years, 41.3% within six and 49.8% within nine. Notably, 79.4% of First Nations university applications in 2024 came through pathways that do not require an ATAR or Year 12, many of them through VET or bridging programs, which makes VET a gateway to higher education as well as an alternative to it.

## After training

Outcomes after VET are mixed. NCVER's *VET student outcomes 2025* reported that 58.6% of Indigenous qualification completers had an improved employment status after training, compared with 62.4% of all completers. The Productivity Commission's indicator on young completers is more positive: in 2025, 87.2% of First Nations VET qualification completers aged 15 to 34 said they had achieved their main reason for training, and 91.5% were

satisfied with the overall quality of training, a level that has stayed at or above about 90% since 2016.

Windley's 2017 analysis contains a finding often missed: Indigenous graduates were less likely to be employed before training, but Indigenous and non-Indigenous graduates who were not employed before training were equally likely to be employed after it. Much of the employment gap after VET reflects where learners start.

Jobs and Skills Australia's 2025 analysis of linked tax and VET records, which follows graduates of the top 100 VET qualifications for one year, shows how much outcomes depend on the qualification.

| Qualification | First Nations graduates | Comparison group |
|---|---|---|
| Certificate III in Electrotechnology Electrician (males): median income | $87,300 | All males $77,600 |
| Certificate III in Carpentry (males): employment rate | 89% | All males 85% |
| Certificate III in Engineering, Mechanical Trade (males): median income; employment | $90,500; 95% | All males $91,600; 98% |
| Certificate III in Surface Extraction Operations (males): employment | 87% | All males 95% |
| Diploma of Counselling (females): median income | $70,400 | All females $41,900 |
| Certificate III in Early Childhood Education and Care (females): employment | 90% | Qualification median 87% |
| Certificate III in Security Operations (females): median income; employment | $20,100; 74% | National headline employment 84% |

*Source: JSA, Education and training divides, 2025, pp. 59 and 70 to 72. In the mining pathway, First Nations males' median income was reported as almost $20,000 lower than for all males.*

JSA found that only two of the top 100 qualifications had First Nations females or males with the lowest employment rates one year after training. Its broader pattern was gendered: First Nations females fared better in pathways leading to gender-balanced and female-dominated occupations such as community services, health and education, while First Nations males fared better in trades. First Nations males earned more than males across the national student base after the Certificate III, Certificate IV and Diploma of Community Services. Pathways into mining occupations were an exception, with far lower median incomes for First Nations males. JSA notes that positive shifts may reflect programs supporting First Nations people in apprenticeships, but that further research is needed to know what is working.

## What keeps learners in training

The quantitative data describe gaps; they say little about how to close them. The strongest Australian evidence on practice remains NCVER's 2017 study led by John Guenther and Melodie Bat of Batchelor Institute. Researchers from five institutions

examined five remote programs selected because they were considered successful and had apparently high completion rates: ranger training in the West Kimberley, Aboriginal health worker training in the Northern Territory, a community services and mental health college in Cairns, the "Yes I Can" adult literacy campaign in western New South Wales, and aged care training on the APY Lands. They interviewed 68 people, including students, trainers, employers, job service providers, community organisations and cultural advisors. Actual completion proved mixed: 78% for Yes I Can and 53% at the Cairns college, but 17% for the APY Lands aged care program and 15% for the Northern Territory health worker program.

They identified four groups of factors that supported retention:

- **Trainer factors.** Good trainers were supportive, respected by learners, adaptable and flexible, and willing to learn themselves. Respondents stressed relationships with both students and employers, and named "trainer churn", rapid turnover of trainers, as a disadvantage. One ranger program participant emphasised trainers coming out "on Country" to see what rangers actually do.
- **Family and community support.** Family, personal, community and cultural factors, including cultural obligations such as funerals and mourning periods, were more often barriers to completion, while support from family members and Elders helped many trainees stay in their course.
- **Training coordination and support.** Communication, help with paperwork, organising transport and "sitting and listening" to students' needs kept people enrolled.
- **Relationships with other students.** Being part of a team and a tight learning community mattered.

The study also argued that success should not be judged on completion alone. Respondents described enhanced self-confidence and identity, foundation skills, community ownership of training, especially when connected to culture and local knowledge, and employment or improved career prospects. For many remote learners, the authors wrote, the benefits of training were cultural, personal and social as well as economic. The study was qualitative, drew only on sites chosen as apparently successful, and did not compare them with less successful programs, so it identifies features of good practice rather than proving their effect.

The Productivity Commission's 2026 report adds an institutional dimension from higher education that applies equally to VET. It cites the Australian Human Rights Commission's *Respect at Uni* study, which gathered evidence from 2,227 Aboriginal and Torres Strait Islander respondents and identified ongoing structural and interpersonal racism, and recommended whole-of-institution anti-racism strategies, trusted complaints processes and anti-racism embedded in curriculum, teaching and staff capability. Decisions to continue study, the Commission notes, are shaped by cultural safety and students' sense of belonging.

## Who is teaching

Culturally responsive practice is harder when few staff share learners' backgrounds. Jobs and Skills Australia's *VET Workforce Study* found that 1.8% of the VET "teach, train and assess" workforce identified as First Nations at the 2021 Census, below the 2.2% of the

wider Australian workforce, and well below the share of First Nations people among VET students. JSA's 2025 gender study recommended national action for First Nations women, co-designed with First Nations stakeholders, including a standalone First Nations Women's Economic Equality Plan and longer-term investment in Aboriginal community-controlled and First Nations-owned RTOs.

## Limits of the evidence

The headline targets rely on 2021 Census data and will not be reassessed until 2028. Indigenous status is self-identified, and identification can change between collections and over time. Completion rates exclude students whose status is unknown and treat a learner who gains employment before finishing as a non-completer. The JSA outcome data cover one year after training, for the largest qualifications only, and incomes partly reflect hours worked. The two NCVER research reports are from 2017; the qualitative study examined five successful remote programs and may not transfer to non-remote settings, where most First Nations people live. Finally, very little Australian research has rigorously evaluated specific culturally responsive interventions in VET; most of the evidence on practice is descriptive.

## What this means for your practice

The following points are our interpretation of the research, not recommendations made by the authors or publishers.

1. **Invest in relationships and continuity.** Learners in the NCVER case studies stayed when trainers knew them, respected them and stayed in the role. Where possible, keep the same trainer with a cohort, and plan handovers when staff change.
2. **Work with community, not around it.** Talk with local Elders, community organisations and families about scheduling, cultural obligations and what success looks like. Build flexibility for sorry business and cultural leave into course plans and assessment timelines.
3. **Make the practical support real.** Help with enrolment paperwork, transport, technology and funding often decides whether a learner stays. Assign someone to follow up quickly when a learner stops attending.
4. **Teach on Country and in context where you can.** Connecting training to local knowledge, real work and community priorities was a recurring feature of successful programs, and it supports both engagement and authentic assessment.
5. **Address racism directly.** Have a clear, trusted way for learners to raise concerns, act on them, and include cultural safety in staff development, not as a one-off session but as part of ordinary supervision.
6. **Track your own gap.** Compare completion and outcomes for First Nations learners with others in your organisation, by course and delivery mode. National figures show a gap of more than 11 points; your data show where your gap is.
7. **Look beyond completion.** Record what learners gain even when they do not finish: confidence, foundation skills, employment. These outcomes matter to learners and communities, and they help you see what your programs are achieving.

## Sources


- Productivity Commission, *Closing the Gap Annual Data Compilation Report July 2026*, 2026, https://www.pc.gov.au/closing-the-gap-data/annual-data-report
- NCVER, *VET qualification completion rates 2025*, 2026, https://www.ncver.edu.au/research-and-statistics/publications/all-publications/vet-qualification-completion-rates-2025
- NCVER, *Apprentice and trainee completion rates 2025*, 2026, https://www.ncver.edu.au/research-and-statistics/publications/all-publications/apprentice-and-trainee-completion-rates-2025
- NCVER, *VET student outcomes 2025*, 2025, https://www.ncver.edu.au/research-and-statistics/publications/all-publications/vet-student-outcomes-2025
- Jobs and Skills Australia, *Education and training divides: gendered skills, pathways and outcomes* (Gender Economic Equality Study, Paper 2), 2025, https://www.jobsandskills.gov.au/research/studies/gender-economic-equality-study
- Jobs and Skills Australia, *Speeding up progress towards gender economic equality: 10 next steps* (Paper 3), 2025, https://www.jobsandskills.gov.au/research/studies/gender-economic-equality-study
- Jobs and Skills Australia, *VET Workforce Study*, 2024, https://www.jobsandskills.gov.au/studies/vet-workforce-study
- NCVER (Guenther, J., Bat, M., Stephens, A., Skewes, J., Boughton, B., Williamson, F., Wooltorton, S., Marshall, M. and Dwyer, A.), *Enhancing training advantage for remote Aboriginal and Torres Strait Islander learners*, 2017, https://www.ncver.edu.au/research-and-statistics/publications/all-publications/enhancing-training-advantage-for-remote-aboriginal-and-torres-strait-islander-learners
- NCVER (Windley, G.), *Indigenous VET participation, completion and outcomes: change over the past decade*, 2017, https://www.ncver.edu.au/research-and-statistics/publications/all-publications/indigenous-vet-participation-completion-and-outcomes-change-over-the-past-decade
- Department of Education, *2024 Section 16 Equity performance data*, and *Key findings from the 2024 Higher Education Student Statistics*, https://www.education.gov.au/higher-education-statistics/resources/2024-section-16-equity-performance-data

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