Framework overview

Connected Assurance Framework

Strengthening quality, equity and trust in learning outcomes in the age of AI.

As AI becomes embedded in learning and teaching, universities face a defining challenge: to show that learning outcomes are genuinely assured – for in-person, hybrid and online environments.

Situation

AI is accelerating change in assessment design, student work and academic judgement. Regulators and institutions must demonstrate confidence in outcomes across increasingly diverse delivery models.

Complication

Invigilation, integrity controls are necessary, but insufficient. Alone, they fragment assurance, constrain access for equity learners and discourage assessment innovation.

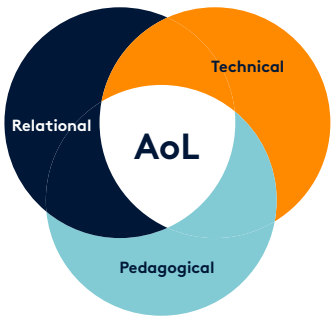
Solution

A Connected Assurance Framework: a design-led, program-level approach integrating technical, relational and pedagogical evidence to build genuine confidence in student learning outcomes.

What is the Connected Assurance Framework?

OES's Connected Assurance Framework (CAF) provides a practical model for building credible, defensible assurance of learning in AI-enabled environments. Developed through direct delivery experience and informed by leading higher education researchers, it operationalises existing regulatory intent – particularly TEQSA's guidance and the Higher Education Standards Framework – into executable practice.

At its core, assurance of learning is strongest when it is designed across a program of study, connecting three mutually reinforcing dimensions:



Relational assurance

Support – making learning visible

- Sustained, meaningful engagement between educators and students.
- Informed academic judgement based on observation over time, not isolated artefacts.

Examples include:

- Pre-placement coaching and exam preparation.
- Small-group and 1:1 academic dialogue.
- Oral assessments (practice and formalised).

Technical assurance

Security – appropriate conditions

- Proportionate identity verification at key assessment points.
- Controlled digital and physical environments where required.
- Synchronous oral assessments under secure conditions.
- Enabling condition, not standalone solution.

Pedagogical assurance

Standards – program-level design

- Curriculum and assessment design generating cumulative, coherent evidence.
- Scaffolded assessments across a full degree.
- Alignment between learning outcomes and assessment tasks.
- Students demonstrate integrated capability, not isolated performance.

Key principle: These three dimensions are mutually reinforcing and must be designed as a whole. Over-emphasising one at the expense of others weakens assurance overall.

Key principles

The CAF is built on five principles that guide how it is applied in practice.

1 Validity over detection

Confidence in learning is built through the quality, coherence and triangulation of evidence across a program – not through isolated artefacts or post-hoc policing. AI detection tools support assurance; they don't define it.

2 Authenticity and security designed together

Secure environments alone cannot demonstrate complex learning. Authentic tasks require appropriate verification and engagement to support confident academic judgement. Neither works without the other.

3 Assurance is cumulative and relational

Ongoing educator–student interaction, structured dialogue, feedback and observation provide critical insight into learning progression over time. Single-point assessments are increasingly fragile.

4 Delivery mode is not a proxy for risk

Risk is shaped by assessment and program design – not by whether learning occurs online, on campus or in hybrid form. Physical presence is not a proxy for assurance quality.

5 Equity and quality are interdependent

44% of Australian students study in external or multimodal modes. Frameworks that restrict flexibility risk disproportionately disadvantaging regional, mature-age and equity-cohort learners – undermining both participation goals and assurance outcomes.

Applying the CAF: What does it look like in practice?

The CAF is a design framework, not a prescriptive template. It adapts across disciplines, institutional contexts and student cohorts. Below are the practical questions and actions it prompts at each level.

Dimension	Ask yourself	Design actions
Relational	• Do educators know their students' learning over time, rather than just their submitted work? • Are there structured touchpoints (tutorials, check-ins, discussions) that make thinking visible? • Can educators make an informed judgement about a student's capability, independent of a single artefact?	• Build synchronous engagement into program design. • Require substantive educator–student dialogue, not just feedback on submissions. • Use oral assessments or academic check-ins at key program milestones. • Train educators in relational assurance practices.
Technical	• Is identity verification proportionate to the risk and stakes of each assessment? • Are controlled environments used where genuinely needed, rather than as a default? • Do technical controls integrate with, rather than replace, other assurance evidence?	• Apply robust identity verification at high-stakes assessment points. • Use controlled environments where warranted by discipline or regulatory expectation. • Treat synchronous oral assessments as dual-purpose: security and relational evidence.
Pedagogical	• Does assessment design generate cumulative, coherent evidence across the full program? • Are learning outcomes clearly mapped to assessment tasks at each stage? • Do students have opportunities to demonstrate integrated capability, not just point-in-time performance?	• Map assurance evidence across the degree, not unit by unit. • Scaffold assessments so early tasks build toward later demonstrations of capability. • Map learning outcomes explicitly with assessment tasks at the program level. • Design for triangulation: multiple evidence types that can be compared and cross-referenced.

Working with OES

OES brings together sector insight, practical implementation experience and a commitment to collaborative improvement to help institutions translate assurance aspirations into sustainable practice. Connected Assurance is inherently iterative and so we welcome opportunities to test, refine and apply the framework in partnership with institutions, professional bodies and sector stakeholders.

Get involved

- Test the framework – pilot the CAF with your programs and delivery contexts.
- Collaborate on research – help build the evidence base for connected assurance.
- Book a discovery session – find out how the CAF works in practice and other considerations for Assurance of Learning in the age of AI.

Updates, insights and outcomes:
oes.edu.au/assuranceoflearning