

Elevate Australasia

 AdvanceHE

Scaffolding effective decision-making



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From the Editor

We are delighted to share the second set of case studies as part of the Elevate Australasia program in 2025-26. The Elevate program was designed to support institutions around the world with the challenges they face in educational excellence and student support. The Australasia edition dealt specifically with challenges such as evolving student needs and new regulatory pressures specific to the Australasia region.

As part of the program we invited submissions to a digital showcase of case studies, demonstrating good practice initiatives from across Australasian higher education providers that could be adapted into good practice across the region. In the second edition of the showcase, we share eight case studies which look at programs and schemes which support effective decision making by students.

They demonstrate practical approaches that develop students' decision-making through authentic, technology-enhanced and discipline-specific learning. They emphasise ethical reasoning, clinical and professional judgement, AI-supported learning, simulation and inclusive learning design to prepare graduates for complex workplace decisions.

We'd like to thank all of the authors who contributed to the publication of these insightful, innovative and impactful case studies.

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Authentic learning to centre the patient experience in Healthcare Education

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Background

This case study addresses a health education challenge of delivering learning activities, able to give students a learning encounter which provides them an authentic experience and insight from the patient's point of view. The impact of this case is the applicability to a wider range of learners from both health and other disciplines, especially industries where graduates interact directly with consumers or clients.

The case involves active learning and peer role play with placebo inhaler devices. The learning activity aims to put students' knowledge and skills into practice while they also experience device use from a patient's point of view (eg difficulty in operating, breathing effort, convenience, size).

Aligning to Bloom's Taxonomy the activity moves from application of knowledge through the steps of analysis and synthesis to evaluation, (Bloom, 1956). The hands-on physical learning experience allows students to link theoretical knowledge to practical application by considering which inhaler type would be best for an individual patient and their characteristics. Providing students an authentic patient experience of the challenges of using an inhaler gives them a deeper understanding of the importance and application of person-centred care for clinical decision making (Linn et al. 2012). This can be expanded to other disciplines, placing the consumer/client experience at the core of learning experiences.

The learning activity reflects experiential learning theory by providing students the opportunity to employ knowledge, in combination with physical skills with elements of clinical decision making (Kaufman, et al. 2013, Maudsley & Strivens, 2000). The design and delivery of the activities across second and third year also employs elements of constructivist learning by scaffolding and progressive difficulty (Kang, et al. 2010; Yager, 1991). Additionally, incorporation of the learning experience into the subject, aims to align to the industry expectations of graduates such as pharmacist capabilities outlined by National Competency Standards for Pharmacists (PSA, 2016) and Health practitioner expectations outlined by Australian Commission on Safety and Quality in Health: Partnering with consumers and person-centred care (ACSQHC, 2026). Finally, the activity aims to address the University's strategic pillar of accessible education (UNSW, 2025) by providing a learning experience accessible to a broad range of students (Priyadharsini & Sahaya Mary, 2024).

Approach

The nature of the intervention was development and delivery of a learning activities in student workshops. A rationale of provided students an experience from a patient's point of view was employed. The learning activity was provided to second and third-year students in Discipline of Pharmacy subjects, delivered during face-to-face workshops. The exercises were designed to be progressive as students' capabilities develop. The second-year learning exercise was a foundational activity with exposure to a limited range of inhaler devices (3) which was scaffolded to the third-year learning exercise which added more complex inhaler types and increased the number of inhaler devices to be explored.

The third-year workshop environment consisted of small student class of 22, self-chosen peer case partners, with an academic supervisor who also has extensive patient care experience. The learning activity was provided in a psychologically safe and inclusive environment for students to:

1. **observe an example patient-pharmacist interaction from the supervisor/s**
2. **physically practice with each device**
3. **role-play with each other where one student plays the patient and the other the pharmacist.**

The majority of the workshop was a peer-learning exercise. The students rotated through ten placebo inhaler stations where they had access to the placebo inhaler device, and written information which they were able to refer to throughout, as well as use as a patient counselling aid.



Prior to the workshop it is expected that the students have completed the pre-requisite lecture and learning materials which provide the therapeutic information about inhaler pharmaceuticals and drug pharmacology and therapeutics. During the workshop students use the placebo inhaler device themselves, to gain an understanding of the ease or difficulty of using the device from a patient's point of view. Students experienced how complicated the device was to load, how much inspiratory effort (breathing in) it took to activate the device, as well as additional considerations such as would the device fit easily into a bag or pocket, etc.

Moreover, students are able to evaluate the impact and efficacy of their own professional practice through successfully teaching the “patient” inhaler technique to their peer, and direct observation of the “patients” technique. Students received feedback from their peer from a rubric, as to whether the interaction reached a standard considered professionally competent. Informal formative feedback was also provided by the workshop supervisor (Rodriguez-Paz, et al. 2009).

The timeframe for development of this case was over an 18-month period of designing, authoring and delivering the subjects (the learning activity was delivered as a component of two new subjects), writing and running the workshops, assessing the students within oral exam (second year), and an objective structured clinical examination (OSCE, third-year) and reviewing student feedback on completion of the subjects in 2025.

Outcomes

The case had a strong educational impact, supporting successful student learning. The learning activities were generally received well with active participation and positive feedback. Specific positive feedback was received such as:

“Hands on workshops really helped, especially inhaler techniques.”

“The workshops were highly engaging and was a great experience with practical activities.”



All the third-year students in the were successfully assessed as competent in the Objective Structured Clinical Examination (OSCE) assessment, which incorporated a patient case study closely aligned to the learning activity.

More broadly placing patient (consumer/ client) experience as a core priority contributes to supporting our students to develop into person-centred health professionals. Shaping learning experiences to include patient (consumer/ client) experience provides students opportunity to apply learning to real world scenarios becoming more job ready graduates (Wolters, et al. 2021). Incorporating more real world and hands on application to learning experiences, is important in an evolving world especially in context where person-care and interpersonal skills remain a core focus of graduate capabilities.



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Design innovation in multi-residential housing: teaching pattern language and value-based programming through precedent analysis

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Background

Architectural education has traditionally relied on intuition-led studio models in which design decisions are guided by tacit knowledge and personal judgment. While these approaches might foster creativity, they often lack complementary analytical frameworks, leaving students insufficiently equipped to justify design strategies, assess trade-offs, integrate research evidence, or respond to complex societal challenges (Sal Moslehian et al., 2022; Taylor, 2025; Tvedebrink & Jelić, 2021).

This limitation is particularly evident in the context of multi-residential housing design, where interconnected issues such as affordability, accessibility, individual and community wellbeing, social equity, and environmental sustainability must be addressed (Andrews et al., 2023; Foster et al., 2022; Holtan et al., 2024). These are widely recognised as “wicked problems”, indeterminate and non-linear challenges requiring structured inquiry and value-informed decision-making (Buchanan, 1992).





This case study draws on a novel design pedagogy developed within Atelier HOME, a two-trimester, research-led design studio in the final year of Deakin University's Master of Architecture programme.

Atelier HOME focused on multi-residential housing and was embedded within the broader work of the HOME Strategic Research and Innovation Centre (SRIC), which investigates housing design for care, connection, and social equity. The pedagogy supports precedent analysis, the articulation of project values, and the development of principle-driven design strategies. It repositions architectural design as both a creative and investigative practice, enabling students to connect tacit (intuition, experience) and explicit (evidence, precedent, values) design knowledge.

This approach integrates two complementary methodological tools: Christopher Alexander's Pattern Language (1977) and Herschberger's Value-Based Programming (2015), implemented within a rational design-decision model - commonly referred to as the "Glass Box" approach (Salama, 2016). Pattern Language helps students identify recurring socio-spatial patterns in precedents, while Value-Based Programming supports the translation of abstract design values into clear goals, user needs, and spatial strategies.

These tools provide a structured yet flexible methodology that supports transparent design reasoning and reflective practice. The pedagogical framework underpinning the studio was informed by Constructivist Learning theory (Biggs, 1996) and Problem-Based Learning (De Graaf & Cowdroy, 1997), emphasising active inquiry, critical reflection, and engagement with real-world design challenges.

In the Australian context, ongoing debates around housing affordability, urban density, and ageing populations underscore the need for architects capable of addressing complex social and health-related outcomes through design. By embedding structured inquiry and value-based reasoning into the studio, the Atelier HOME pedagogy contributes to bridging the gap between research and practice, while supporting the development of reflective and socially responsive graduates.

Approach

Within Atelier HOME, students analysed architectural precedents through the lens of Pattern Language, identifying recurring socio-spatial design issues at neighbourhood and building scales. This helped reveal how design strategies respond to behavioural tendencies and contextual conditions, particularly in housing for vulnerable populations.

In parallel, students applied Value-Based Programming to translate these patterns and contextual insights into structured programming frameworks, mapping values (human, environmental, cultural, technological, aesthetic, temporal, and economic) to goals, facts, needs, and design strategies. This dual approach enabled iterative connections between precedent analysis and design development. To support this process, the studio was organised around a sequenced

set of weekly tasks linking key housing design components to relevant spatial patterns and guiding questions. A curated framework (Table 1) guided students in applying patterns to specific design components, such as thresholds, circulation, unit layouts, and communal spaces, while progressively developing their design propositions. Design components thus became vehicles for value expression, with each decision explicitly linked to identified patterns and underlying priorities.

Weeks	Focus	Key Patterns	Activities / Learning Goals	Key Questions
Weeks 1–2	Understanding Context and Precedent Analysis	Pattern 21, 35, 37	Explore socio-spatial, economic, and environmental issues in Australian multi-residential housing; experiment mapping techniques to uncover embedded values, design principles, and design strategies in a precedent using selected patterns	How can mapping and pattern-based precedent analysis reveal key housing issues and design opportunities?
Weeks 3–4	Exploring Entry, Thresholds, and Communal Areas	Patterns 110–115, 117–118, 120, 129, 133, 160, 163	Analyse how spatial hierarchy and thresholds shape movement, privacy, and social interaction; explore strategies for fostering interaction, integrating nature, and designing inclusive environments	How do spatial hierarchies, entry transitions, and communal spaces foster social interaction and a sense of community?
Weeks 5–6	Site Analysis; Exploring Comfortable and Adaptable Unit Design	Patterns 75–78, 79, 102, 107, 116, 118, 130, 136–137, 138–140, 143–144, 159, 164–165, 191, 197–198	Conduct site visits and analyse environmental and social context; Explore unit layouts that support comfort, adaptability, and wellbeing across different user types and life stages	How can unit design support occupant physical, psychological and social wellbeing across life stages?
Weeks 7–8	Site Integration and Unit Configuration	Patterns 104–107, 112, 116, 129, 171	Develop schematic design with focus on unit configuration, circulation paths, and communal areas; incorporate non-residential programs based on site analysis; test massing and placement strategies	How can massing and architectural programming respond to occupant needs—from affordability and accessibility to social equity and inclusivity, to climate resilience, to adaptability?
Weeks 9–10	Design Intent and Spatial Organisation	All applicable patterns	Synthesise research and translate priority values and design principles into an integrated spatial framework; refine spatial strategies to support connectivity, inclusivity, wellbeing, and climate resilience	How does the design reflect core principles, fostering healthy, regenerative, thriving communities?
Weeks 11–12	Evaluation and Final Refinement	All applicable patterns	Evaluate the design against the established framework; refine design diagrams and drawings to ensure design responsiveness	How well does the schematic design support diverse users and their specific needs over time?

Table 1: A summary of weekly studio learning goals

To further scaffold learning, the teaching team provided a few worked examples of value-based programming (see Table 2), demonstrating how abstract values (eg safety, belonging or adaptability) can be translated into spatial strategies through clearly defined relationships between design goals, factual conditions, user needs and design responses.

Notably, students worked with carefully selected precedents, ensuring engagement with high-quality, contextually relevant examples and reinforcing the importance of critically using design references as sources of knowledge. The intervention was introduced over a 12-week trimester, with a progression from precedent analysis and value articulation to schematic design development and evaluation. This structure supported an iterative design process in which students continuously tested and refined their proposals against their own value-based frameworks.

Values	Goals	Facts	Needs	Design Ideas /Patterns
Social Value Neighbourly homes	- Foster a sense of belonging and inclusion. - Encourage informal social interactions between residents and neighbours. - Strengthen the interface between private and public realms.	- Higher-density housing often risks social fragmentation if interfaces are closed-off or overly private. - Poorly defined boundaries between private and public space can create conflict or disengagement.	- Establish clear but permeable boundaries that allow residents to feel secure while still visually connected to neighbours and the street. - Use design elements (edges, thresholds, shared nodes) that balance privacy with opportunities for encounter.	- Landscape and material treatments to create semi-permeable boundaries (Pattern 112: Entrance Transition). - Interfaces that allow visual connection between private gardens and public paths (Pattern 69: Public Outdoor Room). - Active edges that support casual encounters while maintaining privacy (Pattern 55: Raised Walk; Pattern 140: Private Terrace on the Street).
				

Table 2. Example programming table provided to students (Precedent: Clyde Mews by Six Degrees Architects)

Outcomes

The findings are drawn from an integrated analysis of teaching team observations, student design portfolios, and weekly reflection exercises. We posit that the combined use of Pattern Language and Value-Based Programming helped students to translate abstract design values into coherent design propositions. Students began to consistently question their own design decisions, asking: How does the design reflect core principles and foster thriving communities? and How well does the design support diverse users and their needs over time?

This ongoing self-reflection supported the development of more consistent and socially responsive design proposals, while providing a shared framework for evaluating how design intentions were realised.

Over the course of the studio, students moved from descriptive interpretations of precedents toward more critical analysis. The iterative use of patterns and programming frameworks supported this shift, enabling students to define value-led design criteria and test and refine their proposals accordingly.

This was also reflected in improved clarity and confidence in articulating design intent, particularly in linking values, user needs, socio-spatial patterns, and spatial outcomes. This clarity enhanced their engagement with feedback: rather than defending form-based decisions, students were increasingly able to discuss how their proposals aligned with defined user needs and project values.

Another key outcome was the development of more transparent and reflective design processes. While structured studio workflows and clearly communicated expectations are known to support learning (McLaughlan & Chatterjee, 2020), they are not sufficient on their own. In Atelier HOME, their integration with value-led reasoning and socio-spatial analysis enabled students to move beyond surface-level compliance and engage in inquiry-driven practice.

Some limitations were also observed. The programming framework was initially perceived as abstract by some students, particularly when translating values into spatial propositions without relying on familiar design instincts. The approach also required sustained iteration, which proved challenging within a compressed studio timeframe. In addition, the use of predefined patterns risked narrowing exploration when treated as discrete solutions. This was mitigated through the introduction of a digital pattern network resource (patternlanguage.cc), which supported a more relational and flexible understanding of patterns.

Overall, we argue that architectural studios should be reframed as spaces where research and design evidence are actively integrated to prepare graduates to address complex societal challenges. This approach has broader relevance for design education, particularly in disciplines engaging with multi-scalar issues. Its key contributions include the development of transparent and reflective design thinking, the integration of tacit and explicit knowledge, and the strengthening of links between research and practice. Future work should focus on expanding the methodology through the integration of evidence-based design processes and exploring its scalability across larger cohorts and diverse design briefs.



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Case-based learning in Banking education: enriching teaching with real-world ethical challenges

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Background

A persistent challenge in banking and finance education is bridging the gap between theoretical instruction and the real-world complexities of ethical decision-making. While students often acquire strong technical knowledge of risk models, they are less prepared for the ambiguity, time pressure, and ethical tensions that shape professional judgement in practice.

This challenge is increasingly salient in light of accreditation and sector expectations. AACSB standards emphasise that business schools should deliver curricula and intellectual contributions that demonstrate positive societal impact (AACSB, 2021). Case writing and case-based teaching are widely recognised as effective mechanisms for addressing these expectations by integrating authentic, practice-oriented learning into the curriculum (Adams, 2021; Brooks & Shirley, 2023). Importantly, case writing also provides tangible indicators of academic productivity for faculty and contributes to institutional evidence portfolios for accreditation and quality assurance (Young et al., 2024).

Empirical research consistently demonstrates that case-based learning (CBL) enhances student learning and engagement, as reflected in both objective performance measures and students' perceived learning experiences (Borah et al., 2023; Medini et al., 2020). Advances in digital delivery have further strengthened the pedagogical value of case-based approaches as active learning tools in post-pandemic higher education contexts (Telli & Aydın, 2021).

Despite these benefits, structural constraints limit the effective use of contemporary cases. Developing high-quality teaching cases is time-intensive (Cinnéide, 2006), leading many educators to rely on textbook cases that may be outdated or misaligned with specific learning objectives. Commercial case repositories can also impose financial barriers for institutions or students (Young et al., 2024).



The aim of this project was to address these pedagogical and structural challenges through the development and integration of a real-world teaching case. By embedding the case within an existing undergraduate banking and finance curriculum, the project sought to enhance applied learning, support the development of professional judgement, and demonstrate how case writing can function both as an effective teaching strategy and as a form of impactful, accreditation-relevant educational scholarship.

Approach

This project adopted a case-based learning (CBL) approach centred on the development and curriculum integration of a real-world teaching case examining the collapse of Silicon Valley Bank (SVB). This approach strengthens ethical reasoning and critical thinking while supporting deeper sensemaking and the transfer of ethical principles to new contexts (Bagdasarov et al., 2013; Thiel et al., 2013). Expanding the use of case-based pedagogy in banking units responds to industry expectations for graduates who are not only technically skilled but also ethically grounded and socially responsible.

The intervention involved the design of a data-rich, narrative-driven case grounded in publicly available sources, including regulatory filings, financial statements, macroeconomic data, and media reporting. This design choice moved beyond simplified or retrospective accounts of banking failure and instead immersed students in the ethical, governance, and regulatory complexities faced by decision-makers in practice. The case was intentionally structured around unfolding events and competing stakeholder perspectives, positioning students as analysts required to exercise professional judgement under conditions of uncertainty.

The case was incorporated into the unit Fundamentals of Bank Management, offered by the School of Accounting, Economics, and Finance within the Faculty of Business and Law at Curtin University, and delivered to undergraduate students at both Curtin's Bentley campus and its offshore Mauritius campus.

The project was developed by the unit coordinator and lecturer in 2024 and implemented during Semester 1, 2025, with students positioned as active participants in the learning process rather than passive recipients of content. To support inclusive participation across a diverse student cohort, engagement with the case occurred through multiple modes, including individual preparation, small-group discussion, and whole-class dialogue, enabling students to contribute in ways aligned with their confidence, communication preferences and analytical strengths.

The case was delivered within a single 90-minute teaching session scheduled midway in the unit, ensuring students had sufficient conceptual grounding to engage meaningfully with its complexity. It was introduced within the weekly lecture topic Risks of Financial Institutions, where students examined a range of banking risks, including interest rate risk, market risk, credit risk, operational risk, liquidity risk and insolvency risk.



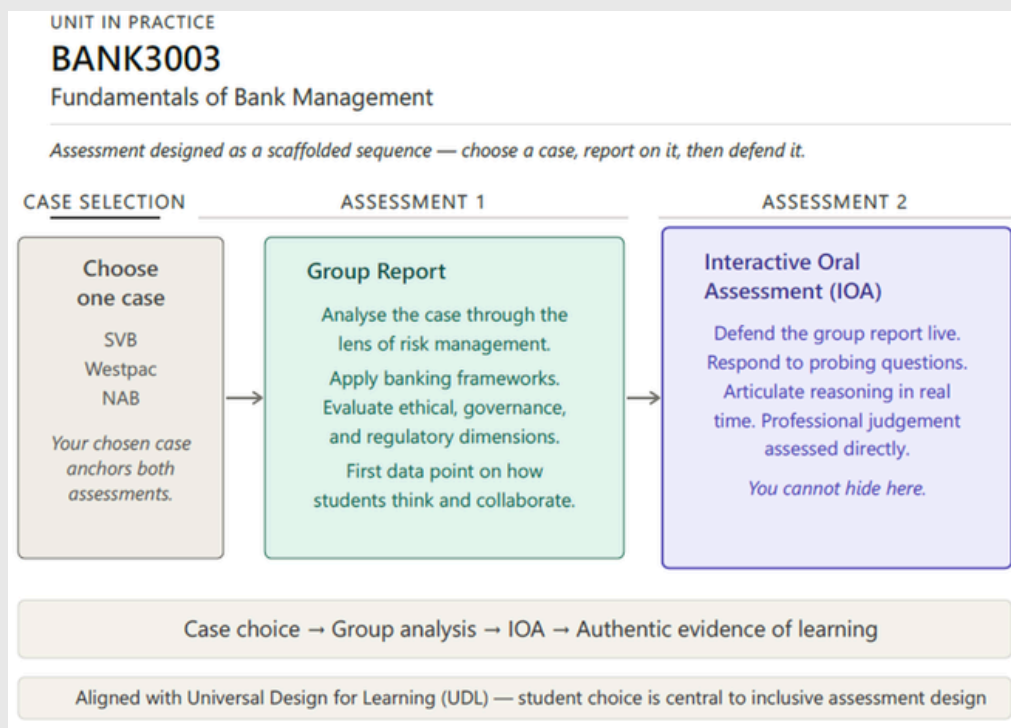


Figure 1. Students select one of three real-world banking cases of their choice for a group report (Assessment 1), which then serves as the foundation for an Interactive Oral Assessment (Assessment 2).

Outcomes

The outcomes of this project demonstrate that the classroom-tested SVB teaching case was effective in supporting applied learning in banking and finance by bridging the gap between theoretical instruction and real-world practice. The case introduced core risk management concepts and illustrated their practical application through a contemporary banking failure, which students found particularly engaging when abstract theories were connected to real-life scenarios. Student feedback collected via a Qualtrics survey in Semester 1, 2025 indicates strong perceived value, with 88% of respondents recommending that the case be incorporated into future classes.

The instructor delivering the case at Curtin's Mauritius campus observed that:

“The teaching case also helped improve students’ soft skills - brainstorming, research, teamwork, and presentation skills - which I personally believe are crucial as well.”

The quality, relevance, and transferability of the case are further evidenced by its publication through the UK Case Centre for global distribution (<https://casecent.re/p/208264>), extending its reach beyond the original institutional context. Collectively, these outcomes contribute to the scholarship of teaching and learning by offering a scalable, evidence-informed model for integrating ethics into professional education. Beyond banking and finance, the project's approach can inform teaching practices in disciplines such as law, accounting, and business ethics, where real-world complexity and ethical ambiguity are central to professional judgement.

Building on this project, two further cases have been developed on major Australian banks, including Westpac and NAB, to address the relative scarcity of high-quality cases grounded in the Australian banking context. This comparative design enables students to engage critically with ethical, governance, and regulatory dilemmas specific to Australia's banking system while also drawing insights from contrasting international practices such as the SVB collapse.

More significantly, in Semester 1 2026, these three cases form a major component of a redesigned assessment structure aligned with the Universal Design for Learning (UDL) framework (Meyer et al., 2024).



UDL is grounded in the recognition that learners differ in how they engage with and demonstrate knowledge, making student choice a central feature of inclusive assessment design. Students choose any one of the three cases as the basis for a collaborative group report (Assessment 1), which then serves as the foundation for an Interactive Oral Assessment (IOA) (Assessment 2), where they demonstrate and defend their understanding. IOAs are authentic, experiential assessments involving real-time, unscripted conversations between students and assessors, often designed to emulate real-world professional interactions (eg job interviews, business pitches) (O’Riordan et al., 2026). They have gained prominence in higher education as a direct response to generative artificial intelligence, offering more authentic and individualised evidence of learning than traditional written tasks alone. The assessment structure is illustrated in Figure 1.

Looking ahead, key questions remain about the measurable impact of this redesigned assessment structure on student outcomes. While student feedback suggests strong perceived value, further research is needed to examine whether the combination of case-based learning, UDL-aligned assessment, and IOAs translates into deeper and more durable learning gains, and whether IOAs elicit richer evidence of ethical reasoning and professional judgement compared to traditional written assessments.

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Building inclusive, industry-aligned rigging teams in animation education

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Background

Rigging is one of the more demanding areas of animation education, requiring students to combine software skills, visual judgement, problem-solving, and production decision-making. In mixed undergraduate and postgraduate cohorts, this can create recurring challenges, including uneven technical confidence, early hierarchy formation, reduced visibility of quieter students, and difficulty assessing individual contribution in collaborative production.

These issues were particularly evident in undergraduate and postgraduate rigging courses with mixed cohorts. Students are expected not only to follow technical instruction, but also to make increasingly independent design decisions in a production-oriented environment.

This case study outlines a teaching redesign developed to address these issues through an inclusive, team-based mini-production model aligned to industry practice. The redesign was informed by practice-based and reflective approaches to learning, particularly the view that students learn most effectively when they can test, revise, discuss, and justify decisions in authentic making contexts (Gray and Malins, 2004; Schön, 1983).



Approach

The core intervention shifted the course from a predominantly technique-led rigging model to a studio-style production workflow. Rather than beginning with disconnected technical exercises, the course was organised around a shared foundational character asset prepared in advance by the lecturer. Before term, this included character design, sculpting, retopology, UV mapping, rig testing and preparation of core demonstrations, requiring approximately 50 to 60 staff hours.

At the time of implementation, three core demonstration videos had been recorded and edited, with more added later in response to software updates and teaching needs. Students then worked in teams to extend, rig, test and refine the shared asset before presenting both process and outcome in a studio review (Figure 1). This provided a common technical starting point while still allowing room for creative differentiation, role allocation and collaborative problem-solving.

To reduce barriers to participation and avoid fixed groups forming too early, students were not placed into permanent teams at the start of term. During the first four weeks, they worked in rotating random groups through short collaborative tasks designed to build shared vocabulary, strengthen core rigging knowledge, and increase confidence. A key part of this phase was a weekly low-stakes competition built around the previous week's teaching points.

Each task took around two hours of staff time to design and focused on moderate-difficulty collaborative questions.

Some could be solved through shared searching and division of labour, while others required students to work through rigging logic together under time pressure. Groups then presented their answers, explained their reasoning, exchanged answer sheets, and marked each other's responses against the model solution. Participation was 100%. This format surfaced misconceptions early, encouraged interaction across different skill levels, and gave students repeated practice in explaining technical decisions publicly (Vygotsky, 1978; Taber, 2018).

Stable teams were formed only in Week 5, once students had already worked with a broad range of classmates. From that point, the course moved into a simplified production structure modelled on industry practice. Responsibilities included project concept planning, rigging and technical direction, animation testing, documentation, and presentation. The lecturer set milestones, modelled techniques, facilitated critique, and offered both face-to-face and online consultation. Students were responsible for planning, communication, documentation, and workflow progression within their teams.



Figure 1. Inclusive rigging workflow for confidence, collaboration, and production readiness

Phase	Weeks	Teaching focus	Student activity	Intended benefit
Orientation and technical foundation building	1–4	Course introduction, foundational skill development, rotating mixed-group tasks	Short collaborative exercises, such as design problem diagnostics, micro-planning tasks, and jointly developing a character rigging hierarchy plan	Reduce or disrupt early hierarchy formation, build learning confidence, surface misconceptions, and foster a sense of class collaboration
Team formation and early project development	5	Role allocation and project concept planning	Teams are formed, roles confirmed, and deliverables clarified	Embed creative practice while clarifying responsibility boundaries and project scope
Independent collaboration phase	6	Light-touch tutor guidance during study week	Focused work on specific rigging challenges, such as facial expression design, blendshape sculpting, and related visual ideation. AI-generated imagery may be used as a supplementary design reference, provided the tool and source are clearly acknowledged. Weekly progress is documented.	Encourage reflection, self-directed learning, and more independent collaboration and communication
Production and postproduction phase	7–11	Introduction of new techniques, in-class critique, and troubleshooting	Apply rigging design within the project, test rigs using animation references, undertake troubleshooting and deeper learning, refine animation, edit, and present the final project	Build practical experience, develop transferable skills and reflective practice, and strengthen peer trust

Table 1. Project phases, teaching focus, student activity, and intended benefits

The course sequence was intentionally scaffolded. Weeks 1 to 4 focused on orientation and technical foundations. Week 5 formalised teams, roles, and deliverables. In Week 6, during study week, students worked more independently on targeted challenges such as facial rigging and facial expression systems. At this point, generative AI was permitted only as a limited design aid, mainly for facial ideation or reference imagery.

It was framed as supplementary rather than a substitute for rigging decisions, and any tool or source had to be acknowledged. Weeks 7 to 11 formed the main production cycle, organised around a repeated rhythm of learning new techniques, applying them in the team project, and refining work through critique and peer feedback (Table 1).

Assessment criteria emphasised not only technical quality, but also process evidence, reflective commentary, creative decision-making, and fair contribution.

Students could therefore demonstrate achievement through multiple forms of evidence, including technical checkpoints, annotated playblasts, process documentation, short reflections, and the final outcome.

Captioned demonstrations, weekly written notes, and MS Teams-based discussion further supported access. This aligns with broader inclusive and formative teaching principles that recognise student diversity and the value of structured feedback and developmental support (Wingate, 2015; Yorke, 2003).

Outcomes

The redesign produced three main outcomes. First, the weekly random-group challenges increased motivation in a visible but low-stakes way. Because students could see not only which group performed well, but also how other groups reasoned through the questions, the presenting and peer-marking stages became more meaningful. By the second and third rounds, more groups were asking for extra time, discussing more actively, and revising answers repeatedly when faced with harder questions. This suggested stronger engagement with the review tasks and greater investment in getting both the answer and the rigging logic right.

Second, psychological safety appeared to improve during the early phase of the course. In the first random-group activity, students were more cautious and reserved in discussion. In later weeks, they moved into task mode faster, introduced themselves more readily, and exchanged ideas with less hesitation. Because they had already worked closely with many classmates before permanent teams were formed, the room no longer felt like a space where most people were still strangers. This seemed to reduce clique effects and make later team formation smoother, broadly consistent with staged models of group development and with work on participation and communities of practice (Tuckman, 1965; Wenger, 1998).

Third, the redesign made contribution more visible and feedback more useful. Weekly checkpoints, process documentation, and reflective components meant that students were not judged only on a final team output. Instead, they had to show rig tests, revisions, and reasoning as the work developed. This improved assessment fairness and made problems easier to identify before they accumulate.



Informal student feedback and classroom engagement suggested that the redesign was experienced positively by many students. Students appeared to value the clear structure of the course, the step-by-step progression of technical learning, and the supportive teaching environment. The redesign also appeared to make rigging more accessible to students with different levels of prior experience, although there remains scope to further differentiate challenge for more advanced learners.



Key messages and transferability

Three principles emerged from this case. First, rotate first, stabilise later. Early random mixed-group work broadens peer contact and builds confidence before high-stakes collaboration begins. Second, combine a shared production outcome with visible process evidence. This improves fairness and strengthens formative feedback. Third, teach rigging as decision-making rather than software procedure alone. Students benefit when technical choices are explained, discussed, and reviewed in class.

These principles are transferable beyond rigging and can be adapted to other technical and practice-based subjects, including VFX, game design, studio capstones, and collaborative production courses where uneven confidence, contribution visibility, and early hierarchy formation are recurring issues.

Next steps

Future development will focus on refining the shared asset, tightening the wording of assessment criteria, and improving how process evidence, leadership, and version history are weighted. There is also scope to extend the model into adjacent animation pipelines and package the approach into reusable teaching resources such as rubrics, role cards, and weekly checklists.

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Design and implementation of interactive clinical decision-making scenarios in a Bachelor of Nursing capstone unit

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Background

Registered nurses are required to integrate clinical knowledge and skills within dynamic, complex healthcare environments to ensure safe, effective patient care. It is therefore important that undergraduate nursing education is intentionally structured to support the development of these capabilities (Nibbelink & Brewer, 2018; Thompson et al., 2013). Nursing graduates transition into complex clinical environments where they are expected to prioritise, escalate and communicate effectively under time pressure. Despite robust theoretical teaching, students often report difficulty applying clinical reasoning cycles in unfamiliar or fast-evolving situations, signalling a persistent theory–practice gap. We designed an interactive, video-based suite of clinical decision-making (CDM) scenarios to provide repeated, authentic and safe practice opportunities that mirror real-world uncertainty. The intervention was embedded in a mandatory final-year unit aligned to course learning outcomes and the Nursing and Midwifery Board of Australia (NMBA) Registered Nurse Standards for Practice.

Simulation is a well-established component of Australian undergraduate nursing; computer-based simulation is increasingly used to enhance reasoning through safe, repeatable practice with feedback (Tutticci et al., 2024; Woda et al., 2017). Evidence of simulation learning transferring to real-world performance remains mixed supporting the need to complement perceived learning with objective outcomes over time. The CDM scenario design was informed by Kolb's experiential learning cycle (concrete experience → reflection → conceptualisation → experimentation) and narrative pedagogy to promote engagement, retention and behaviour change (Kolb, 1984). Evidence-based online learning principles, such as retrieval practice, elaboration and instructional video design, were also embedded to optimise cognitive load and transfer.



Approach

We produced three branching video scenarios: Escalation of Care, Out of My Depth, and Prioritisation of Care, each interweaving clinical and relational decision-making (e.g., multidisciplinary communication, family interactions). Scenarios were built in Articulate Storyline, packaged as SCORM, and deployed in Brightspace D2L for asynchronous practice; one scenario was also facilitated synchronously in on campus seminars to prompt reflective dialogue under moderate time pressure and within a group dynamic.

The project team comprised nursing academics, a learning designer and an academic developer; a multimedia team supported scripting, casting and filming with professional actors in the Clinical Simulation Centre. A co-design process incorporated lived clinical experiences, implicit/explicit cues, and branching decisions (McKercher, 2021) aligned to unit outcomes and NMBA standards. Implicit and explicit cues were integrated to prompt situational awareness and clinical judgement. Scenarios were adapted from anonymised lived experiences to align with unit learning outcomes. Diversity of learner background informed flexible access, repeated attempts, and multimodal engagement (online and seminar). Embedded coaching prompts and optional replays supported different paces of learning and confidence levels, enabling all students to thrive. The scenarios were integrated across an 11-week trimester within the capstone unit.

Two scenarios were completed asynchronously within the online learning space, and one scenario was undertaken in a structured seminar environment. During the seminar, facilitators used guided discussion questions to prompt student self-reflection on decision points and to encourage group dialogue about reasoning processes. While these discussions supported reflective learning, no formal prebrief or debriefing process or specific frameworks were implemented for these scenarios. This decision was intentional, as the scenarios were designed as formative learning activities within a capstone unit rather than high-stakes simulation experiences. We aimed to create flexible, repeated engagement and peer discussion.

Clinical decision-making SCENARIOS

▼

Add dates and restrictions...



In these interactive learning modules, you will embark on a journey where your choices and decisions shape the outcome of the story. Through this format, you will have the opportunity to apply your knowledge, skills, and critical thinking abilities in realistic situations. Each decision you make will lead to new challenges, opportunities, and outcomes, offering a hands-on and experiential learning adventure.

[Upload / Create](#) [Existing Activities](#) [Bulk Edit](#)

- SCENARIO 1 - ESCALATION OF CARE
SCORM Object
- SCENARIO 2 - OUT OF MY DEPTH
SCORM Object
- SCENARIO 3 - PRIORITISATION OF CARE
SCORM Object

The evaluation of the scenarios via an online survey was pooled across three teaching periods to maximise representation and capture sustained implementation.

Outcomes

A total of 141 students responded to a survey we conducted to evaluate the effectiveness of this suite of CDM scenarios. Of these respondents, 6 students also participated in semi-structured interviews to provide explanatory depth by understanding their perspectives further of the scenarios. Students reported high satisfaction with the scenarios' quality and design.

Student experiences with the interactive clinical decision-making scenarios were described as highly engaging, motivating, and relevant to their learning. Most participants agreed that the scenarios were motivating (95%), engaging (95.1%), and a valuable use of their study time (96.4%). The blended delivery model where the scenarios were incorporated in both online and in person components was experienced as a dynamic and flexible approach that supported individual learning preferences while also promoting deeper reflection and collaboration.

We surveyed students on their perceptions of the scenarios relating to core nursing attributes. They reported perceived improvements to their critical thinking (97.2%), clinical decision-making (97.2%), readiness for independent practice (95.7%), along with collaboration/communication skills (97.1%). Engagement indicators were similarly strong.

Student experiences with scenarios	Agree n(%)	Disagree n(%)	Missing data n (%)
The interactive clinical decision-making scenarios helped me feel motivated to learn within the unit	134 (95)	4 (2.8)	3 (2.2)
The interactive clinical decision-making scenarios were engaging and interesting	134 (95.1)	5 (3.5)	2 (1.4)
The interactive clinical decision-making scenarios were a valuable use of my study time	136 (96.4)	2 (1.4)	3 (2.2)
I feel doing the cloud based and in seminar CDM scenarios was valuable to my learning	135 (95.7)	4 (2.8)	2 (1.4)
The clinical decision-making scenarios simulation real-life situations	135 (95.8)	6 (4.2)	0 (0)

Table 1. Student experiences with scenarios (N=141)

Student perceptions	Agree n(%)	Disagree n(%)	Missing data n(%)
The interactive clinical decision-making scenarios helped improve my...			
Critical thinking skills	137 (97.2)	4 (2.8)	0 (0)
Clinical decision-making skills	137 (97.2)	2 (1.4)	2 (1.4)
Readiness for independent practice as a RN*	135 (95.7)	3 (2.1)	3 (2.2)
The interactive clinical decision-making scenarios encouraged collaboration and effective communication among healthcare team members	137 (97.1)	2 (1.4)	2 (1.4)

Table 1. Student perceptions of scenarios (N=141)

The suite of interactive CDM scenarios is now a recurring feature of the capstone unit each trimester, indicating curricular sustainability. Its modular, branching design makes it adaptable for earlier-year units and for continuing professional development. Introducing scenario-based learning earlier in the curriculum may enable students to rehearse these skills to support their self-efficacy development, an attribute that is closely linked to clinical performance (Nuampa et al., 2025).

The design principles, branching structure and authentic clinical focus also make this approach highly applicable in postgraduate and continuing professional education. Practising nurses, transition-to-practice clinicians and interprofessional teams can use similar scenario frameworks to refine decision-making, calibrate clinical judgment under pressure, and maintain competence in evolving care environments. In this way, the interactive scenario suite represents not only an innovative undergraduate pedagogy but a versatile educational tool capable of supporting lifelong professional development.

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From innovation to implementation: a guardrailed approach to generative-AI virtual patients

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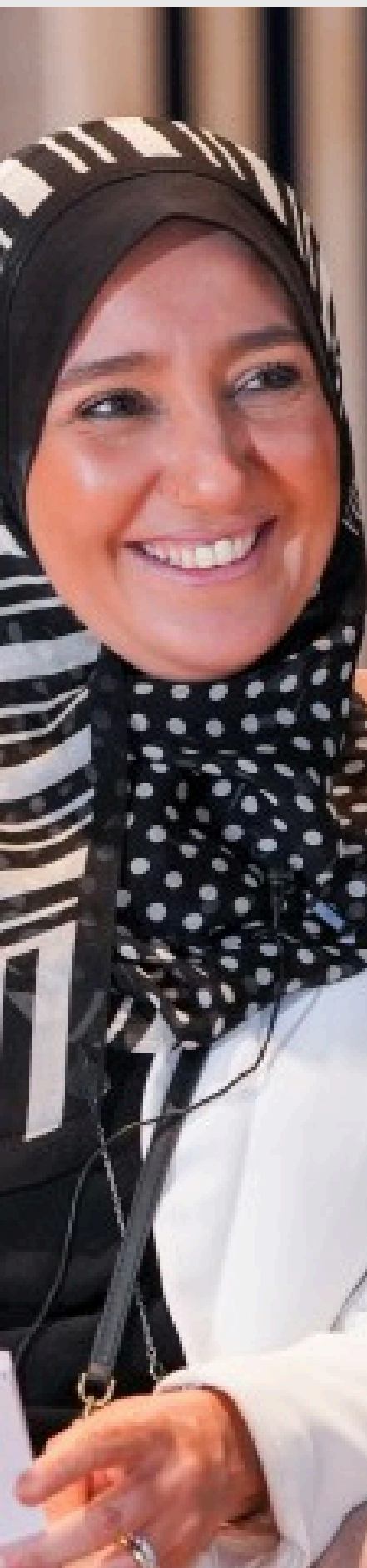
Co-authors: Professor Gary Grant,
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Lyndsee Baumann-Birkbeck

Background

The increasing accessibility of generative AI and the capability of these tools has generated significant interest across higher education (Escotet, 2024), while simultaneously raising concerns about assessment integrity and creating opportunities for innovative, flexible learning approaches that enhance student engagement (Francis, Jones, & Smith, 2025). Traditional models of simulation-based learning in health professional education are often constrained by cost, access, staff workload, and growing student cohort sizes (Shah, Edgar, & Evans, 2018). While generative AI offers potential solutions to these challenges, its effective use requires careful design to ensure pedagogical quality, ethical practice, and safe implementation. The aim of was therefore to establish clear guidelines and guardrails to support scalable, future focused learning for health professional students using virtual simulated patients.

The development of generative AI-powered virtual simulated patients responds to a growing challenge to provide authentic clinical learning experiences that are accessible, repeatable, and resource efficient.





This case study focuses on an undergraduate pharmacy context, where there is a need for students to practice clinical reasoning, professional communication, and therapeutic decision-making in a safe environment that supports patient-centred care (Darley, Farland, Adkins and Ray 2025, Dave and Bhamra 2025, and Mertens et al 2025). Experiential, constructivist, and case-based learning theories were used to inform the development of activities utilising the virtual simulated patients and the associated cases, with scenarios designed to engage students in active learning experiences that mirror authentic clinical practice.

Through realistic patient interactions, students are able to construct knowledge through integrating prior learning with new information, reflect on the appropriateness of their clinical decisions and actively respond when new information is obtained from the virtual simulated patient.

Using this approach to the design of the learning activity included authenticity, timely and meaningful feedback alongside opportunities for learners to reflect and refine their clinical reasoning and communication skills in a safe learning environment. More broadly, there are expectations from the relevant professions for work ready graduates, and institutional strategies promoting digital literacy through technology enhanced learning, ethical AI use, and flexible delivery.

Together, these influenced the design of purpose built and ethically designed virtual simulated patients intended to enhance learning while complementing real-world clinical experiences.

Approach

This case study describes the design, development, and implementation of generative AI-powered virtual simulated patients we created to support clinical skills development in undergraduate pharmacy education. Using a Design Science Research (DSR) methodology, the project was led by pharmacy academics in partnership with clinical pharmacists and student researchers and focused on the creation of practical, ethically grounded guidelines for building virtual simulated patient experiences with embedded guardrails.

The primary challenge we addressed was the need for scalable, flexible, and authentic learning opportunities for students to practice core clinical competencies, including history taking, clinical reasoning, therapeutic decision-making, and professional communication. Traditional simulation activities are resource intensive, restricted to the classroom and can be associated with learner anxiety and variability in student engagement. To address these limitations, we developed interactive, conversation-based virtual patient scenarios that students could access repeatedly in a safe and self-paced learning environment.

We used generative AI to generate patient responses and branching clinical scenarios, enabling realistic and adaptive interactions. Academic staff retained responsibility for design of the virtual simulated patients through the design of prompts, guardrails, and alignment to assessment to ensure the clinical accuracy, educational benefit, and consistency with learning outcomes. Ethical and practical considerations, including data privacy, scalability of the learning activity, and staff workload, were integral to the design process and informed all stages of development.

The resulting guidelines we developed provide a structured, step-by-step framework for building virtual simulated patients using ChatGPT as a delivery platform. The Best Possible Medication History framework was used as an exemplar to illustrate how clinical content can be mapped to prompts, responses, and scenario pathways. A suite of reusable and customisable templates has been created to support efficient development and adaptation by educators.

Equity, diversity, and inclusion were central to the design of the cases. The scenarios were intentionally developed to reflect diverse patient backgrounds, health conditions, communication styles, and levels of health literacy. The virtual format reduced barriers associated with synchronous simulations, supporting students with varying confidence levels, learning preferences, and accessibility needs. While we initially developed the framework for pharmacy education, it is transferable and can be applied across a broad range of health disciplines seeking to integrate generative AI-enabled simulation into clinical education.

Outcomes

The outcomes of this case study indicate that generative AI-powered virtual simulated patients can provide a scalable, high-quality, and ethical approach to developing clinical skills in undergraduate pharmacy education. The DSR approach we utilised, enabled the translation of theory into a practical set of guidelines and templates that support consistent, high-quality virtual simulated patient design while maintaining academic oversight. The project showed that generative AI can be safely integrated at scale into clinical education when appropriate guardrails, prompt curation, and assessment alignment are led by educators.

A key outcome from this study is that the educational value of generative AI lies in academic design. By separating randomised AI generated interactions from developed educator defined prompts and validated templates, the guidelines ensure clinical accuracy, ethical integrity, and learning outcome alignment. Although initially developed for pharmacy and exemplified using the Best Possible Medication History framework, the guidelines are transferable across health disciplines and levels of training, including medicine, nursing, and allied health.

Further application and evaluation of this work will be conducted by the research team and will be achieved through systematic evaluation of learning outcomes, student confidence, and skill transfer to authentic clinical assessments. Integration with learner analytics and appropriate assessment activities, would strengthen the evidence of impact and support broader interdisciplinary and institutional adoption.





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Applying DevOps principles to education development: a case study on AI-assisted education development and operational implementation

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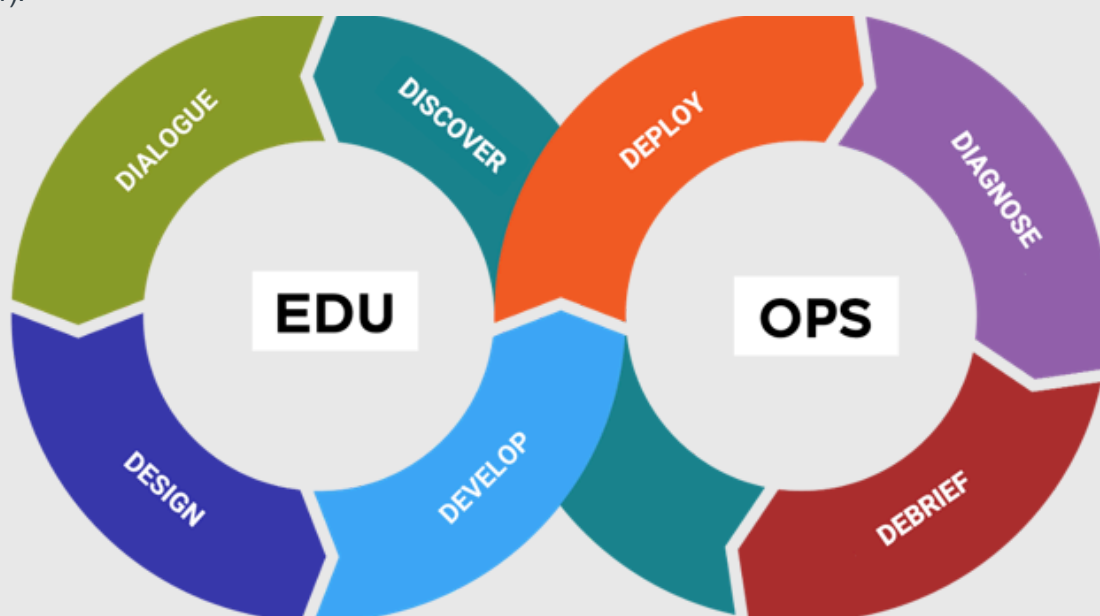
Background

The rapid emergence of generative artificial intelligence has prompted renewed scrutiny of established assessment practices in higher education. Concerns regarding academic integrity, alongside shifting expectations about what constitutes meaningful evidence of learning, have accelerated a move towards more authentic forms of assessment (TESQA, 2023). These changes, however, require coordinated and scalable redesign of curricula, teaching strategies, and student support systems to ensure alignment with evolving assessment approaches.

Here in we present a case study conducted at the University of New South Wales (UNSW) School of Chemical Engineering, which examines the potential adaptation of DevOps principles, an approach that integrates software development and IT operations through iterative, collaborative, and automated practices, into an EduOps framework aimed at promoting efficient and sustainable course redesign and development.

Approach

EduOps consists of seven iterative steps: Discover, Dialogue, Design, Develop, Deploy, Diagnose, and Debrief (see Figure 1), incorporating practices from established education development framework and model such as ADDIE, Backward Instructional Design, and ABC Learning Design (Gagné et al., 2005; Hasenknopf et al., 2019; Laurillard, 2002; Laurillard, 2012; Molenda, 2003; Young and Perović, 2016; Young and Perović, 2020). The EduOps approach seeks to address persistent constraints such as large enrolments and limited capacity for curriculum innovation. The case also explores the use of AI tools to assist or automate certain aspects of course design, thereby enabling more responsive and scalable educational development (see Table 1).



EduOps Stages	Activities	Automation
Discover	The design team collate and systematically reviews course materials, including outlines, assessment guides, student feedback, governance system data, and supplementary resources such as lecture slides or exam scripts. This provides essential context and identifies opportunities for later stages.	Generative AI tools analyse course documents, identifying key themes, assessment types, learning outcomes, and gaps. By providing concise summaries and highlighting issues, AI speeds up the Discovery phase and supports evidence-based discussions in later stages.
Dialogue*	The design team meet with the teaching team to clarify course context, objectives, challenges, priorities, and roles. This step helps align the assessment redesign with course design requirements, establishes scope and scheduling, and ensures the redesign matches the teaching team's capacity and capabilities.	Generative AI supports dialogue between the design and teaching teams in two ways that help structure conversations, streamline notetaking, and enhance continuity throughout the redesign process: § AI assisted communication and collaboration platforms summarise key points and actions during and after meetings. § Generative AI tools produce pattern books and exemplars to provide relevant prompts and guide discussion.
Design	The design team translates insights from the discovery and dialogue stage into a structured assessment plan by creating an assessment blueprint and conducting test results analysis. Test results analysis serves to identify quality gaps, uncover misconceptions, estimate workload, and inform the refinement of rubrics, grading procedures, and feedback strategies. Assessment blueprints systematically align assessment tasks with learning outcomes, performance criteria and levels, and mark allocation to ensure that assessments are valid, and appropriately balanced between formative and summative approaches.	Generative AI optimizes the design stage by systematically aligning assessment tasks and subtasks with learning outcomes and assessment criteria. This streamlined process enhances validity and imposes clear structure on complex student work, thereby strengthening constructive alignment and overall coherence.
Develop	The design team and teaching team co-design course materials, resources, and learning activities to support the assessment. This phase entails converting the assessment blueprint established in the Design stage into concrete instructional elements and artefacts.	Generative AI accelerates the development of course materials by drafting lecture notes, practice questions, rubrics, and feedback comments aligned to the assessment blueprint. It also adapts resources for different learning needs, ensuring consistency and inclusivity across instructional artefacts.

Table 1. Overview of the EduOps framework, detailing associated activities and the role of generative AI in automating and augmenting each stage of educational development and operational implementation.

* Regular communication between the teaching and design team continues throughout each subsequent stage of the EduOps process.



The intervention was implemented through a collaborative model involving the teaching team and a design team drawn from UNSW Nexus Program, a cross-institutional initiative that brings education developers, and subject matter experts together. The time frame of intervention is approximately 8 weeks for each course, i.e. the EDU cycle in Figure 1, that is followed by a 10-week term in which the intervention is implemented, i.e. the OPS cycle in Figure 1. By allocating time and staffing, and pairing education developers with subject matter experts, this approach grounds educational development in disciplinary expertise and evidence-based pedagogy, thus ensuring effective and sustainable development and implementation. Further details of the Nexus Program are provided in Bournival et al. (2024).

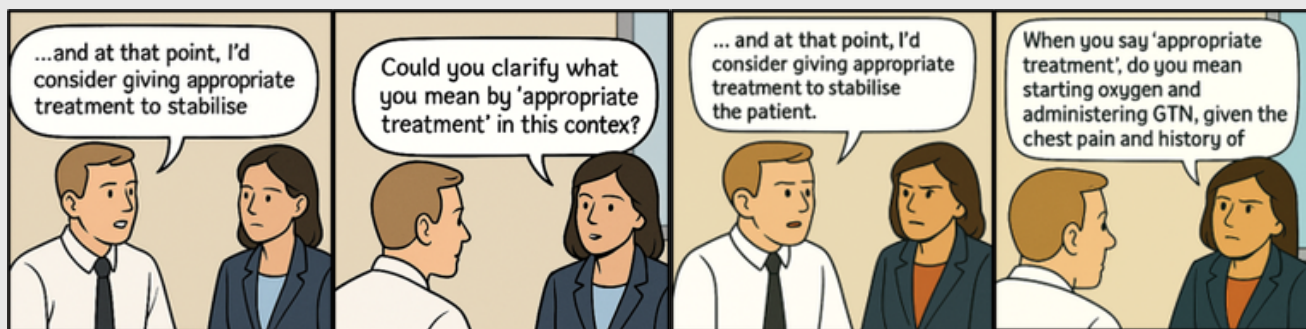
Outcomes

AI-assisted communication and collaboration platforms augment the EduOps process by capturing, structuring, and synthesising discussions in real time. Features such as automated summaries, speaker tracking, transcripts, and integrated document sharing shown in Figure 2 support continuity across design cycles, reduce administrative burden, and ensure that key decisions, constraints, and pedagogical considerations are clearly documented. This enhances collaborative alignment between design and teaching teams and enables more efficient, evidence-informed course redesign.

Generative AI tools can augment the EduOps process by generating and structuring course resources, thereby reducing the manual effort involved in designing robust and pedagogically sound assessment artefacts. Figure 2 shows an example where OpenAI Custom GPT is used to map course learning outcomes to VALUE rubric dimensions and performance levels; this supports the efficient development and mind-share around assessment frameworks, and promote the use of robust evaluation criteria.

Generative AI tools can also support the EduOps process by producing multimedia resources for instructor training at the Deploy stage, such as graphics and video explainers (see Figure 4). The same tool is also applicable for capturing and supporting the analysis of students' learning process, particularly non-text-based interactions that have traditionally been challenging to document (see Figure 5). More importantly, these resources can be tailored to specific assessment designs and teaching contexts, thereby supporting more effective and scalable instructional practice.

Generative AI tools can support systematic evaluation by analysing learning and teaching artefacts, as well as instructor and student experiences and feedback in the Diagnose and Debrief stage. Using these tools, the teaching and design team can synthesise insights across multiple data sources and generate structured reports for documentation, quality assurance, and continuous improvement, thereby strengthening institutional record-keeping and evidence-informed decision-making in future work.



Probing Questions is a prompting technique where the assessor invites deeper reasoning to assess higher-order thinking.

Unlike presenting or clarifying questions, probing involves exploring deeper layers of understanding, such as the candidate's clinical reasoning, judgment, or ability to apply knowledge to varying contexts.

Probing questions should be used with caution and guided by the principle of equivalence and consistency. That is, probing should not follow a rigid script (uniformity) as identical probes risks limiting meaningful assessment or creating unfair advantage. Instead, assessors should ensure consistent and comparable level of challenge across candidates.

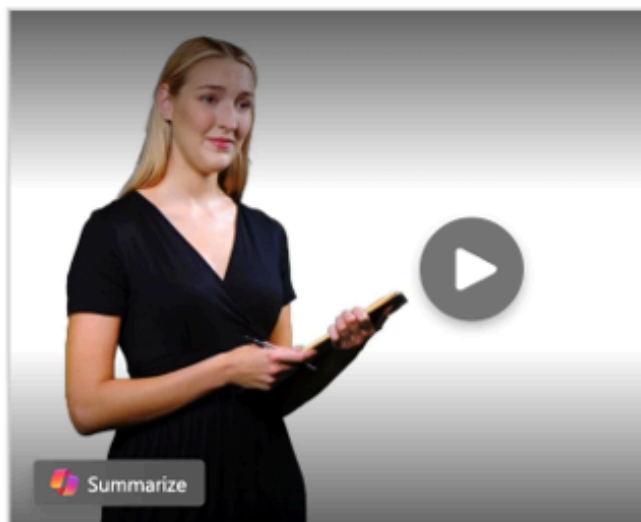


Figure 1. Graphic and video elements that were generated by AI to support learning and teaching.

Clarifying Questions is a prompting technique where the assessor asks for elaboration without suggesting an answer. The goal is to elicit a more precise understanding. The image below shows appropriate (left) and inappropriate (right) way of asking a clarifying question.

Conclusion

The agency of teaching teams, coupled with effective collaboration with the design team, is fundamental to meaningful and sustainable course redesign. Active involvement fosters ownership and professional commitment, while ensuring that changes are both pedagogically sound and practically feasible. AI tools enhance the EduOps process by streamlining communication, analysing course-related data, and supporting collaborative design and decision-making. This enables teams to focus on pedagogical strategies that promote student engagement and authentic learning, without imposing a significant additional workload.



The findings of this study indicate that EduOps principles, supported by artificial intelligence and underpinned by a systematic, collaborative, and technology-enabled approach, offer considerable potential to accelerate and enrich curriculum and assessment design processes, particularly during periods of disruption and rapid change in higher education.

Future research should examine how EduOps workflows can be refined and optimised, as well as explore the system where infrastructure, policies, and support systems comes together to support effective and sustainable educational development and implementation operation at scale.

Future research should focus on refining and optimising EduOps workflows, as well as investigating whole-of-institutional institutional systems where infrastructure, policies, and support mechanisms converge to facilitate effective and sustainable educational development and large-scale implementation.



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Readiness reimaged: how guided AI enhances student preparation for work

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Background

The rapid integration of generative AI (GenAI) into higher education and workplaces has challenged traditional approaches to academic integrity, assessment design, and graduate employability. Early institutional responses to GenAI use in and for assessment often relied on binary permissions either allowing or prohibiting AI. Neither of which adequately expose students to good practices required in digitally mediated workplaces. This case study addresses the complexities, challenges, and opportunities for educators when exploring, trialling, and implementing AI literacy, particularly the development of ethical and professional judgement.

The approach taken across the Faculty of Science, Engineering and Built Environment (SEBE) at Deakin University responds to a sector-wide challenge: how to develop students' AI literacy as a graduate capability to enhance work-readiness and employability outcomes. SEBE (as strategically guided the University) opted to do more than permit the use of GenAI for learning. Educators guided students in ethical, curriculum-embedded practice, teaching, practising, and assessing authentic employability skills reliant on GenAI in real-world contexts.

The use of AI in the curriculum was grounded in scaffolded, constructively aligned teaching practices (Biggs, 1996; Borton, 1970; Schön, 2017), positioning AI-enabled activities as authentic assessment aligned with professional learning outcomes and digital capability for workplace readiness. In summary, GenAI was viewed not as a threat to assessment integrity but as an opportunity to enhance students' developing work-readiness amid rapid technological change and the need for equitable, professionally appropriate guidance to all our undergraduate and postgraduate cohorts – career starters, advancers or changers alike.

The goal of enhancing AI literacy for undergraduate SEBE students was embedded through two placement-preparation pathways: (1) a foundational core unit, Career Tools for Employability, and (2) pre-placement Work-Integrated Learning (WIL) preparation modules (Placement Preparation Modules; PPM). Curricula were reviewed and redesigned to include a guided learning phase in which a carefully selected AI activity was integrated into the assessment task.

An assessment incorporating AI was restructured as a formative task, with AI prompts and responses functioning as peer and educator feedback mechanisms that encouraged students to interpret, critique, and act on feedback during drafting (Zhan et al., 2025). This curriculum-led transformation, focused on ethical decision-making in GenAI use, was underpinned by the resource Generating Artificial Intelligence in Work-Integrated Learning: Resources for university staff, students, and industry partners (Dean et al., 2025), ensuring alignment with workplace expectations and institutional policy.

Approach

Embedding and Iteratively Uplifting AI Interventions

The goal was to review and then renew the curricula, based on the aspiration to embed AI tools to prepare students for emerging professional practice contexts. The AI curriculum transformation initiative was led by the University, with the uplift carried out by SEBE WIL academics in collaboration with the Faculty Learning Innovations team. This collaboration ensured curriculum coherence and effective technology integration to support employability preparation.

The curriculum approaches with greatest impact to date on student work readiness and employability learning are as follows:

1. FAQ AI Agent (“Cogniti”) in “Career Tools for Employability” unit

Challenge:

With over 3000 student enrolments per year in this unit, the challenge of how to ensure a successful student experience, at scale, was identified. A unit review identified a high percentage of students had similar queries relating to the pragmatic instructions on how to complete the unit. An effective means for rapidly responding to student questions, to better support unit completion given that success in this first-year affected transition toward employability capability enhancement in subsequent WIL units, was essential.

Opportunity:

A Deakin-designed FAQ AI agent (“Cogniti”) was constructed and implemented in the unit to provide students with access to a unit-centric (AI) expert that could instantly provide query responses. Given the structured set of questions and the low-stakes engagement, the development of the agent seemed sensible. To enhance efficiency and student experience by embedding AI as a bounded support tool and fostering digital literacy and critical evaluation through modelling good practice.



Complexities:

Implementation required attention to agent stability, student-centred tone, and institutional governance requirements. Testing showed that it was more effective not to rely on dynamic prompting, but rather to embed clear instructional guidance and epistemic guardrails at system level.

2. Structured Generative AI Prompting in Career Development Tasks

Challenge:

Students needed opportunities to learn how to use GenAI effectively and ethically within an assessment context.

Opportunity:

This initiative is transferable across disciplines incorporating employability or authentic assessment tasks as structured prompts enhance assessment alignment. Embedding GenAI as a scaffolded formative feedback mechanism allowed students to draft career scripts independently (e.g., “Me in a Minute” and LinkedIn Summaries) and design rubric-aligned prompts. This strengthened constructive alignment, fostered evaluative judgement, and positioned AI as a professional “copilot.” Ethical practices were embedded and students de-identified documents, avoided sensitive data, and acknowledged AI use. Rubric-aligned prompting enhances writing quality, prompt literacy, and professional articulation.

Complexities:

Compliance-based AI governance alone did not enable students to critically engage with AI or develop employability-focused curricula. Students had to critically evaluate AI-generated feedback, navigate assumptions about audience and labour market expectations and selectively accept or reject suggestions. Embedding AI ethically required careful scaffolding to maintain alignment with professional values and core knowledge while ensuring the AI supported learning rather than replacing student judgment.



3. AI Resource Guide in PPM

Challenge:

Students on placements struggled to use AI responsibly in workplace contexts, often asking “Is AI allowed?” without considering ethical or professional implications.

Opportunity:

The ‘Generating Artificial Intelligent in Work-Integrated Learning: Resources for university staff, students, and industry partners’ (Dean et al., 2025) resource provided the students a structured ethical decision-making framework prompting consideration of industry regulations, organisational policies, confidentiality, and professional standards. Students identified workplace “red flags” (e.g., misrepresenting AI outputs, entering confidential data, failing to verify information) and actively selected or rejected AI suggestions, demonstrating evaluative judgement.

Complexities:

Students on placement needed to reconcile AI-generated suggestions with authentic workplace practices and expectations, which were often context-dependent, while simultaneously navigating ethical and considerations such as confidentiality and responsible use of AI outputs.



Outcomes

The AI interventions enhanced student learning and employability by embedding structured, ethical engagement with generative AI. Scaffolded prompts supported students with varying levels of digital confidence and directed them to institutional GenAI guidance, library resources, and privacy protocols, fostering responsible professional practice. The intervention ran across two trimesters and was iteratively refined through teaching team reflection and student feedback, enabling continuous improvement in response to student learning needs.

Key findings showed clear improvements in employability-related capabilities. Students reported greater confidence in articulating their professional identity and digital presence and demonstrated more sophisticated evaluation of AI-generated feedback, applying professional judgment relevant to workplace contexts. They also developed heightened awareness of ethical considerations and workplace accountability when using AI, including confidentiality, verification of information, and responsible professional conduct.

This case study demonstrates that structured, scaffolded AI learning experiences effectively build digital literacy, evaluative judgment, and professional decision-making. These approaches are transferable to other disciplines and levels where authentic or employability-focused assessments are used, particularly in preparing students for working environments or placements.

Future work will monitor students' AI decision-making during WIL placements, expand the approach across programmes, and evaluate alignment with evolving professional, ethical, and regulatory expectations. This ongoing development aims to ensure graduates are prepared to navigate AI-integrated workplaces responsibly and effectively.

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