### **Future-Focused:**

Educating in an Era of Continuous Change

# From vision to reality: Shaping future nurses through co-design and programmatic assessment

Michelle Pedlow, Olivia Gallagher

University of Western Australia

The University of Western Australia aims to launch its first undergraduate nursing degree in 2026, co-designed from inception and underpinned by programmatic assessment for learning. This course was developed in direct response to sector-wide disruptions, including generative artificial intelligence, workforce challenges, assessment reform, and evolving healthcare demands. Instead of adapting existing models, we created a curriculum intentionally designed to equip students to navigate and thrive in complex environments. This paper traces our design journey, from co-design with clinicians, educators, nursing alumni, and community partners to the creation of a cohesive, feedback-rich assessment system. Key features include low-stakes assessments, structured academic mentorship, course portfolios, case-based vivas, and holistic progression panels. These components empower students to integrate feedback, track their development, and build professional identity over time. We also address the policy tensions encountered, particularly the misalignment between course-level progression and traditional unit-based governance. Through adaptive moderation processes and strategic alignment with institutional frameworks, we established a robust model that balances innovation with compliance. This case study offers a scalable, future-focused approach to curriculum reform for professionally accredited programs, one that prioritises student growth, industry alignment, and sustainable practice in an era of ongoing change.

*Keywords:* programmatic assessment, co-design, feedback, academic mentorship, nursing education, curriculum development, artificial intelligence

### 1. Reimagining Nursing Education for a Changing World

As the University of Western Australia prepares to launch its first undergraduate nursing course, we found ourselves asking a deceptively simple question: What does it mean to educate nurses for a world we cannot fully predict? It is a question that has guided every phase of our course development as both a pedagogical challenge and a moral and strategic imperative. Australia's healthcare sector is navigating increased patient acuity, digital transformation, and critical workforce challenges. National initiatives, such as the Australian Government Department of Health and Aged Care (2024) National Nursing Workforce Strategy, have reshaped expectations of nursing education by promoting the decentralisation of training. At the same time, universities face mounting pressure to improve graduate readiness, uphold academic integrity, and respond to disruptive technologies, most notably the rise of generative artificial intelligence (GenAl) (Department of Education, 2024). TEQSA's Assessment Reform in the Age of Artificial Intelligence (Lodge et al., 2023) calls for programlevel, authentic, and AI-resilient assessment design, reinforcing the need for transformative approaches. We are no longer operating in a stable environment. In this era of continuous change, we set out to design a nursing course that also prototypes a future direction for nursing education. We developed a bachelor course grounded in clinical excellence, flexibility, and programmatic assessment. The course recognises nurses as both knowledge holders and adaptable, reflective practitioners capable of leading in dynamic, interprofessional settings. It offers a holistic, forward-looking model that reimagines what undergraduate nursing education can and should be in a world of evolving complexity.

# 1.2 The Problem with The Status Quo

Conventional nursing programs often expand content without critically evaluating how students experience or apply it. Too frequently, curriculum reform is additive, layering new material over outdated structures while clinging to traditional assessment models (Kumar et al., 2025). These approaches, though well-intentioned, fail to reflect the realities of contemporary nursing practice. Our consultations with nursing leaders, clinicians and educators exposed a recurring frustration: a disconnect between what students were taught, how they were

### **Future-Focused:**

Educating in an Era of Continuous Change

assessed, and what they actually need in the workplace. Core competencies such as clinical reasoning, communication, cultural safety, and ethical judgment, essential to nursing, were introduced in fragmented ways, inconsistently assessed across units, and divorced from real-world expectations (Becnel, 2024; Cheng et al., 2024). Students often felt unsure of what was expected and unclear on how individual units contributed to their growth as practitioners (Fooladi et al., 2022). We responded by rethinking our approach to traditional course design entirely. We shifted from aligning assessments to isolated content and instead began designing a cohesive developmental journey that builds professional identity over time (Nieminen, 2025). We placed progression, reflection, and mentorship at the centre of the learning experience. Our revised design philosophy prioritises knowledge acquisition and the formation of capable, confident, and reflective nurses who are ready to lead, adapt, and grow within a complex health system.

#### 1.3 A New Kind of Course for a New Kind of Nurse

We responded with the Bachelor of Nursing (Honours), a four-year undergraduate course that is future-focused, regionally responsive, and pedagogically innovative. From the outset, the course was designed on a blank slate rather than through the adaptation of existing curriculum designs. This intentional approach created space for rethinking core assumptions and enabled us to pose critical design questions. For instance, how might assessment operate as a developmental map of growth rather than a process of uncertainty and conjecture? How might students be supported to move beyond passively receiving feedback towards actively seeking, engaging with, and applying it to shape their learning trajectories? And how might the curriculum cultivate reflective and capable practitioners while simultaneously aligning with the rigorous requirements of professional accreditation? At the core of the course is a co-design approach that frames both conceptual foundations and practical implementation (Zeivots et al., 2025). A fit-for-purpose design framework underpins the curriculum, promoting feedback loops, developmental scaffolding, and continuity of learning. The curriculum frames assessment as a continuous developmental journey spanning the entirety of the program. Our curriculum development journey reflected the very principles intended for students, emphasising growth, feedback, and reflection, alongside the negotiation of constraints, policy tensions, and iterative cycles

# 2. Co-design as Compass: Building With, Not For

This paper extends beyond reporting outcomes to reflect on the processes of development, presenting a case study in how collaboration and curiosity can enable meaningful innovation in a rapidly changing sector. From the outset, co-design was adopted as a methodology for shared decision-making (Zeivots et al., 2025).

# 2.1 Advisory-Led, Clinically Grounded

The co-design process was guided by overlapping advisory structures – including an Advisory Board, Curriculum Steering Group, Rural and Remote Steering Group, and Project Steering Group – that actively shaped key decisions such as curricular sequencing and placement models. Input from clinicians across metropolitan and regional contexts, nursing leaders, accreditation experts, alumni, and academics from multiple disciplines provided a comprehensive perspective on the future needs of nursing education: locally relevant, clinically informed, and adaptable to evolving demands. A central insight was the need for graduates to navigate complex systems as confidently as they manage clinical care. In response, the curriculum integrates digital health, AI literacy, interprofessional collaboration, and extended simulation as key domains that complement and extend core nursing knowledge.

#### 2.2 Regional Responsiveness and Equity

Equity of access and widening participation are also central to the course design. By leveraging the university's regional presence across Western Australia, students are able to study close to where they live and work through regional hubs that combine academic support with community-embedded clinical placements. This approach ensures opportunities extend beyond metropolitan areas and strengthen sustainable regional nursing pipelines. Flexible delivery options, locally delivered support, and dedicated pathways for part-time, advanced standing, and enrolled nurse-to-registered nurse conversion students broaden participation. Progression criteria were intentionally designed to recognise the diversity of learner cohorts. At the same time, the integrity of the programmatic assessment framework was upheld. Together, these measures ensure equitable access to high-quality, locally relevant nursing education.

# 3. Why Programmatic Assessment? Why Now?

# **Future-Focused:**

Educating in an Era of Continuous Change

Programmatic assessment marks a paradigm shift from traditional structural and pedagogical approaches to curriculum design. Our work was guided by the principle that thoughtfully designed assessment systems, supported by a robust feedback infrastructure, have the capacity to promote and sustain meaningful learning (Pedlow & Boud, 2025). Instead of relying on episodic, high-stakes assessments, we implemented a continuous, feedback-driven model that helps students understand and act on their learning over time (Baartman et al., 2022; Torre et al., 2021). This approach treats assessment as an integral part of the learning journey, not merely its endpoint (Van Der Vleuten et al., 2015), and positions feedback as a distinct but complementary process that requires dedicated attention to maximise its educational value (Winstone & Boud, 2020). At our institution, we built our programmatic assessment model around the principles of breadth, continuity, and feedback-informed progression (De Jong et al., 2022). We collect multiple low-stakes data points and use them to support high-stakes decisions in a defensible, student-centred way. Every component reinforces learning, not just performance.

### Students engage in:

- Low-stakes assessments distributed across units, ensuring no single data point determines progression.
- Constructive, actionable feedback at every data point, positioning assessment as integral to learning.
- Ongoing academic mentorship with recurrent learning conversations, fostering reflection, self-regulation and learner agency.
- Portfolios capturing diverse artefacts, enabling triangulation of evidence across multiple methods.
- Milestone viva assessments that promote dialogue, reflection, and growth at key points across the course.
- Stage-gate progression panels that make transparent, holistic judgments of readiness and development.

So, what does this look like in practice? We operationalised this model through scaffolded learning and assessment sequences. Students actively track their development through Personal Development Plans (PDPs) which are continuously revisited and updated with feedback and reflections from low-stakes assessments across units. Academic Mentors review portfolios and provide dialogic, actionable feedback. Students are expected to respond to this feedback in subsequent submissions, actively closing the loop and refining their PDPs. Students curate evidence into their portfolio and complete a case-based viva each semester, synthesising their learning and demonstrating progress against course outcomes. Progression is evaluated holistically through semester-end panels. Educators use standardised rubrics to make evidence-informed decisions, with a particular focus on students scoring below 60%. In these cases, a tiered Learning Development Plan is activated, offering tailored Academic Mentor support to keep students on track and progressing with confidence. Governance is embedded at every level, moderation processes such as calibration sessions, fail-grade reviews, and unit quality checks ensure consistency, fairness, and alignment with accreditation standards. Academic Mentors play a pivotal role, not only guiding the interpretation of feedback but also supporting progression through structured conversations and portfolio development. Overall, the framework establishes a rigorous, student-focused assessment system that positions success as growth, preparedness, and the effective use of feedback for ongoing learning.

#### 3.1 Responding to a Changing Sector

Our course directly responds to TEQSA's Assessment Reform for the Age of Artificial Intelligence (Lodge et al., 2023) and the Universities Accord (Department of Education, 2024) calls for systemic review and redesign of curricula. TEQSA urges providers to move away from high-stakes, text-based assessments vulnerable to Al misuse and instead adopt program-level, authentic, and resilient assessment models. The Accord emphasises the need to improve student retention, employability, and adaptability, outcomes well supported by our feedback-rich, longitudinal approach. Importantly, we do not view programmatic assessment as a strategy solely to mitigate Al risk. Rather, we embrace Al's presence across the curriculum, providing students with structured opportunities to engage with it ethically and critically. We actively encourage students to explore Al as a learning partner, under guided conditions that emphasise transparency, self-regulation, and critical use. Our intention is to create a safe and open space for students to discuss Al, experiment with its affordances, and reflect on its impact on their thinking and work.

This philosophy aligns with our institution's *Staff and Student Guidelines for Generative AI Use in Assessments,* which we operationalise through clear task design, embedded reflection prompts, and scaffolded support. In doing so, we aim to develop students' AI literacy in parallel with their feedback literacy, cultivating the dispositions required to thrive in a rapidly evolving knowledge economy. Emerging research affirms the value

# **Future-Focused:**

Educating in an Era of Continuous Change

of consistent, low-stakes feedback in building resilience, reflection, and retention (Henderson et al., 2019; Molloy et al., 2020). Our model builds on this by embedding Al-enabled tools into the feedback infrastructure, ensuring assessment is authentic, developmental and future-focused (Corbin et al., 2025). In doing so, we equip students to integrate, apply, and grow – developing clinical competence and meeting the expectations of employers and the broader public for adaptive, ethically grounded graduates.

### 4. Navigating Challenges and Policy Tensions

Innovation rarely occurs in isolation. Implementing this new programmatic assessment framework revealed that designing for the future often requires working at the edge of existing policy (Baartman & Quinlan, 2024). While the institution welcomed our innovative curriculum, aligning course-level assessment models with unit-based governance presented both logistical and philosophical challenges. Progression, grading, and board of examiner processes are typically structured around discrete unit marks rather than holistic, longitudinal judgments. This raised critical questions about how course-level progression decisions, derived from aggregated portfolio evidence and panel review, could be recognised within systems designed for unit-by-unit evaluation, and how rigour and comparability could be ensured while supporting personalised learning.

To address these issues, we established a progression panel architecture embedded within the Department's Learning and Teaching Committee, enabling evidence-based recommendations to be reviewed and ratified through existing governance structures. At the same time, institutional rules concerning assessment types, weightings, and submission formats constrained the flexibility required for multimodal, scaffolded, and iterative assessment design. We approached these constraints as opportunities for advocacy, identifying flexibilities within current frameworks, creating context-specific processes, and proposing refinements to inform broader policy reform. In doing so, this work contributed to institutional policy reform. It also aligns with emerging national directions, particularly TEQSA's Assessment Reform for the Age of Artificial Intelligence (Lodge et al., 2023), which calls for authentic, course-level, and feedback-rich approaches.

### 5. Reflections and Conclusion: Designing for Growth in an Age of Change

The design and development of the course was as much a process of reflection as of action. Mirroring the journey we envisage for students, the process involved navigating uncertainty, embracing iteration, and working within complexity. A central principle guided this work: learning is oriented towards growth. This philosophy informed the programmatic assessment for learning design, portfolio design, and progression panel architecture, as well as the collaborative practices that shaped the curriculum. Co-design was essential in ensuring alignment with industry and community needs, and the curriculum emerged through sustained engagement with clinicians, educators, and community partners to ensure both real-world relevance and future readiness. In a context characterised by shifting clinical environments, and evolving professional expectations, nurses require knowledge and the capacity to reflect, adapt, and act with integrity. To this end, the curriculum embeds longitudinal assessment, academic mentorship, and structured feedback processes to support students in developing their professional identities. Ultimately, the course reflects the complexity, relationality, and human dimensions of nursing, and stands as an example of what is possible when disruption is approached as an opportunity for co-creating the future of nursing education.

**Note**: At the time of writing, the Bachelor of Nursing (Honours) is undergoing accreditation by the Australian Nursing and Midwifery Accreditation Council (ANMAC).

#### Reference list

Australian Government Department of Health and Aged Care. (2024, September 11). National Nursing Workforce Strategy – building the evidence base.

https://www.health.gov.au/resources/collections/national-nursing-workforce-strategy-building-the-evidence-base

Baartman, L., Van Schilt-Mol, T., & Van Der Vleuten, C. (2022). Programmatic assessment design choices in nine programs in higher education. *Frontiers in Education*, 7. <a href="https://doi.org/10.3389/feduc.2022.931980">https://doi.org/10.3389/feduc.2022.931980</a>

Baartman, L. K. J., & Quinlan, K. M. (2024). Assessment and feedback in higher education reimagined: using programmatic assessment to transform higher education. *Perspectives: Policy and Practice in Higher Education*, 28(2), 57-67. <a href="https://doi.org/10.1080/13603108.2023.2283118">https://doi.org/10.1080/13603108.2023.2283118</a>

# **Future-Focused:**

Educating in an Era of Continuous Change

- Becnel, K. T. (2024). Effectiveness of simulation-based case studies on knowledge acquisition and clinical judgment in undergraduate nursing students. *Nurse education today*, *132*, 105994. https://doi.org/10.1016/j.nedt.2023.105994
- Cheng, C.-Y., Hung, C.-C., Chen, Y.-J., Liou, S.-R., & Chu, T.-P. (2024). Effects of an unfolding case study on clinical reasoning, self-directed learning, and team collaboration of undergraduate nursing students: A mixed methods study. *Nurse education today*, *137*, 106168-106168. <a href="https://doi.org/10.1016/j.nedt.2024.106168">https://doi.org/10.1016/j.nedt.2024.106168</a>
- Corbin, T., Tai, J., & Flenady, G. (2025). Understanding the place and value of GenAI feedback: a recognition-based framework. *Assessment & Evaluation in Higher Education*, 1-14. https://doi.org/10.1080/02602938.2025.2459641
- De Jong, L. H., Bok, H. G. J., Schellekens, L. H., Kremer, W. D. J., Jonker, F. H., & Van Der Vleuten, C. P. M. (2022). Shaping the right conditions in programmatic assessment: how quality of narrative information affects the quality of high-stakes decision-making. *BMC Medical Education*, 22(1). https://doi.org/10.1186/s12909-022-03257-2
- Department of Education. (2024, February 25). *Australian Universities Accord Final Report*. Australian Government. <a href="https://www.education.gov.au/australian-universities-accord/resources/final-report">https://www.education.gov.au/australian-universities-accord/resources/final-report</a>
- Fooladi, E., Karim, M. N., Vance, S., Walker, L., Zanjani, M. E., Ilic, D., & Brand, G. (2022). Factors Associated With Undergraduate Nursing Students' Academic and Clinical Performance: A Mixed-Methods Study. *Frontiers in Medicine*, *9*. https://doi.org/10.3389/fmed.2022.793591
- Henderson, M., Phillips, M., Ryan, T., Boud, D., Dawson, P., Molloy, E., & Mahoney, P. (2019). Conditions that enable effective feedback. *Higher Education Research & Development*, *38*(7), 1401-1416. https://doi.org/10.1080/07294360.2019.1657807
- Kumar, M., Pattanayak, S., & Belford, N. (2025). *The Layered Landscape of Higher Education : Capturing Curriculum, Diversity, and Cultures of Learning in Australia* (First edition. ed.). Routledge.
- Lodge, J., Howard, S., Bearman, M., & Associates. (2023). *Assessment reform for the age of artificial intelligence*. <a href="https://www.tegsa.gov.au/sites/default/files/2023-09/assessment-reform-age-artificial-intelligence-discussion-paper.pdf">https://www.tegsa.gov.au/sites/default/files/2023-09/assessment-reform-age-artificial-intelligence-discussion-paper.pdf</a>
- Molloy, E., Boud, D., & Henderson, M. (2020). Developing a learning-centred framework for feedback literacy. Assessment & Evaluation in Higher Education, 45(4), 527-540. https://doi.org/10.1080/02602938.2019.1667955
- Nieminen, J. H. (2025). How does assessment shape student identities? An integrative review. *Studies in Higher Education*, *50*(2), 287-305. https://doi.org/10.1080/03075079.2024.2334844
- Pedlow, M., & Boud, D. (2025). The key role of feedback in institutional readiness for programmatic assessment. *Innovations in Education and Teaching International*, 1–14. https://doi.org/10.1080/14703297.2025.2564775
- Torre, D., Rice, N. E., Ryan, A., Bok, H., Dawson, L. J., Bierer, B., Wilkinson, T. J., Tait, G. R., Laughlin, T., Veerapen, K., Heeneman, S., Freeman, A., & Van Der Vleuten, C. (2021). Ottawa 2020 consensus statements for programmatic assessment 2. Implementation and practice. *Medical Teacher*, *43*(10), 1149-1160. <a href="https://doi.org/10.1080/0142159x.2021.1956681">https://doi.org/10.1080/0142159x.2021.1956681</a>
- Van Der Vleuten, C. P. M., Schuwirth, L. W. T., Driessen, E. W., Govaerts, M. J. B., & Heeneman, S. (2015). Twelve Tips for programmatic assessment. *Medical Teacher*, *37*(7), 641-646. https://doi.org/10.3109/0142159x.2014.973388
- Winstone, N. E., & Boud, D. (2020). The need to disentangle assessment and feedback in higher education. *Studies in Higher Education, 45*(4), 656–667. <a href="https://doi.org/10.1080/03075079.2020.1779687">https://doi.org/10.1080/03075079.2020.1779687</a>
- Zeivots, S., Hopwood, N., Wardak, D., & Cram, A. (2025). Co-design practice in higher education: practice theory insights into collaborative curriculum development. *Higher Education Research & Development*, 44(3), 769-783. https://doi.org/10.1080/07294360.2024.2410269

Pedlow, M. & Gallagher, O. (2025). From Vision to Reality: Shaping Future Nurses Throughm Design Programmatic Assessment. In Barker, S., Kelly, S., McInnes, R. & Dinmore, S. (Eds.), *Future Focussed. Educating in an era of continuous change*. Proceedings ASCILITE 2025. Adelaide (pp. 452-457). https://doi.org/10.65106/apubs.2025.2692

# **Future-Focused:**

Educating in an Era of Continuous Change

Note: All published papers are refereed, having undergone a double-blind peer-review process.

The author(s) assign a Creative Commons by attribution license enabling others to distribute, remix, tweak, and build upon their work, even commercially, as long as credit is given to the author(s) for the original creation.

© Pedlow, M. & Gallagher, O. 2025