

Elevate Australasia

AdvanceHE

Careers and employability



June 2026



Table of Contents



04 **H.E.A.R.T. - A Large-Scale
Authentic Research Model for
Developing Career-Ready
Science Graduates**
Deakin University, Australia

09 **Design Your Future:
Embedding Career
Exploration as Curriculum**
University of Sydney, Australia

13 **A 'Buddy Program' for
improving the work
readiness of built
environment students**
Deakin University, Australia

17 **Authentic learning activities
equipping students with
practical workplace
knowledge and skills**
La Trobe University, Australia

21 **Building Employability
Together**
Deakin University, Australia



From the Editor

We are delighted to share the first tranche 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 first edition of the showcase, we share five case studies which focus on student support through careers and employability initiatives.

The five case studies explore how universities are embedding employability into curricula. Deakin's Buddy Program improves work readiness for built environment students, whilst a large-scale authentic research model helps science graduates at Deakin develop career-ready skills. The University of Sydney embeds career exploration directly into the curriculum through a Design Your Future initiative. Deakin's Building Employability Together involves students as co-designers of careers provision. La Trobe's contribution focuses on authentic learning experiences to develop graduate employability. Together, these studies highlight co-design, authentic learning, and curriculum-integrated career development as key approaches to preparing students for professional life.

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

**Dr Elliott Spaeth, Senior Consultant, Inclusive Education,
Advance HE**

H.E.A.R.T. - A Large-Scale Authentic Research Model for Developing Career-Ready Science Graduates

Jan M West and Tiffany Gunning
Deakin University, Melbourne,
Australia

Background

This case study outlines the transformation of a Level 3 core subject (SLE323 Applications of Biomedical Science), in the Bachelor of Biomedical Science at Deakin University, Australia into a student-driven, capstone-style experience. The redesign was in response to a major course review recommending incorporation of a capstone assessment to consolidate disciplinary knowledge and graduate capabilities across the degree.

The new structure comprises four case studies (40%) and a team-based research project (60%). This submission focuses on the research project, developed over 12 months (part-time), for multi-campus cohorts of 300–375 students based on the Undergraduate Research Experience (URE) developed by Rowland, (2016). These types of projects enable programs to offer an authentic research experience to large cohorts as individual research experiences, whilst valuable are neither feasible or sustainable.





The redesign was guided by three intersecting frameworks. First, an Authentic Large-scale Undergraduate Research Experience (ALURE) model aimed to provide every student, regardless of class size, with responsibility for the full research lifecycle: design, ethics, data collection, analysis, interpretation, communication and defence (West et al., 2019). Second, backward design principles shaped curriculum alignment, consistent with the Deakin Curriculum Framework (Deakin University¹, n.d.). Third, the project was mapped to Deakin's eight Graduate Learning Outcomes (GLOs), enabling students to evidence employability skills including teamwork, communication, problem-solving, leadership and ethical practice.

The broader institutional context aligned with Deakin's strategic agenda, Deakin 2030: Ideas to Impact (Deakin University², n.d.), and sector-wide priorities emphasising authentic assessment, employability and sustainability through embedding the United Nations Sustainable Development Goals (UNSDGs) (United Nations. (n.d.))

Aims:

1. To design a scalable, authentic capstone research experience for large undergraduate science cohorts.
2. To develop well-rounded graduates capable of evidencing their practice, justifying decisions, collaborating effectively, and engaging critically with sustainability agendas.

Student reflection: ***“This unit, instead of focusing only on delivering knowledge like other units, focuses on transferable skills of understanding concepts, showcasing them and presenting them and teamwork.”*** (Student T1, 2024).

Approach

Nature and rationale of the intervention

Backward design was used to identify desired learning outcomes before constructing assessments and learning activities (Dazeley et al 2024). The research project became the primary integrative task through which students could demonstrate achievement of all GLOs. The rationale was to shift from content transmission to student ownership, positioning learners as emerging professionals.

Students worked in self-formed teams of six to design a research project under the broad thematic umbrella of “Heart Rate.” This topic was intentionally inclusive and accessible, requiring no expensive equipment, while allowing significant creative latitude. Across 2024–2026, >100 distinct projects have been developed, demonstrating model flexibility and student creativity (Figure 1).

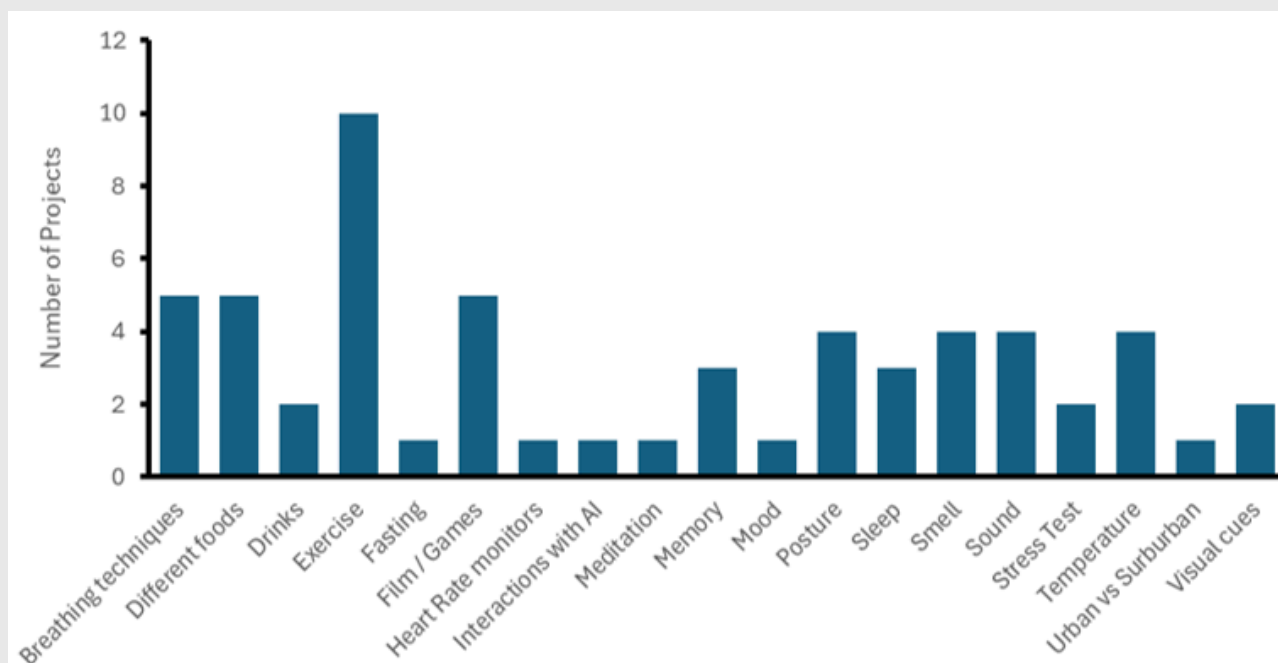


Figure 1. Topics for Student Designed Research Projects (2025)

Assessments within the 60% project include: Project Plan (10%), Abstract (5%), Conference-style Presentation (35%), Oral Defence (10%).

Students present at a simulated scientific conference. Industry representatives, alumni and academic staff served as assessors. The oral defence requires each student to justify methodological decisions, articulate UNSDG alignment, and evidence their contribution to team processes and GLO development.

To promote fairness and accountability, peer evaluation was implemented to individualize the results presentation if necessary. Only 25/1096 students (2024-2025) justified mark adjustment, indicating high engagement and support of equitable contributions.

Collaboration and stakeholders

The redesign was a collaboration between academic staff, curriculum designers, course directors, technical staff, alumni assessors and students. Student voice informed iterative refinements, particularly around workload, assessments and group processes.

To support team formation and reduce anxiety associated with high-stakes group work, several scaffolds were introduced: A SWOT analysis to identify individual strengths and development areas; LMS-based Padlet introductions (50+ posts); A “cooling off” period to allow team changes; Writing of a team agreement.

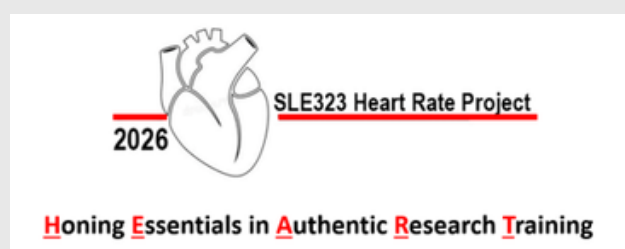
Weekly seminars dedicated to project development, reinforce that assessment focuses on the scientific process and justified decision-making, not statistically significant outcomes.

Inclusive and compassionate design

The cohort included students registered with the Disability Resource Centre having diverse cultural, linguistic and educational backgrounds. Inclusive design principles implemented: (1) Broad project parameters allowed students to work within their interests and capacities while considering research ethics; (2) Flexible presentation options supported accessibility and (3) Clear but non-prescriptive guidelines encouraged creativity.

The mnemonic HEART (Honing Essentials in Authentic Research Training) and a dedicated project logo (Figure 2) reinforced identity and belonging, mirroring professional conference culture.

This approach recognised the emotional dimensions of teamwork and leadership development, providing a “safe supported space” for risk-taking, reflection and growth.



Outcomes

Impact and findings

The transformation resulted in high student engagement, ownership and enthusiasm for the conference. Students consistently report the project as the most authentic experience of their degree.

Selected reflections include:

“The liberation given in this unit is great, preparing undergraduates for real-life experiences.”

“The conference style presentation was a very interesting assessment task and makes this unit unique and applicable to the real world.”

An alumni assessor, now a director of a science media company, stated students demonstrated the ability to communicate complex ideas clearly, formulate arguments, and collaborate effectively, reflecting career readiness.

Students also publicly articulated the impact. Graduates sharing on LinkedIn that the experience made them ***“feel like researchers and not just students,”*** highlighting the power of authentic tasks. This was also reflected in the grade distribution of the research project (Figure 3).

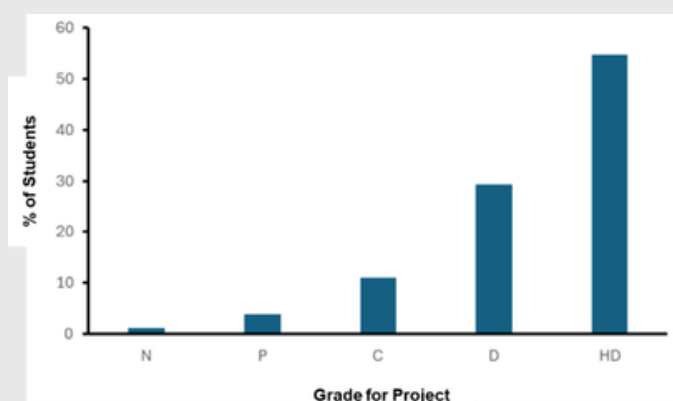


Figure 3. The grade distribution for the research project component of the subject. N=Fail (<50); P= Pass (50-59); C=Credit (60-69); D=Distinction (70-79); HD=High Distinction (80 and above)

Key measurable indicators included: High rates of equitable contribution among team members; Creation of 100+ unique research projects; Strong industry and alumni engagement in assessment.

Transferability

This model is transferable across disciplines where: A broad, accessible theme can anchor diverse inquiry; Assessment prioritises process over product; Authentic audiences enhance motivation; Graduate attributes are explicitly mapped and evidenced.

Critical success factors include robust scaffolding, transparent communication, and staff willingness to embrace uncertainty. Educators must be prepared not to “have all the answers,” modelling scholarly curiosity alongside students.



Sustainability and next steps

Requiring students to engage with the UNSDG's as a social responsibility lens encourages critical reflection on the decision making, supporting the development of ethical, impactful, and socially responsible professional practice.

Future research questions include:

- How does participation influence graduate employability outcomes?
- What longitudinal impact does authentic capstone assessment have on professional identity?
- How might interdisciplinary collaboration expand SDG engagement?

Key messages

- Provide strong scaffolding for challenging, high-autonomy tasks.
- Emphasise repeatedly that assessment rewards justified scientific process, not “perfect” results.
- Trust students with responsibility; ownership drives engagement and growth.
- Integrate sustainability meaningfully to connect disciplinary learning with global citizenship.

Conclusion

This redesign demonstrates that large-cohort, research-led capstone experiences are not only possible but transformative. When students are positioned as emerging professionals within supportive, inclusive environments, they thrive and, in turn, inspire their educators.



References

- Dazeley, R, Goriss-Hunter, A, Meredith, G, Sellings, P, Firmin, S, Burke, J and Panther B (2025) Agile Backward Design: A Framework for planning higher education curriculum. Australian Education Research 52, 1489–1508. <https://doi.org/10.1007/s13384-024-00772-7>
- Deakin University¹ (n.d.) Curriculum framework. Retrieved April 28, 2026. <https://www.deakin.edu.au/about-deakin/why-deakin/education-excellence/curriculum-framework>
- Deakin University² (n.d.) Deakin 2030: Ideas to impact. Retrieved April 28, 2026, from <https://www.deakin.edu.au/about-deakin/strategic-partnerships/deakin-2030-ideas-to-impact>
- Rowland, S (2016) An ALURE (Authentic Large-scale Undergraduate Research Experience) for your students: designing for success using learnings from a multi-institutional, multi-disciplinary project. <https://espace.library.uq.edu.au/view/UQ:416519>
- United Nations. (n.d.). Sustainable Development Goals (SDGs). United Nations Department of Economic and Social Affairs. Retrieved April 28, 2026, from <https://sdgs.un.org/goals>
- West, J, Veenstra, A, Kappler, U, Pedwell, R, Cheung, S, O'Sullivan, L, and Rowland, S (2019). Chapter 3: implementing an ALURE. Engaging undergraduate students in authentic science research: a large-scale approach. Edited by Susan Rowland, Gwendolyn Lawrie, and Rhianna Pedwell. Hammondville, NSW Australia: Higher Education Research and Development Society of Australasia. 15-22. <https://espace.library.uq.edu.au/view/UQ:7cafc82>

Design Your Future: Embedding Career Exploration as Curriculum

**Jennifer Fletcher, Damian Birney, Junyi Cai and Casey Squires,
The University of Sydney, Australia**

Background

Across the Australian higher education sector, graduate employability remains a persistent concern, yet many students report uncertainty about how their degree connects to future work and life pathways. This challenge is particularly acute for students with limited social or cultural capital, financial constraints, or reduced confidence navigating institutional career-building resources. Employer feedback also suggests many students lack confidence in career decision-making and struggle to articulate transferable capabilities when transitioning beyond university.

Design Your Future (DYF) was developed in response to this challenge as a university-wide, credit-bearing undergraduate unit. Its central premise is that career development is not an adjunct service, but a form of academic learning requiring structured, scaffolded, and inclusive pedagogical design. The unit aims to strengthen students' agency, confidence, and capability to navigate increasingly complex and non-linear career pathways.

Offered across all faculties and year levels at a large research-intensive Australian university, DYF serves a highly diverse cohort in terms of discipline, culture, and prior experience. The case aligns with the UK Professional Standards Framework (UKPSF; Advance HE, 2023), particularly in relation to inclusive curriculum design, evidence-informed teaching, and partnership-based learner support. It contributes to sector-wide conversations on employability, learner development, and inclusive education.



DYF draws on life design and design thinking approaches (Burnett & Evans, 2016; Hasso Plattner Institute of Design at Stanford, 2010), framing career development as iterative, exploratory, and values-led. Constructivist and chaos theories of career development (Savickas, 2005; Pryor & Bright, 2011) are incorporated to recognise uncertainty and non-linear pathways as central features of contemporary careers. Psychological theory, particularly self-efficacy (Bandura, 1997) and self-determination theories (Ryan & Deci, 2000), inform the emphasis on autonomy, competence, and relatedness as drivers of sustained career-building action. DYF responds to calls for future-facing curricula that embed employability meaningfully within disciplinary study (Tomlinson & Souto-Otero, 2025), framing it as a developmental capability grounded in self-knowledge, reflection, relationships, and informed action.

Approach

DYF is delivered as a six credit-point unit over a 13-week semester, primarily online, combining large-group briefings, small-group tutorials, reflective and portfolio-based assessment, and experiential engagement activities. Students progress through a scaffolded learning journey that includes reflection, career prototyping, goal-setting, and engagement with people and opportunities beyond the classroom.

A central design decision was to situate career development as a legitimate academic learning rather than an optional or co-curricular activity.

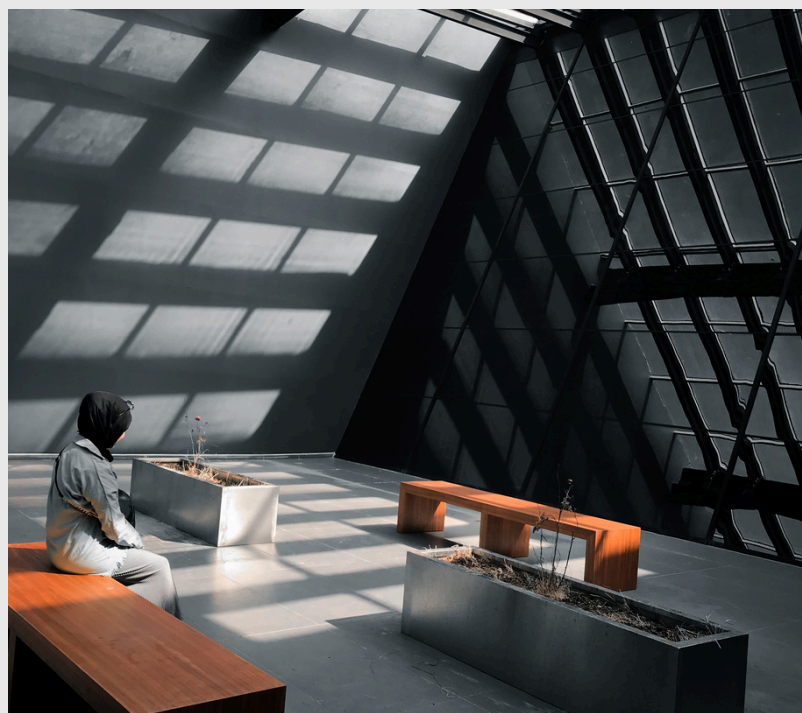
Assessments emphasise reflective portfolios and applied activities, rewarding depth of engagement, personal relevance, and action, rather than prescribing “correct” outcomes.

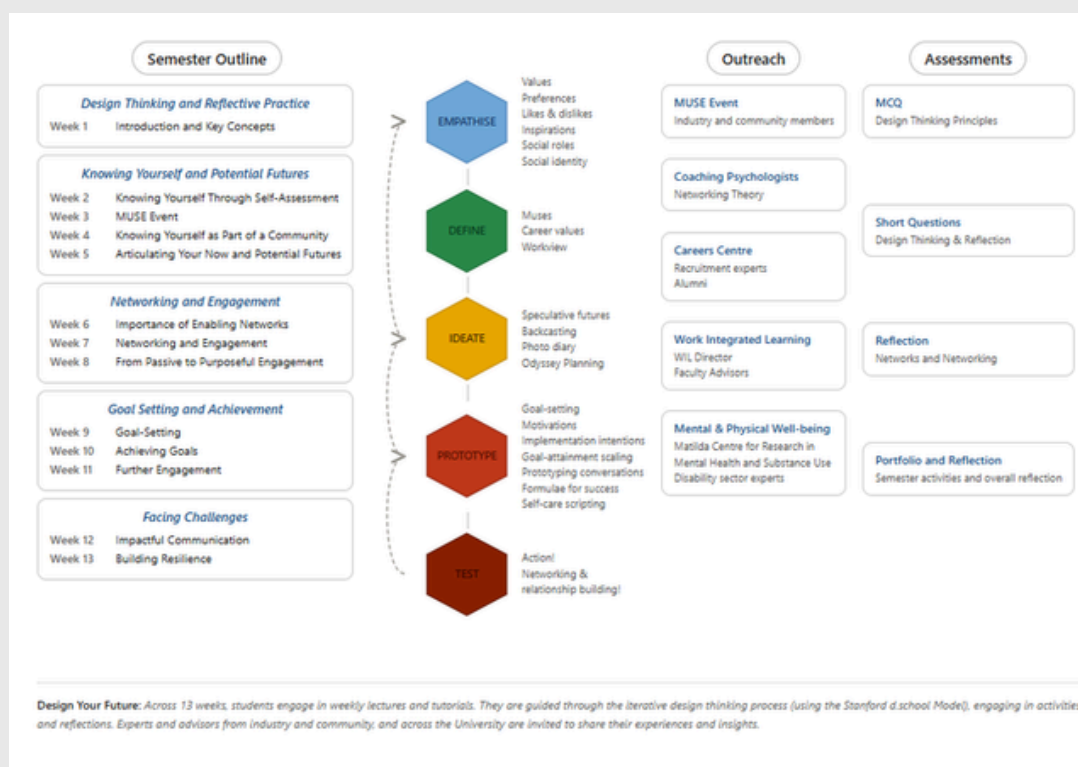
The delivery of the unit is intentionally collaborative. Academic staff from psychology, professional staff from the Careers Centre, educational designers, coaching psychologists, industry partners, alumni, and student ambassadors all contribute to the learning ecosystem.

The unit also features specialist guests, including health scientists from the Matilda Centre for Research in Mental Health and Substance Use, who bring an evidence-based perspective on wellbeing and sustainable performance in study and work. Tutors are selected for strong communication skills and are supported to engage students flexibly and empathically, recognising that career reflection can be both motivating and challenging.

Inclusivity is a core design principle. Universal Design for Learning (UDL; CAST, 2018) underpins the curriculum, with multiple means of engagement, representation, and expression embedded throughout. Students are offered choice and autonomy in assessment topics and formats, concepts are introduced through written, visual, and audio modes, and learning activities are scaffolded to support students with varying levels of confidence and prior experience.

For international students in particular, key ideas and expectations are carefully explained through tailored drop-in sessions, annotated exemplars, case/scenario demonstrations, and clear assessment checklists that support students who may be less familiar with Australian local job market norms. Uncertainty and non-linear pathways are normalised and validated, reducing the implicit advantage held by students with established networks or clear career plans.





A signature experience of the unit is an early semester, on-campus event: Muse 'n' Mingle: Inspiration to Design Your Future. This event anchors the unit experience by bringing together inspirational speakers from diverse professional and cultural backgrounds who share personal, often non-linear, career journeys. The focus is on adaptability, resilience, and values-driven decision-making, but all narratives are authentic lived experiences. Professionals come from corporate, government, social enterprise, and entrepreneurial sectors, spanning fields such as health, law, engineering, and business, and reflecting diversity across age, cultural background, gender, disability, and other dimensions of diversity.

The event serves multiple pedagogical purposes:

- Strengthening student belonging
- Providing relatable role models
- Catalysing engagement with self-exploration

To extend its impact, the event generates reusable learning resources, including video content and testimonials, which can be integrated into ongoing teaching and evaluation.

Outcomes

In its inaugural year, DYF enrolled over 900 undergraduate students (Semester 1: n = 498; Semester 2: n = 408), with retention exceeding 90%, indicating strong engagement in an elective online learning context. Student satisfaction was high, with overall satisfaction ratings averaging 4.28/5 and ratings for quality of teaching reaching 4.47/5 (Semesters 1 & 2, 194 respondents). Across both semesters of the following year, enrolments increased substantially (1093 students), reflecting growing institutional recognition of the unit's value and strong word-of-mouth among students. This expansion was accompanied by continued high levels of engagement and positive feedback (4.3/5 overall satisfaction; quality of teaching 4.46/5), suggesting the model is both scalable and sustainable across diverse cohorts.

A dedicated research program has been embedded to evaluate the unit's impact on student development; with ethical approval obtained through institutional processes. Analyses of student learning artefacts and reflective portfolios demonstrated increased agency, clarity of values, and willingness to engage in career-building behaviours.



Students reported engaging in a wide range of career prototyping activities, including informational interviews, networking with industry professionals, seeking internships and work-integrated learning opportunities, and initiating conversations with faculty and peers about future pathways. Qualitative feedback highlights the validation of uncertainty and the opportunity to “try out” possible futures in low-risk ways. One student described the Muse ‘n’ Mingle event as “the most valuable learning event of my university career”, while another reflected that it made designing their future feel “important and real”. The Muse event’s impact is strong: 95% of students reported it provided compelling career-building examples; 93% agreed the stories were genuinely inspiring. To extend the impact beyond the lived experience, the event also generated high-quality video footage and highlights, alongside student and partner testimonials and related learning artefacts that can be repurposed for teaching, evaluation, and partner engagement.

Industry partners have also endorsed the approach, emphasising the value of graduates who can reflect, adapt, and build relationships in complex and changing work environments. The DYF model offers transferable principles for other contexts: embedding career development within curriculum, valuing reflexivity alongside action, designing inclusively for diverse student cohorts, and leveraging cross-institutional partnerships. Ongoing development will focus on longitudinal tracking, refinement of assessment scaffolding, and exploring adaptation within disciplinary programs.

References

Advance HE. (2023). UK professional standards framework for teaching and supporting learning in higher education. <https://advance-he.ac.uk/guidance/teaching-and-learning/ukpsf>

Bandura, A. (1997). Self-efficacy: The exercise of control. W. H. Freeman and Company.

Burnett, B., & Evans, D. (2016). Designing your life: How to build a well-lived, joyful life. Knopf.

CAST. (2018). Universal design for learning guidelines version 2.2. <http://udlguidelines.cast.org>

Hasso Plattner Institute of Design at Stanford. (2010). An introduction to design thinking: Process guide. Stanford University.

Pryor, R. G. L., & Bright, J. E. H. (2011). The chaos theory of careers: A new perspective on working in the twenty-first century. Routledge.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78. <https://doi.org/10.1037/0003-066X.55.1.68>

Savickas, M. L. (2005). The theory and practice of career construction. In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (pp. 42–70). Wiley.

Tomlinson, M., & Souto-Otero, M. (2025). Graduates' conceptions of meaningful work. *British Educational Research Journal*, 51(6), 2700–2718. <https://doi.org/10.1002/berj.4195>



A ‘Buddy Program’ for improving the work readiness of built environment students

Abid Hasan, Deakin University, Australia

Background

In the built environment sector, work readiness is crucial to graduate employability (Borg and Scott-Young, 2020). However, there is widespread concern about built environment graduates' lack of practical knowledge, experience and the soft skills needed in project-based industries like architecture, construction and engineering (Chipulu et al., 2012; Borg and Scott-Young, 2020).

Many students, especially international ones, do not fully grasp real-world industry practices due to limited exposure to project-based learning and hands-on experience.

They also have few chances for direct mentorship from professionals, networking with industry contacts, or gaining insights into career options. As a result, a gap exists between what is taught in built environment programs and industry expectations. Additionally, mentoring, industry awareness, and sustained professional exposure are particularly vital for improving women's participation and retention in male-dominated sectors such as construction, where women represent fewer than 15% of the workforce (Hasan et al., 2021; Hasan et al., 2024).

Employers encourage universities to improve graduate employability by integrating practical experiences and career guidance into their curricula (Borg and Scott-Young, 2020).

Recent research also attests to the significant impact of work-integrated learning (WIL) on improved employability for built environment graduates (Aliu et al., 2024). Consequently, WIL experiences, such as industry placements or internships at actual workplaces, simulated work conditions, site visits, and guest lectures by professionals, or a combination of these, are considered a critical component in preparing built environment students for professional practice and enhancing their graduate employability (Gratchev et al., 2025; Keleher et al., 2011).

Such experiences enable students to develop an informed understanding of industry expectations and standards, workplace culture, ethical values and the realities of industry practice (Jackson, 2017). This exposure is particularly significant for construction management students, as the career trajectories in the construction industry are diverse and often nonlinear.



However, many existing WIL experiences, such as guest lectures or site visits, though they provide useful insights into real-world practices, are short, consist of one-off or isolated interactions, and thus lack sustained exposure to practice and practitioners.

Moreover, concerns about work disruption, logistics and occupational health and safety have increasingly limited the inclusion of WIL experiences, such as site visits, in university curricula in recent years, especially repeated visits to the same project, which are needed to appreciate the spatial and temporal constraints (Quinn et al., 2019).

On the other hand, industry placements, though highly effective as WIL, are often optional in the built environment programs or not readily available to students, especially international students, who may lack the local professional network. Therefore, alternative, innovative approaches to WIL, based on cooperation and partnership between universities and industry or organisations, must be developed to positively influence the graduate learning experience and better position graduates in the highly competitive labour market (Thune and Støren, 2015).

Furthermore, WIL programs must consider equity concerns and create more opportunities for disadvantaged groups, such as women and international students.

Approach

To address the learning, skills and equity gaps among built environment students, a buddy program was designed and is delivered in Victoria in collaboration with the education committee of the state chapter of the National Association of Women in Construction (NAWIC).

Designed primarily for undergraduate students in their penultimate year and postgraduate students in their final year of the course, especially females, the program provides structured mentoring, career coaching and sustained engagement with industry professionals. Participants develop clearer career direction, stronger professional networks and greater confidence as they transition from university into the workforce.

The three-week intensive program is delivered annually and comprises a series of workshops and networking events. In addition, the program pairs students with early-career industry professionals, or “buddies,” to facilitate mentoring and knowledge transfer. It is designed on the tenets of the ecological systems theory, social cognitive career theory and social exchange theory, extending mentoring beyond a single instance or individual-level exchange by providing sustained mentoring and multiple professional development opportunities, as well as student-student, student-professional and student-employer networking in safe environments (Byars-Winston and Dahlberg, 2019).

Recognising that the inclusion of men in diversity, equity, and inclusion initiatives is essential for achieving sustainable cultural change in the built environment sector (Hasan et al., 2021), the program is open to all genders across architecture, construction management, and engineering courses, while maintaining a female participation rate of more than 50 per cent among both students and buddies. The program structure and timeline are shown in Figure 1.

In the first workshop, students are introduced to diverse career pathways and hear from industry professionals who share their career trajectories and success stories. Participants also meet buddies, allowing them to begin building professional connections.

The next two workshops focus on recruitment processes, including role expectations, career planning, interview preparation, and strategies for a smooth transition from university to industry. The final workshop covers conventional and social media networking strategies and introduces students to potential employers, further strengthening their understanding of industry expectations, available roles, and recruitment practices.

After each workshop, students meet with their industry buddies, either in person or online, to share their experiences, providing opportunities for reflection, guidance, and discussion. Buddies sometimes also organise site or office visits, providing students with direct exposure to real working environments and professional culture. At the start of the program, students and buddies fill out a form about their motivation and expectations.

At the end, they share their experiences and suggestions for further improving the program via an anonymous survey. The lessons learned are incorporated into the next year's program design and delivery, ensuring continuous improvement and relevance.

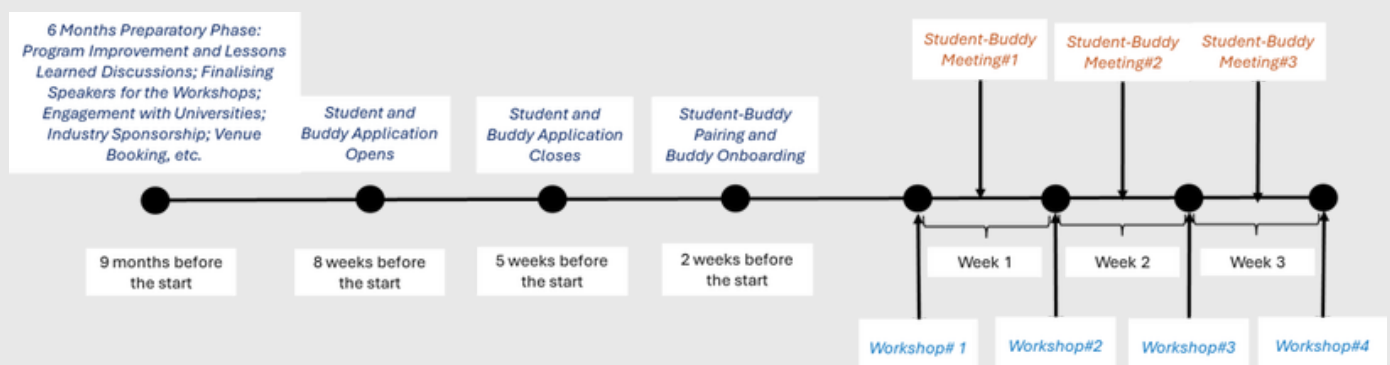


Figure 1. Programme structure and timeline

Outcomes

The success of this program can be judged by the high level of engagement and positive feedback, not only from students and buddies but also from the participating organisations, which has led to its expansion across multiple universities and sustained funding from industry partners.

In 2023, only Deakin students participated in the program. In 2024, the program expanded to include students from three institutions: Deakin, Holmesglen Institute (Melbourne), and RMIT. In 2025, the University of Melbourne joined the initiative, further strengthening cross-institutional collaboration that supported a cohort of more than 60 students from Deakin, RMIT, and the University of Melbourne. To date, the program has produced more than 170 graduates. In 2026, another batch of 65 students from four universities: Deakin, Monash, RMIT and the University of Melbourne have been shortlisted to participate in the program.

Thus, the program has demonstrated significant scalability and continues to expand, with the capacity to support hundreds of students in future cohorts. It also provides a transferable model that can be adapted to other disciplines and institutional contexts.

The program is distinguished by its innovative design and the strong collaboration it fosters between universities and industry stakeholders. Its inclusive structure and delivery, supported by industry funding, ensure that participation is free for all students. The ongoing commitment of multiple universities, industry professionals, and partner organisations reflects the program's value and demonstrated impact.

For students and buddies, the program has been a transformative experience, reflected in over 95% recommending it and three consecutive years of 100% positive anonymous survey feedback. Unsolicited reflections from students, many of whom are now employed in industry, further attest to the program's substantial impact on their learning, confidence, and employability.



References

- Aliu, J., Aghimien, D., Aigbavboa, C., Oke, A. E., & Ebekoziem, A. (2025). An employability skills model for built environment graduates: a partial least squares structural equation modeling analysis. *International Journal of Construction Education and Research*, 21(1), 74-93.
- Borg, J., & Scott-Young, C. M. (2020). Employers' perspectives on work readiness in construction: are project management graduates hitting the ground running?. *International Journal of Managing Projects in Business*, 13(6), 1363–1379.
- Byars-Winston, A., & Dahlberg, M. L. (2019). *The Science of Effective Mentorship in STEMM*. Consensus Study Report. National Academies Press.
- Chipulu, M., Neoh, J. G., Ojiako, U., & Williams, T. (2012). A multidimensional analysis of project manager competences. *IEEE Transactions on Engineering Management*, 60(3), 506-517.
- Gratchev, I., Espinosa, H.G., Busch, A. (2025). Industry Evaluation of Students' Skills and Competencies. In: Gratchev, I., Selvan, K.T., Espinosa, H.G. (eds) *Transformative Approaches to Career-Ready Education*. Springer.
- Hasan, A., Ghosh, A., Mahmood, M. N., & Thaheem, M. J. (2021). Scientometric review of the twenty-first century research on women in construction. *Journal of Management in Engineering*, 37(3).
- Hasan, A., Tivendale, L., Udawatta, N., & Mahmood, M. N. (2024). Personal and organisational factors for plugging the leaky pipeline: learnings from the experiences of early career female construction management professionals. *Journal of Management in Engineering*, 40(6).
- Jackson, D. (2017). Developing pre-professional identity in undergraduates through work-integrated Learning. *Higher Education*, 74(5), 833–853.
- Keleher, P., Patil, A., & Harreveld, R.E. (2011). *Work-Integrated Learning in Engineering, Built Environment and Technology: Diversity of Practice in Practice*. Information Science Reference.
- Quinn, D., Cioffi, E., Hill, S., Kor, M., & Longford, A. C. (2019). Implementing work-integrated learning in online construction management courses. *Journal of University Teaching and Learning Practice*, 16(1), 1–16.
- Thune, T., & Støren, L. A. (2015). Study and labour market effects of graduate students' interaction with work organizations during education. *Education + Training*, 57(7), 702–722.

Authentic learning activities equipping students with practical workplace knowledge and skills

Jasvir Kaur Nachatar Singh, La Trobe University, Australia

Background

The context here is MGT3HRD (Human Resource Development) is a third-year undergraduate subject offered within the Human Resource (HR) major at La Trobe Business School (LBS) delivered in Semester 1, with enrolments of 75–170 students annually across multiple campuses. The subject equips students with strategic capabilities in training, development and career planning, fostering graduate employability through interactive, practice-based pedagogy. Initially MGT3HRD was designed as a blended subject but, due to COVID-19 it pivoted online till 2022.

When I inherited MGT3HRD, I identified limited alignment between the subject content, assessments and workplace practice in developing future HRD professionals. Recent empirical studies (Chowdhury & Miah, 2016; Verma et al., 2018) supported my observations that HR graduates often lacked not only theoretical knowledge but also essential applied skills such as critical thinking, communication, and professional self-management to perform HR roles.

Drawing on my research in graduate employability (h-index: 19), industry feedback and university frameworks such as La Trobe University's (LTU) Employability Framework and Strategic Plan 2025–2030, which call for transformative, industry-relevant learning through authentic tasks and assessments, I initiated a multi-year process of subject transformation beginning in 2020. My teaching philosophy aligns with LTU strategic plans that is student-centred, grounded in constructivist pedagogy (Biggs, 1996) which fosters students' experiential learning, reflection, and engagement.



Approach

In this section, I will be discussing on how I redesigned the authentic learning activities and assessments to provide students the flavour of what HRD in practice looks like.

Working in collaboration with HRD industry partners and students, since 2020, I redesigned content, delivery, learning activities and assessments to ensure authenticity and alignment with contemporary HR practice. These include scenario-based role plays, personalized storytelling, gamification, and reflective tasks that mirror real HRD practice. Such activities encourage students to explore problems, test solutions, and reflect on outcomes—skills directly transferable to workplace settings. The effectiveness of this approach is reflected in both student engagement and feedback. Students consistently highlight the value of interactive activities in linking theory to practice: “Being able to link the learning from the weekly LMS tasks to the content that was covered in the workshop was great. Jasvir has a wonderful and engaging teaching style. The content learnt related to real life situations. Skills learnt can be easily transferrable into day-to-day work responsibilities” (SFT, 2021). This transformation has been iterative, and evidence driven.

I also co-designed two flagship assessments with industry professionals - the Training Plan (TP) and the Career Development Portfolio (CDP) - to authentically replicate HRD practice and build students' employability. These assessments align strongly with La Trobe's Work Integrated Learning (WIL) Framework and Strategic Plan 2020–2030 by giving students practical, work-focused experiences.

In TP, students act as Learning and Development Consultants to design, plan, and evaluate a high-quality, real-world training program, on topics such as leadership development, mentoring, or performance management. This task develops students' ability to analyze organizational needs, propose solutions, and communicate professionally, which are core capabilities for HRD graduates.



The CDP requires students to create an individualized career portfolio supported by an interactive visual career map. CDP is an innovative WIL tool that builds self-awareness, fosters positive learning outcomes and develops career goals, self-management skills, and strategies to address career gaps.

This assignment aligns with the La Trobe Career Ready Advantage Award reinforcing the connection between coursework and employability outcomes. Both assessments are scaffolded with workshops and personalized feedback, which students value: “Having ample time in class allocated to each assessment with lecturer and being able to get direct feedback to achieve the best results possible and learning for the future” (SFS, 2021).

Industry partners and external reviewers have also praised these assessments as authentic and relevant to professional practice: ***“There’s a good variety of industry, reflective, and application-based assessments. The narrative of the subject flows really nicely and is relevant to the assessments. I really appreciate the care and concern you take for students; it truly reflects in the work you do”.***

Outcomes

In particular, authentic and interactive approaches have strengthened student performance. The overall success rates in MGT3HRD have consistently remained high (ranging from 86.2% to 95.2% between 2020 and 2025), while fail rates have declined significantly.

In terms of student engagement, I love inspiring my students to become future HRD professionals through innovative, interactive and authentic activities, reflecting sustainable learning:

“The best aspects of this subject were continuing to learn about HRD. There were engaging activities and substantial amount of detail and feedback provided in what we had to do in each assignment” (SFS, 2022). Students positively engaged with the timely, authentic feedback I provided: ***“Jasvir is very passionate and involves students in every aspect of her teaching activities. She also provides detailed guides for assignments to ensure students understand what they are doing”*** (SFT, 2021).

Overwhelmingly, students experienced transformative learning with the content, assessments and application of knowledge and skills to their future career: “The best aspect of this subject was the subject matter within the content and assessments. I can see myself using the concepts and build my knowledge within my future endeavors” (SFS, 2020). These impacts translate into employment success. According to the QILT Graduate Outcomes Survey, full-time employment for HR graduates rose from 71.4% in 2020 to 100% in 2023, underscoring the role of MGT3HRD in preparing students for the workforce.



The authentic assessments such as the Training Plan and Career Development Portfolio show how assessments can mirror real-world practice. This approach is not discipline-bound. The underlying principle - students acting in a professional role to solve real problems - can be adapted to nursing (clinical case plans), engineering (design briefs), education (learning intervention plans), or IT (client-based system proposals). The assessments could be adapted as shared employability modules across the university, especially given the strong evidence of impact from students and staff members.

In addition, the use of role plays, storytelling, gamification, and reflective tasks can be applied in any field where professional judgement and interpersonal capability matter. Subsequently, the model of collaborating with HRD professionals can be replicated in any discipline with industry partners - health, law, creative arts, STEM, social sciences. Moreover, because the innovations were sustained across blended, online, and face-to-face delivery, they offer a blueprint for institutions seeking consistency across modes.

The next steps could be leading workshops or communities of practice on authentic assessment and feedback based on the achievements of MGT3HRD as well as formalize industry partnerships to co-design future assessments.



References

Biggs, J. (1996). Enhancing teaching through constructive alignment. *Higher education*, 32(3), 347-364.

Chowdhury, T. A., & Miah, M. K. (2016). Employability skills for entry-level human resources management positions: Perceptions of students and employers. *Australian Journal of Career Development*, 25(2), 55-68.

Verma, P., Nankervis, A., Priyono, S., Mohd Salleh, N., Connell, J., & Burgess, J. (2018). Graduate work-readiness challenges in the Asia-Pacific region and the role of HRM. *Equality, Diversity and Inclusion: An International Journal*, 37(2), 121-137.



Building Employability Together

Harnessing an untapped opportunity, Reflexive Practice and Co-Design for Career Learning in Undergraduate Science Degrees

Sharon La Fontaine, Sharon Berman, Cathy Caballero, Karen Young, Anthony R. Rendall, Lynda O'Sullivan, Jen Chung, Julius Daguman Jr, and Amanda McPherson

Deakin University, Australia

Background

Context

Graduate employability remains a persistent challenge in higher education, particularly for science graduates with low employment rates since 2012 (1). Non-vocational undergraduate degrees such as the science degrees present unique complexities: diverse, unpredictable career pathways; limited visibility of career options; and an increasingly diverse student population navigating competing demands including financial pressures and academic expectations.

Equipping students to successfully transition to work and manage their careers requires personalised career development that is equitable, adaptable and relevant, alongside a shift from opt-in activities to embedded, programmatic approaches (2,3). Aligned with national priorities (4), our evidence-informed response was grounded in understanding students' needs, employer expectations, staff capability and the broader community context.

We developed an innovative, curriculum-integrated career development learning (CDL) approach leveraging students' need for paid employment (3), alongside work-integrated learning (WIL) to improve career and employability outcomes.



Theoretical foundation

Our student-centred, holistic approach is designed to meet students where they are and tailored to learners' diverse needs (3). Watts' DOTS (decisions, opportunities, transition, self) (5) and Bridgstock's models (2) informed our design. Acknowledging the complex and unpredictable nature of early career pathways and recognising career and employability learning as ongoing developmental processes occurring across various settings and experiences, our approach also draws on theories that emphasise the psychosocial dimensions of career development (6,7) and the transformational potential of experiential learning (8).

By engaging in and reflecting upon paid work, work placements and CDL activities, students can connect and apply their classroom learning to authentic work-related experiences to enhance their work readiness, craft their career stories and plan for future opportunities (3). Work-integrated learning (WIL) and relevant paid employment strengthen employability by developing skills, professional identity, networks and industry engagement (3). Integrating these experiences in the curriculum helps students connect theory with practice, building capabilities for navigating complex career pathways.

Wider context

Higher education providers must support and enhance graduate employability within a competitive labour market, rapid technological change and evolving policy demands, with greater participation of students from equity backgrounds a national priority (4). In response, our approach capitalises on an untapped opportunity, harnessing students' paid work as a vehicle for CDL, enabling students to "learn while they earn" (3).

By integrating students' existing real-world work with academic study, this approach promotes a more equitable experience of career development and transforms paid employment into a structured and powerful learning opportunity. It enables students to support themselves while also envisioning longer-term high value from their studies, thereby leading to meaningful careers and improved employment outcomes (3).



Approach

Nature of the intervention and rationale

Our approach was intentionally reflexive and grounded in practice wisdom. We consulted senior leadership, course and teaching teams to understand curriculum constraints and opportunities; engaged employers to identify career-readiness expectations; listened to students about their circumstances and aspirations; and remained attentive to policy, sectoral and institutional contexts.

We designed (2021) and implemented (2022 onwards) a CDL program embedded within seven undergraduate science degrees, reaching >2500 students annually. From 2023, all science courses also included a core placement experience (≥600 students/year).

The cornerstone innovation was the Stepping Stone concept (Figure 1): supporting students to undertake paid work early in their degree and to progressively leverage this experience into industry-relevant roles aligned with their career aspirations and key selection criteria for their ideal professional roles (3).

In a whole-of-course approach four scaffolded CDL touchpoints across all science degrees, from year 1 to 3, use digital tools and resources to support structured reflection, career exploration, planning and action. A mandatory year 1 online unit - Career Tools for Employability - prepares students for CDL and placement (9), followed by embedded CDL in years 1–3 supporting engagement with Stepping Stone roles (3) and preparation for placements.

A year 3 work placement provides an authentic context for applying and reflecting on disciplinary knowledge/skills and incorporates quality WIL assessment design principles (10). Hence the program supports students to make informed career decisions and build lifelong career-management skills.

Who is involved and nature of involvement

Discipline teaching teams and careers service staff co-design and co-teach contextualised CDL content and assessments, embedded in core units (weighted at 20%), achieving >90% completion rates. We engaged employers as partners in defining career readiness in practice, ensuring the curriculum reflects contemporary workplace expectations.

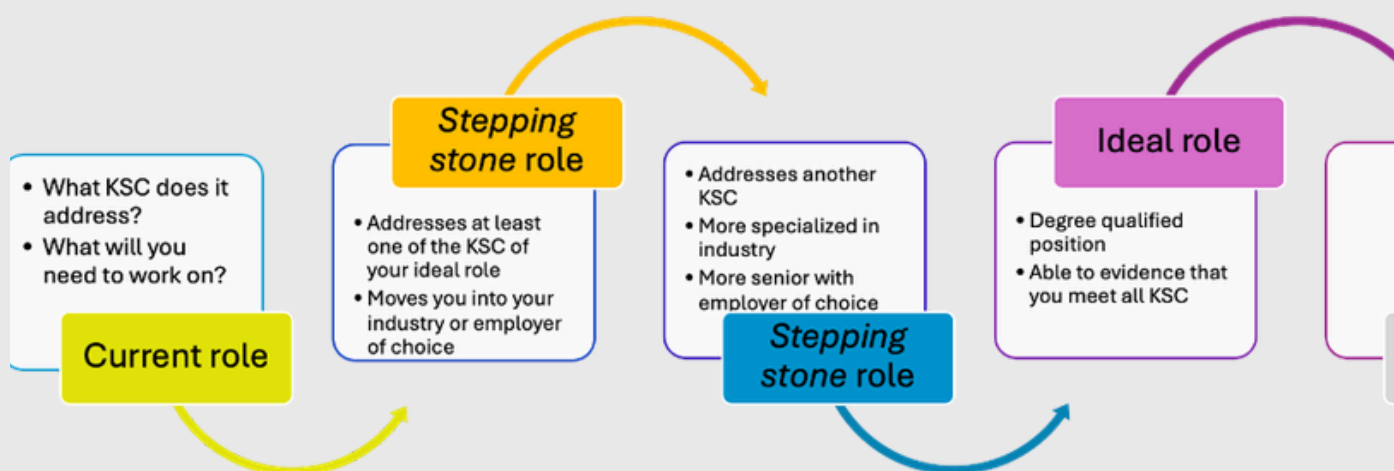


Figure 1. Stepping Stone roles for career development learning. Key features of Stepping Stone roles which are paid roles that should help to address the key selection criteria (KSC) of a student's ideal professional role, move them into their industry or employer of choice and develop discipline and/or advanced transferable skills (3).

Diversity and inclusive environments

Recognising that students juggle work and study, the Stepping Stone approach is intentionally and explicitly inclusive, leveraging their existing or planned employment for CDL.

Flexible assessments accommodate varied career stages and circumstances - students select Stepping Stone roles to apply for in real time creating relevant associated learning activities, such as job searches, deconstructing position descriptions, addressing key selection criteria and developing recruitment artefacts (eg. resumes, cover letters, LinkedIn profiles).

For students already working in relevant industries, work-based placements reduce the burden of unpaid placements. The curriculum also develops students' capacity to recognise and demonstrate inclusive workplace practices during the recruitment process.

Outcomes

Main findings

Embedded tools help evaluate impact and support continuous improvement. For example, a Work Readiness Scale (WRS) (11) integrated within year 1 and 3 assessments, provides a validated measure of students' perceived work readiness and captures engagement with paid work. Year 3 students scored significantly higher on the WRS compared to year 1 students [WRS score $7.68 > 7.25$, $t(6027) = -20.50$, $p < 0.001$], suggesting substantial perceived development over time.

Significantly, students in relevant, paid work increases by year 3 (Table 1), consistent with data from student surveys, suggesting more students may be engaging with Stepping Stone roles. Student feedback further highlighted enhanced career insights and confidence:

Cohort	2022 - 2024		2023 - 2025	
Year Level	1 (n=711)	3 (n=757)	1 (n=793)	3 (n=527)
% in Paid Work	76.4	79.4	65.2	86.0
Unrelated to field of study	66.2	59.6	57.4	68.1
Related to field of study	9.0	16.8	5.8	13.7
Directly Related to field of study	1.1	3.0	2.0	4.2

Table 1. Subset of WRS data collected during 2022-2025 for years 1 (CDL: 2022, 2023) and year 3 (CDL: 2024, 2025). Represents matched, aggregated data.

Year 1 B. Biomedical Science Student 2022:

“Over the next 12 months my goal is to leave my current job and step into a pre-graduate role...more relevant to the medical and biomedical science fields, which will further develop my professional insight.”

Year 3 B. Environmental Science student 2023:

“...the WIL program and the careers units... were super valuable, even though I was a mature-aged student in the workplace for some time, I learned skills more tailored to my industry....I ended up with a job...where I did my placement later that year.”

Key messages and transferability

Our reflexive approach aligning intentional learning opportunities with student circumstances and employer expectations, resulted in a personalised program supporting informed career decision-making, student agency in career management and self-reliance (3).

We have observed greater student confidence, preparedness, and engagement in career-relevant work. The Stepping Stone approach alongside WIL is transferable across disciplines and can be implemented at scale or within specific courses. Co-design between educators and careers staff leads to bidirectional capability building, strengthening the contextualisation and personalisation of the approach. Leadership support, staff engagement and strong employer partnerships remain critical to sustaining an equitable and adaptable program that prepares students for successful careers.

Future directions

Further curriculum development and engagement with inclusive employer partners will strengthen inclusivity, recognising that not all students have equal access to Stepping Stone roles, including those managing disabilities or other barriers (3).

Future work will examine differences in the impact of Stepping Stone roles across disciplines, track graduate career trajectories over time, and expand industry involvement in curriculum co-design. Our commitment to continued refinement, creating inclusive, practice-based learning experiences will ensure the program remains responsive to student and community needs.

Acknowledgments

Sincere thanks go to Professor Jamie Mustard, PVC Graduate Employment and A/Professor Lauren Hansen, Director, Graduate Employability for their vision and support.

This work was also supported by the Faculty of Science, Engineering and Built Environment and the School of Life and Environmental Sciences. We also acknowledge and thank the discipline teaching teams that worked with us in delivering the program. Work described was approved by Deakin University's Human Research Ethics Committee (DUHREC) [SEBE-2021-80-MOD08; HEAG-H 132_2004; 2024/HE000379].



References

- Norton A, Cakitaki B. Mapping Australian Higher Education 2016, Grattan Institute; 2016.
<https://grattan.edu.au/report/mapping-australian-higher-education-2016/>
- Bridgstock R. The Graduate Attributes We've Overlooked: Enhancing Graduate Employability through Career Management Skills. High. Educ. Res. Dev. 2009;28(1):31-44.
<https://doi.org/10.1080/07294360802444347>
- Hansen L, La Fontaine S. Learn while you earn: harnessing the career development value of paid work for higher education students. J. Teach. Learn. Grad. Employab. 2026; (In Press).
- Department of Education. Australian Universities Accord: Final report. Australian Government; 2024.
<https://www.education.gov.au/australian-universities-accord/resources/final-report>
- Watts AG. Career Development Learning and Employability. Learning and Employability (Series 2), The Higher Education Academy: Islington; 2006
- Super DE. A life-span, life-space approach to career development. J. Vocat. Behav. 1980;16(3):282-298.
[https://doi.org/10.1016/0001-8791\(80\)90056-1](https://doi.org/10.1016/0001-8791(80)90056-1)
- Savickas ML. The theory and practice of career construction. In: Brown SD, Lent RW, editors, Career development and counselling: Putting theory and research to work. Wiley; 2005. p. 42-70.
- Kolb, D. A. Experiential learning: Experience as the source of learning and development. Prentice Hall; 1984
- Young K, Cardilini A, Hermon K. Foundational-WIL for employability awareness: A faculty-wide approach. Int. J. Work-Integr. Learn. 2021;22(4):445-461.
- Boud, D., Ajjawi, R. & Tai, J. Assessing work-integrated learning programs: a guide to effective assessment design. Centre for Research in Assessment and Digital Learning, Deakin University, Melbourne, Australia; 2020
<https://doi.org/10.6084/m9.figshare.12580736>
- Caballero CL, Walker A, Fuller-Tyszkiewicz M. The Work Readiness Scale (WRS): Developing a measure to assess work readiness in college graduates. J. Teach. Learn. Grad. Employab. 2011;2(1):41-54.
<https://doi.org/10.21153/jtlge2011vol2no1art552>

Contact us

Email: enquiries@advance-he.ac.uk

Our purpose is to help higher education transform lives by realising the potential of its people.

Advance HE is a member-led charity of and for the sector that works with partners across the globe to improve higher education for staff, students and society.

Our three strategic goals support the priorities of our members and of the higher education sector:

- Enhance confidence and trust in HE
- Address systemic inequalities and advance education to meet the evolving needs of students and society
- Support the work of our members and the HE sector.

We are experts in higher education, with a particular focus on teaching and learning, governance, leadership development and equality, diversity and inclusion. We work with our network of global associates and partners, and with people, providers and systems around the world, to understand different contexts and challenges in the higher education sector, and to deliver solutions.

We deliver our support through a variety of channels, applying our expertise and sharing best practice. These include professional development programmes, events, fellowships, awards, surveys as well as consultancy and enhancement services.

In addition, our membership provides a range of research, knowledge and resources for members, as well as accreditation for teaching and learning and equality charters that aim to advance gender and race equality in higher education and research.



Advance HE is a company limited by guarantee registered in England and Wales no. 04931031.

Company limited by guarantee registered in Ireland no. 703150. Registered as a charity in England and Wales no. 1101607. Registered as a charity in Scotland no. SC043946. Registered Office: Advance HE, Innovation Way, York Science Park, Heslington, York, YO10 5BR, United Kingdom.