Dr Rita Prestigiacomo

Nexus Fellow

Faculty: Engineering

School: Biomedical Engineering

Nexus Projects: School Project

Nexus Priorities/Project: Wellbeing & Belonging; Assessment & Feedback

2024/5 Nexus School Community-building/Student belonging Project.

Purpose

The 2025 Nexus School Project builds on a 2024 initiative I led within the School of Biomedical Engineering (SBmE), which aimed to better understand the barriers to students' sense of belonging and identity within their program. Findings from a three-term survey highlighted that belonging and identity are layered and multidimensional constructs that are strongly shaped by students' classroom experiences. In response, the 2025 project focused on improving students' experience at the classroom and curriculum level. Reflective practice was identified as a key mechanism to support both identity formation and the development of professional engineering capabilities.

Project / Role Overview

I designed and led the 2025 School Nexus project, working collaboratively with colleagues across the teaching team. Through co-design discussions and iterative feedback, we identified the need to scaffold reflective assessments developmentally across year levels. To support this work, we co-created a resource tailored to biomedical engineering that provides guidance for academics interested in integrating reflective practice into their courses. The resource includes a concise practical guide that helps academics identify their current approach to reflective practice, alongside an extended version with curated assessment exemplars. The final resource has been shared across the School and will support curriculum design for the upcoming four-year Bachelor's degree.

Skills Developed

I further developed leadership in curriculum innovation, collaborative academic engagement, and the ability to translate educational research findings into practical teaching resources. I also strengthened skills in facilitating co-design processes, aligning assessment practices across courses, and supporting colleagues in implementing reflective pedagogical approaches.

Activities, Outputs and Outcomes (per project or role)

Activities

- Designed and led the 2025 School Nexus project, building on 2024 research findings
- Analysed qualitative and quantitative survey data on students' sense of belonging and identity
- Identified reflective practice as a key pedagogical lever linking classroom experience to identity formation

- Facilitated collaborative engagement with colleagues (e.g., co-design discussions, iterative feedback across courses)
- Visually mapped current use of reflective assessment across the curriculum
- Developed a developmental approach to scaffolding reflective skills across year levels
- Co-created discipline-specific guidance for integrating reflective practice into BME courses
- Curated assessment exemplars aligned with reflective learning outcomes

Outputs

- School-level report (2024) on student belonging and identity within SBmE
- A structured, two-part resource for academics (2025):
    - Concise practical guide to situating reflective practice
    - Extended guide with curated assessment exemplars
- Shared resource disseminated across the School of Biomedical Engineering
- Contribution to curriculum design for the upcoming four-year Bachelor's degree
- Strengthened alignment of reflective practice with professional identity development in BME education

Evidence of Impact (Implementation)

School involvement with SX WG	Courses Involved 6	Academic Board Meeting	Collaborations with colleagues from SBmE and a PhD student

Nexus Projects: UDL Guild

Nexus Priorities/Project: Wellbeing & Belonging; Assessment & Feedback;

2025 Nexus UDL Guild: ELP loading research squad

Purpose:

The ELP Workload Policy UDL Guild was established to explore how Equitable Learning Plan (ELP) adjustments are recognised and accounted for within academic workload policies across the university, using the ADA workload model as guideline. The initiative aimed to address growing concerns around the sustainability and equity of workload allocation associated with implementing ELP adjustments, while also considering how principles of Universal Design for Learning (UDL) could support more proactive and inclusive teaching practices.

Project/role overview:

I lead the ELP Workload Policy UDL Guild, coordinating a team of three academics across the university to examine current practices and challenges. This involved facilitating discussions, reviewing existing workload policies, and gathering insights from ADLAs on the impact of ELP-related adjustments on teaching workload. Through collaborative analysis, we identified gaps and inconsistencies in how this work is recognised across the institution.

Skills Developed:

I strengthened my leadership in cross-institutional collaboration and policy-focused work. I further developed skills in facilitating discussions and synthesising diverse perspectives. The project also deepened my expertise in inclusive education, particularly in connecting UDL principles with workload sustainability and equitable teaching practices.

Evidence of Impact (Implementation)

Faculty involvement	Courses/Programs Involved	Workshops delivered (n=0)	Collaborations with three academics across UNSW

Evidence of Impact (SoTL)

Presentations (n=5)	Publications (n=10)	Blogs (n=3)	Ethics applications (n=4)

Relevant Links/Education (Research/SoTL/Resources) Output List

Prestigiacomo, R., Panico, D., Azpiroz Leehan, J., Chong, M., van Oostrum, H., Reilly, R, Ssekitoleko, R & Kark, L. (2026, in press). Global Perspectives on Biomedical Engineering Education and Curriculum Design. *Biomedical Engineering Education.*

Prestigiacomo, R., Aris S., Phipps B., & Castro de Jong D. What can the Third Space learn from a Collaborative Autoethnographic Study on educational change in Higher Education? The International Consortium for Educational Development (June 2026, Salamanca)

Nikolic, S., Quince Z., Lidfors Lindqvist A., Neal P., Grundy S., Lim M., Tahmasebinia F., Rios S., Burridge, J., Petkoff K., Chowdhury A., Lee, W., **Prestigiacomo, R.,** Fernando H., Lok P, Symes, M.: Project-work Artificial Intelligence Integration Framework (PAIIF): Developing a Generic Framework for Educational Integration. *STEM Education*, 5(2): 310-332.https://doi.org/: 10.3934/steme.2025016

Carbajal-Carrera, B., & **Prestigiacomo, R.** (2025). Rhizomatic approaches: A response to hierarchies, linearity, and isolation in language learning. In *The Routledge Handbook of Endangered and Minority Languages* (pp. 392-406). Routledge

Devarapu, S. R., Ahuja, T., Wella Hewage, S., Babayekhorasani, F., Briozzo, P., **Prestigiacomo, R.**, Fiford, R., Machet, T., Daniel, S., & Miao, G. (2025). Industry–academia partnerships in engineering education and research: Investigating barriers and opportunities in current partnerships. Proceedings of the Australasian Association for Engineering Education (AAEE) Conference.

Prestigiacomo, R., & Babayekhorasani, F. (2025). The Nitty-Gritty of Theoretical Frameworks. SEFI 53rd Annual Conference (SEFI 2025), Tampere, Finland. https://doi.org/10.5281/zenodo.17631311

Prestigiacomo, R., Martens, P. J., & Modenese, L. (2024, December). Synergizing partnerships between academics and academic developers: A collaborative autoethnography case study. In *Proceedings of the 35th Annual Conference of the Australasian Association for Engineering Education (AAEE 2024)* (pp. 47-55). Christchurch, New Zealand: Engineers Australia.

Xavier, M. S., Sheng, I. L. S., Polash, M., Chinn, S., Neal, P., Harris, M., **Prestigiacomo, R.**, Chow, W., Armour, W., Hewage, S. W., Nguyen, N., Kenny, E., Ahuja, T., Wu, X., Babayekhorasani, F., Fisher, R., Fernando, H., & Gelche, N. (2024, December). *Emerging themes in engineering education research: Insights from the AAEE winter school (AAEE 2024)*. In *Proceedings of the 35th Annual Conference of the Australasian Association for Engineering Education*, Christchurch, New Zealand. https://doi.org/10.3316/informit.T2025032000

Prestigiacomo, R., Chan, C. C., & Kark, L. (2024). A biomedical engineering curriculum development: A qualitative study engaging four stakeholders. *European Journal of Education*, *59*(2). https://doi.org/10.1111/ejed.12632

Prestigiacomo, R., & Markauskaite, L. (2024). What Does 'to Design' Mean? Teachers' Experiences of a Co-Design Initiative. In I-M. F. Christensen, L. Markauskaite, N. B. Dohn, D. Ripley & R. Hackmann (Eds.), Creating design knowledge in educational innovation: Theory, methods and practice. Routledge.What Does "to Design" Mean? | 22 | Teachers' Experiences of a Co-Desig

Prestigiacomo, R., & Kark, L. (2023, December). Interdisciplinary in a biomedical engineering curriculum development: A student co-design approach. In *Proceedings of the 34th Australasian Association for Engineering Education Conference (AAEE2023)* (pp. 397-405). Gold Coast: Engineers Australia.

Under review:

Prestigiacomo, R. & Carbajal-Carrera, B. Addressing linguistic unease in co-design interactions. Higher Education Journal (submitted to the International Journal of Higher Education Research; addressing changes). **Q1 Journal.**

Prestigiacomo, R., Aris S., Phipps B., & Castro de Jong D. Doings in Higher Educational Change: Collaborative Autoethnographic Reflections on an Innovative Education Focused Program (submitted to Higher Education Research and Development (HERDSA); under review). **Q1 Journal.**

Prestigiacomo, R., Castro de Jong D, Aris S. & Phipps B. Leading from the Middle: Implementing Change and Innovation in Higher Education. The Higher Education Research & Development Society of Australasia (July 2026, Singapore)

Blogs:

The spark of collaboration: connecting expertise for institutional impact

Working in the blur: From transactional encounters to transformative partnerships

Educating engineers in the clinic: Healthcare technology innovation in action