

Building professional capabilities through research-based, work-integrated learning: The JCU Undergraduate Research Internship

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Abstract

The James Cook University Undergraduate Research Internship (URI) is a research-based Work-Integrated Learning program designed to equip regional university students with the capabilities required of healthcare professionals. This presentation will discuss the purpose of the program as well as its parameters and impacts, focusing on how such programs can be implemented more widely to support developing undergraduates' graduate competencies and professional identities.

Introduction

Higher education is challenged to prepare graduates with professional capabilities (Trede & Jackson, 2021). In health professions, such skills are, in part, cultivated through research training. Yet many students perceive research to be less valuable than, and separate to, clinical work (Lloyd-Lewis et al., 2024), despite the critical role research plays in these science-practitioner health professions. From the need to overcome anxiety and disinterest in research and promote research development in an engaging manner suitable to a regional university with large externally-enrolled cohorts, I devised the JCU Undergraduate Research Internship (URI). The URI is a research-based Work-Integrated Learning (WIL) opportunity for undergraduate healthcare sciences students. It is an annual, extracurricular program that pairs undergraduates with staff-researchers based on their skill development and research area preferences. Underpinned by best practice for research-based WIL programs and refined for the regional university context, program parameters include: (1) prioritising student learning in the student-mentor interaction; (2) enabling student-peer and student-staff networking; (3) engaging students in discipline-specific professional development; and (4) transparently outlining expectations to support high-quality supervision experiences (Golding et al., 2019).

Participation Impact and Outcomes

The URI commenced in 2021 with 8 students in the Department of Psychology and now is offered to all College of Healthcare Sciences students [32 students in 2024 and 22 in 2025]. As a first opportunity to be directly involved in conducting research, the URI critically embeds employable skills and career perspectives into their undergraduate experience. Students have designed study protocols, written ethics applications, collected and analysed quantitative and qualitative data, and performed systematic reviews involving meta-analyses. Pre-post program survey data analyses indicated that URI participants rated their perceived confidence, communication skills, self-direction abilities, and critical thinking skills significantly higher after compared to before their participation in the URI. Further, qualitative data indicates that the mentor-mentee relationship is fundamental to the observed growth in professional identity and confidence: students expressed that the URI provided a relationship that broadened their network and made future possibilities real, with confidence transferring from mentors to students. Such outcomes are well-aligned the Australian Qualifications Framework level 7 criteria (www.aqf.edu.au) and relevant accreditation body standards (e.g., www.apac.au).

Discussion

By engaging in real research, the URI breaks down discipline participation hurdles and shifts students' perceptions about the value of research skills to their professional careers (Kinkel & Henkey, 2006). In line with previous research on WIL, URI participation fosters professional identity development (Prior et al., 2022) and eases the transition from student to professional (Berndtsson et al., 2020). Thus, the student-participants gain not only an appreciation for research but also the skills and identity needed to work as a healthcare professional. The URI offers a template for designing engaging research-based WIL programs, with implications to improve practices in the broader, tertiary healthcare sciences education space.

Future directions and key questions

Efforts are underway to refine and expand the URI to promote broader participation by students, staff, and healthcare clinicians living and working in regional, rural, and remote areas. We also aim to build early career researcher capacity alongside student capacity.

- We have identified student anxiety in getting involved in research from having little prior experience. Have you, or your Institution experienced something similar? If so, what practice did you implement, and what was the result?
- What are the barriers and enablers to further developing research-based WIL to include clinicians?

References

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