

MEASURING MORE THAN BIODIVERSITY: ENHANCING STUDENT ENGAGEMENT THROUGH FIELD-BASED LEARNING

Francesca van den Berg^a, Stephen George-Williams^b, Matthew Davis^c, Cameron Negus^c, Lauren Cole^c, Mariel Fulham^c, Manuel Lequerica Támara^a

Presenting Author: Francesca van den Berg (francesca.vandenberg@sydney.edu.au)

^aSchool of Life and Environmental Sciences, The University of Sydney, NSW, 2006, Australia

^bSchool of Chemistry, The University of Sydney, NSW, 2006, Australia

^cUniversity Programs team, Taronga Conservation Society Australia, Mosman, NSW, 2088, Australia

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Two pressing challenges in higher education are connecting with disengaged students, and ensuring meaningful learning in an AI-dominated environment. Providing students with experiential learning experiences may be a promising response to both challenges. Here we present a case-study of the (rapid; <3 months) development of a new unit of study, Measuring Biodiversity (WILD2001; n = 25) as part of the Bachelor of Wildlife Conservation (Taronga) degree restructure. The unit was fundamentally designed with a philosophy of maximising authentic hands-on learning opportunities for students. Co-designed and taught with the University of Sydney and Taronga Conservation Society Australia's University Programs team, this second-year subject exposed students to expert scientists from the University of Sydney, Taronga Zoo, and the Royal Botanic Gardens Victoria, who shared experiences and challenges of measuring biodiversity in their respective fields. Students were then provided with practical experiences (mostly outdoors), and fieldtrips (single-day and multi-day) that enabled them to immediately apply practical skills and theoretical concepts in situ. Supported by staff and student reflections from informal mid-semester surveys and formal end-of-semester surveys, we highlight how these pedagogical approaches developed job-ready ecological skills, fostered positive connections between staff and students, and built a sense of 'cohort' within the student body. All of these elements drove strong engagement and satisfaction within the student cohort. We end by discussing the anticipated challenges we will face when these experiential learning experiences are scaled up for future larger (n >100) cohort sizes.

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