
TEACHER EXPERIENCES: INTEGRATION OF INDIGENOUS SCIENCE AND STEM

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This case study provides a preliminary exploration of academic staff experiences and perceptions in an Australian university charged with the creation and delivery of a first-year Unit for undergraduate students which integrates the learning of Indigenous science and STEM. The Unit is the first of its kind for the institution and is being co-taught by teacher/facilitators from the Faculty of Science and Engineering and the Centre for Aboriginal Studies. Drawing on Vygotskian philosophy, the study explores the changes in educational content and differing epistemologies which can have the capacity to alter teacher's perceptions, experiences and conceptions of self. Reflections were gathered from teaching staff and analysed using descriptive grounded theory methods. Initial findings suggest challenges for teachers in the integration of differing epistemological approaches of STEM and Indigenous science and results will help to inform teacher development in enabling Reconciliation Action Plans adopted in the Higher Education sector. This study on teacher's perceptions and experiences on the integration of STEM and Indigenous science will also contribute to the current context of emerging literature on the ongoing integration of Indigenous knowledge with STEM and on the recent adoption of Reconciliation Action Plans by Australian educational institutions.

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