

# A CLIMATE OF INCLUSION: UTILISING PERSONALISED LEARNING IN CLIMATE SCIENCE EDUCATION

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Climate literacy is becoming essential in graduate careers, as Earth's changing climate intersects with an ever-growing range of fields of work. This reality is recognised by many students, who want increased access to climate education in their curriculum (Harbour, 2021). It is arguably imperative for universities to offer a rigorous but accessible grounding in climate science to all students. However, existing units framed around core components of the climate system are often designed for a science cohort, and so can be restricted in either entry or success by the need for pre-requisite undergraduate or high school qualifications.

This presentation uses the new EARTH2001 Science of Climate Change unit at Curtin University as a case study of how the needs of science and non-science students can be reconciled within a single curriculum. This unit serves two superficially conflicting purposes: the culmination of the Climate Change Science Minor within the Bachelor of Science; and provision of an elective grounding in climate science to any interested student, regardless of background.

These demands are addressed via an inclusive and innovative design approach. Backwards design (Wiggins & McTighe, 2005) is used to ensure clear identification of goals, and combined with core concepts of personalised learning (Keppell, 2014), to create bespoke pathways through the unit. The presentation will discuss the design process, particularly with respect to the flexible and accessible assessments created to integrate scientific rigour with assessment for learning relevant to individual student needs. The design process and outcomes will be used to contextualise qualitative and quantitative student reactions to the unit.

## REFERENCES

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