

Abstract Submission Form and Speaker Profile

Complete your details by typing in the **green** sections of the digital form below. If there are multiple presenters, please include their details where applicable (name, organisation, personal bio)
 Save your completed form in PDF format and submit via the [submission form on the website](#).

Title	A/Prof and Prof	First Name	Peta and Russell	Family Name	White and Tytler
Position/Role	A/Prof and Prof in Education				
Organisation you will represent	Deakin University				
Personal Bio Max. 100 words	<p>Peta J. White is an associate professor in science and environmental education at Deakin University. She educated in classrooms, coordinated programs, supported curriculum reform, and prepared teachers in jurisdictions across Canada and Australia. Her PhD explored learning to live sustainably as a platform to educate future teachers. Peta continues her commitment to initial teacher education and in-service teacher education through research-informed professional learning programs. Peta’s current research follows three narratives: science and biology education; sustainability, environmental, and climate change education; and collaborative/activist methodologies and embodied research practice.</p> <p>Russell Tytler is Alfred Deakin Professor and Chair in Science Education at Deakin University, Melbourne. He has researched and written extensively on student learning and reasoning in science. His interest in the role of representation as a multimodal language for reasoning in science extends to pedagogy and teacher learning. He researches and writes on student engagement with science and mathematics, aesthetics and identity in learning, school-community partnerships, and STEM curriculum policy and practice. He is widely published and has been chief investigator on a range of Australian Research Council and other research projects.</p>				
Title of Presentation	Climate Change Education: Engaging scientists in student learning for agency				
Format of Presentation (please select)	<input checked="" type="checkbox"/> Oral Presentation (20 minutes) <input type="checkbox"/> Workshop - 60 minutes (eg interactive indoor session) <input type="checkbox"/> Workshop - 120 minutes (eg outdoor activity) Indicate your preferred presentation types (you may select more than one) NB: We may not be able to offer your preferred option				
Which theme would you prefer to present under? (please select)	<input type="checkbox"/> Theme 1: Listen <input type="checkbox"/> Theme 2: Learn <input checked="" type="checkbox"/> Theme 3: Transform				

<p>Introduction</p>	<p>This presentation uses our experience as members of the PISA 2025 Science Expert Group, and an Australian Research Council Grant focused on Climate Change Education, to argue for and illustrate approaches to developing students' decision making and agency in relation to socio-ecological challenges through an interdisciplinary framing of science teaching and learning. We argue for a transformation of the science curriculum to include critical social science perspectives, environmental education practice, and an expanded framing of science knowledge and practice.</p>
<p>Presentation Abstract: max. 300 words</p>	<p>The PISA 2025 Science Framework argues for embedding student agency in learning science to address the socio-ecological challenges of the Anthropocene. This positions environmental education as central to the purposes of a contemporary science education in schools internationally. We will describe the development of this framework and explore its implications for environmental educators across Australia. In this presentation we showcase an approach to science education that draws on contemporary climate science related research. Working collaboratively with scientists, teachers, and students we develop and refine teaching and learning sequences designed to increase students understandings and agency with respect to climate impacts. We will illustrate the approach using two examples: one focussed on alternative energy sources and one on biodiversity.</p>
<p>Key Message: A short summary of presentation</p>	<p>We describe global moves towards and expanded framing of science and science education as part of climate change education, and describe research designed to transform science education to encompass socio-ecological challenges.</p>

All abstracts must be received by 5pm **Friday 26 May 2023 (AEST)**.

We expect to notify speakers by mid June

Note: confirmed presenters will be required to register for the conference and pay the relevant registration fees.