

PRACITIONER PRESENTATION

Kaadadjiny Boodja: STEM in a school bushland context

Dr Elaine Lewis, Coolbinia Primary School

Abstract

STEM education is vital in our rapidly changing world. For STEM education to be meaningful and empowering it needs to be focused on solving real problems identified by students themselves. This presentation will showcase such a STEM initiative. It is located at an urban primary school that includes an area of remnant bushland. This initiative, Kaadadjiny Boodja, is ongoing and has been implemented over many years, with different issues addressed at different times. In 2016 for instance, the students focussed on learning about butterflies and subsequently planting host plants for endangered local butterfly species, while in 2019 they created a bush trail with signage that incorporated their art and research findings, along with QR codes and Augmented Reality.

This presentation will share outcomes and impacts of this bushland STEM initiative. Local outcomes include enhanced care of the bushland, in an outdoor classroom STEM real-life meaningful context. Sustained engagement with Noongar educators and artists built positive community relationships and deeper understandings of Noongar knowledge and culture. Students communicated their findings with their peers, the whole school community, the wider local community, as well as other schools across the state, using a wide range of strategies. State impacts involved professional learning sessions across WA by the Department of Education, that included videos and student-created books about the bushland STEM initiative. National impacts have been demonstrated by CSIRO video recognition of the work the school has been doing in this field. Finally, international impacts have been shown through the school sharing this STEM initiative in workshops at recent World Environmental Education Congresses. In brief, this presentation will share strategies employed to enable a problem-solving STEM focus for the care of a unique, urban bushland area.

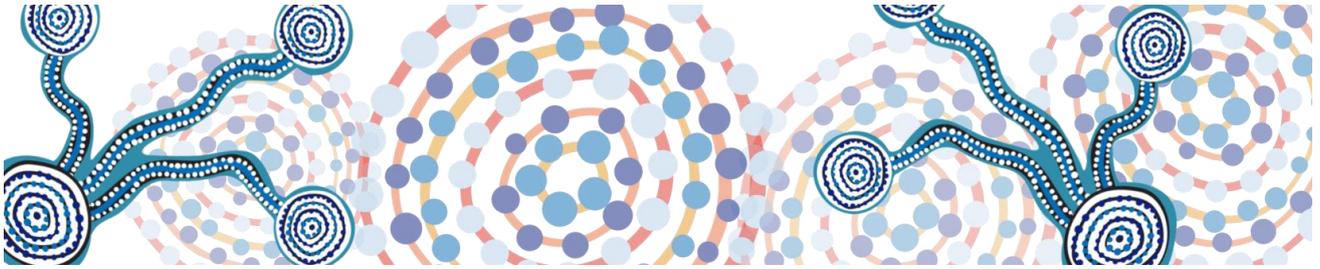
Acknowledgement

I wish to acknowledge the Traditional Owners of the land on which we meet. I would also like to pay my respects to Elders past and present.

Sustainable Schools WA

Speaker Profile

Dr Elaine Lewis is the Cross Curriculum Leader at an independent public school, Perth, WA. In this role Elaine supports teachers embed the three Cross Curriculum Priorities of the WA Curriculum - Aboriginal and Torres Strait Islander Histories and Cultures, Australia's Engagement with Asia, and



Sustainability - into their teaching programs. She has worked as a teacher, across K-7, for many years. Her research interests focus on Education for Sustainability (EfS), particularly the impact of the Australian Sustainable Schools Initiative in schools. Elaine completed her doctoral research in this area, conducting a longitudinal study of EfS at a primary school.

Website links

→ <https://littlegreenstepswa.org.au/committee/>

