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# TOTEM TALK

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**KEYWORDS:** Indigenous, Caring for Country, Conservation

**SUBTHEME:** Indigenous ways of knowing and learning

## OVERVIEW

Universities Australia committed to the first national Indigenous Strategy in 2017, calling for all Australian universities to be more inclusive, representative, and respectful of Indigenous peoples and their knowledges (Universities Australia, 2017). Embedding Indigenous knowledges and perspective into teaching and learning activities is critical to achieving these goals. We investigated the use of 'totemic species' in an undergraduate Biodiversity and Conservation course and linked it to species recovery. The concept of totemism, or spirit animal, refers to cultural connection with a species that is revered and/or protected, has cultural significance and thus requires respectful behaviour. Totemism can be used as a tool for conservation management and as a tool for global conservation initiatives.

## AIMS AND OUTCOMES

This project aimed to develop curriculum that will broaden students understanding of conservation and biodiversity management tools, including species recovery planning. We conducted a voluntary survey at the beginning and end of semester to assess changes in student knowledge of indigenous culture and its connection to species conservation. We hypothesised that improving the understanding of Indigenous Caring for Country knowledge systems in science students, including the value of totemic species, will help students build a better connection with nature and provide a greater respect for Indigenous culture. We also hypothesised that curriculum related to totemic species will help students engage with conservation curriculum more deeply and ultimately improve their sense of responsibility toward conserving biodiversity. We also provide tertiary science educators with a resource that can be used in other university science classrooms.

## RESULTS

At the beginning of semester, students (n=66) demonstrated a basic understanding of Indigenous culture; 95% of respondents knew the name of the traditional owners on which the campus resides (Kurna), understood that Indigenous Australians are represented by many different groups and that many Indigenous people have a strong 'connection to country'. The average number of Indigenous groups that students knew increased by 35.6% (all responses) and 38.6% (all paired responses). Based on the paired responses, Kurna was the most frequently listed group in the pre and post surveys (19.5% vs. 18.3% of listed names). Ngarrindjeri, which was featured as part of a totems tutorial, accounted for 3.9% and 14.3% of the listed groups in the pre and post surveys, respectively. The number of respondents who answered 'yes' to knowing what a totem is increased from 40.0% to 80.6% (full dataset) and from 42.9% to 90.5% (paired dataset), showing that the inclusion of totems in the tutorials and species recovery plan increased students' understanding of this aspect of Indigenous culture. Similarly, the ability of students to describe the cultural significance of a species or species group ('yes', 'unsure', 'no') increased from 34.5% to 62.1% (full dataset) and from 38.1% to 65.0% (paired dataset), with zero students responding 'no' in the post survey. Based on a 1 - 5 scale questionnaire (strongly disagree – strongly agree), student insight into what can be done to reverse the decline of Australian endangered species as well as their agreement with the statement, 'species conservation benefits from the involvement of Indigenous people', increased.

## CONCLUSION

Inclusion of totems as part of a Biodiversity and Conservation course can both increase student interest in species management as well as improve their understanding of cultural connection to country.

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