

Placing ethics within the formal science curriculum: a case study

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The Learning and Teaching Academic Standards Project for Science has defined nationally agreed learning outcomes for Australian graduates of bachelor-level degrees in science. One Science learning outcome requires graduates to demonstrate knowledge of the regulatory frameworks relevant to their discipline area and to personally practise ethical conduct. In a longitudinal study, we surveyed students over all years of a Zoology undergraduate course to seek evidence that graduates understand the regulatory and ethical environment within which animal-based science is conducted and personally reflect on animal ethics issues. The results indicate that after completing their first semester of study, students in this course are highly likely to report consciously thinking about animal ethics issues relating to the use of animals, and that they understand that this learning is directly relevant to their future professional work. Within the case study, we identified two assessment tasks that require students to provide overt evidence that they can construct a scientific research question within an ethical framework. The vertically integrated approach to exposing students to animal ethics is effective, but now requires a more rigorous approach to embedding aligned assessment tasks within the curriculum.