

DISSECTING THE TENSION BETWEEN ETHICS AND LEARNING OBJECTIVES: THE (VIRTUAL) REALITY OF ANIMAL DISSECTIONS

Francesca van den Berg, Timothy Lee, Hong-dao Nguyen, Osu Lilje, Matthew Pye

Presenting Author: Francesca van den Berg (francesca.vandenberg@sydney.edu.au)
School of Life and Environmental Sciences, University of Sydney, Sydney, NSW, 2006, Australia

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In many undergraduate biology courses, animal dissections are used to teach body form and function, and comparative anatomy. Additionally, animal dissection is a key skill for some careers and forms part of the professional accreditation for some vocational degrees. Recently, there has been increasing uptake of technological alternatives (e.g. virtual reality, computer models) to animal dissections. This adoption in biological courses in Higher Education is largely due to rising students' ethical concerns and minimising the number of animals used in dissections. However, in making these accommodations, we need to ensure that we are not compromising the quality of learning and skill-based outcomes to which the students are exposed. We reviewed the literature into technological alternatives to animal dissection and critiqued the reasons for their implementation, student perceptions and advantages or disadvantages to student learning. We found that students were generally positive towards technological alternatives, however, the impact of these technologies on student learning depended on the learning objectives and the closeness of the assessment to the original dissection activity. We propose a flexible approach for the use of technological alternatives for animal dissections, tailored to individual student's ethical perspectives, as well as career path selection.

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