Looking beyond the laboratory: Finding time to develop global perspective in a content-driven physiology unit

S.J. Etherington, School of Veterinary and Life Sciences, Murdoch University, Perth, WA 6150, Australia.

Internationalisation of the curriculum is central to the core values and strategic direction of many modern universities. However, academic staff at the coalface in the hard sciences are frequently resistant to implementing internationalization of the curriculum (Clifford, 2009). Science-based academics commonly consider development of a global perspective as inevitable, citing the intrinsic cultural neutrality of core scientific principles. A worrying consequence of this belief is that explicit instruction in intercultural engagement and communication skills is commonly absent from tertiary science courses. Given the multinational nature of modern scientific collaborations and the widespread international mobility of professional scientists, these are likely to be essential skills for effective science graduates. This study addressed one major challenge to promoting intercultural competence among undergraduate science students: finding time to scaffold such learning within the context of content-heavy, time-poor units.

Utilising the Interaction for Learning Framework developed by Arkoudis *et al.* (2010), small changes to enhance global and intercultural awareness were incorporated into existing teaching activities within a second-year biomedical physiology unit. Interventions included a short orientation session to promote intercultural exchange and awareness, incorporation of a global perspective into an assessment item and structuring increased opportunities for interaction in tutorial classes. The project was approved by the Murdoch University Human Ethics Committee (Permit 2011/175).

In student surveys, 40% of domestic and 60% of international student respondents articulated specific learning about interaction in intercultural groups as a result of unit activities. Themes among student responses were the logistics of working in intercultural groups (40%), insight into other perspectives (33%) and the experience of finding common ground (20%). 60% of students indicated that "interacting with students from other cultures [had] helped them develop a deeper or more informed understanding of biomedical physiology". Many students identified specific examples of how cultural factors would impact on the study or application of biomedical physiology within the global community. In addition, staff observed more widespread benefits for student engagement and mastery of physiology content. It is concluded that significant development of crosscultural awareness and a more global perspective on scientific understanding can be supported among physiology undergraduates with relatively minor adaptations to course content.

Clifford VA (2009). Engaging the disciplines in internationalising the curriculum. *International Journal for Academic Development* **14**, 133-143.

Arkoudis S, Yu X, Baik C,Borland H, Chang S, Lang I, Lang J, Pearce A & Watty K. (2010). Finding Common Ground: Enhancing interaction between domestic and international students. Melbourne, ALTC.