

EMPLOYING AN ONLINE MICROSCOPY TUTORIAL IN THE COLLABORATIVE CLASSROOM TO REINFORCE LABORATORY-BASED PRACTICAL SKILLS

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ABSTRACT

Biomedical Skills 1 is a new first semester unit that was introduced in 2012 into QUT's Bachelor of Biomedical Science. One of the main aims of the unit is to facilitate the competent learning of laboratory skills for the study and practice of biomedical science. Microscopy is one such laboratory skill that can prove challenging for some students and which has largely been taught in the wet laboratory. Time in the wet laboratory is often limited so learning needs to be maximized. By using a collaborative classroom with students working in groups of five with access to a networked PC, we employed an online virtual microscopy tutorial (courtesy of the University of Delaware) to reinforce the use of the compound microscope. The virtual microscope was able to be manipulated in the same ways as a real microscope. Students were given a group worksheet to complete which encouraged them to engage with each other as they progressed through the tutorial as well as conferring with each other as they answered the questions. Feedback from the students was overwhelmingly positive, with students commenting that they felt much more confident in using the microscope in the laboratory sessions following the virtual microscopy tutorial.

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