

USING VIDEOS TO IMPROVE THE STUDENT LABORATORY EXPERIENCE

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ABSTRACT

The planned "ideas exchange" session will focus on our experiences in using videos as pre-laboratory exercises and post-laboratory tutorials to enhance and improve laboratory classes. Laboratory classes are an integral component of a Bachelor of Sciences undergraduate degree and are designed to develop proficiency in technical skills, provide an opportunity to place theory in context, develop critical thinking skills and promote enquiry based learning. There is increasing evidence that pre-laboratory preparation is beneficial to student learning as students who are well prepared for their laboratory classes are reported to more readily acquire laboratory skills, be more confident to carry out the specified activities during class and derive maximum benefit from their laboratory experience. Similarly post-laboratory tutorials or "wrap-up" sessions are an effective means of concluding a learning exercise and useful to provide feedback on data generated for report writing and reflection. Brief videos specific to several laboratory classes have been prepared which provide both the pre-laboratory exercises and the post-laboratory tutorials which anecdotally has improved the laboratory experience and facilitated increased student engagement. Such experiences in class will be paramount in developing our students as independent learners, researchers, critical thinkers and generators of knowledge and as such is an issue directly aligned with the conference theme on developing students.

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