

CONTENT DELIVERY ALTERNATIVES TO LECTURES THAT STUDENTS DON'T ATTEND

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KEYWORDS: engagement, educational technology, flipped classroom

Problem

The traditional way to deliver content in chemistry units is through classroom lectures and their recordings. A great concern for us is how students are accessing content when the majority neither attend lectures nor use the recordings. Students have to learn content to meet the majority of learning outcomes in chemistry units, and lack of engagement with the traditional mode of delivery affects pass rates and progression through units. Another aspect to this problem is the job satisfaction of lecturers. Delivering lectures in a format that has to be recorded to a small percentage of enrolled students is disillusioning.

Plan

Different approaches to delivering and engaging students with content have been tried in some chemistry units at Murdoch University that have large and small numbers of students enrolled. There are some differences in approach as a consequence of the number of students enrolled in the unit. Implementing alternatives to better engage students with content may enhance learning quality and result in more students progressing through their units. Available technologies have been applied to these approaches.

Action

The poster will show how different approaches have been applied to addressing the problem in chemistry units with large and small enrolments.

In the large bridging chemistry unit (Fundamentals of Chemistry) all content is delivered through the online unit (LMS) and a customised textbook. Classroom lectures have been replaced with a limited number of recordings, and an online learning platform called 'Mastering Chemistry' (Pearson publishing) adopted.

A flipped classroom approach has been implemented to deliver the organic chemistry content in the second and third year units, Organic and Biological Chemistry 1 & 2. Lecture content is pre-recorded and made available online. Classroom time is spent with students working in small groups on structured learning activities under the guidance of the lecturer.

Reflection

While the efficacy of these approaches in terms of student learning and progression is to be fully evaluated, the impression of the lecturer is that more meaningful learning activities are being provided for students. Educational technologies can be used to replace classroom lectures and provide better learning experiences for chemistry units with both large and small enrolments. The classroom experience of the lecturer is certainly enhanced. Rather than stand and deliver a lecture in a restrictive recordable format, the lecturer can engage with students on a personal level and even get to know what specific content individual students need help with. There is no doubt that the work required to restructure units out of using recorded classroom lectures is challenging and time consuming. The poster aims to show that the effort is worthwhile for both student learning and lecturer job satisfaction.

Proceedings of the Australian Conference on Science and Mathematics Education, The University of Queensland, Sept 28th to 30th, 2016, page 115, ISBN Number 978-0-9871834-5-3.