Introduction

Technology is ever changing and students are ahead of lecturers in this area. This session will demonstrate two technological tools that can be used in large group settings. The exercises within the session will show participants how students can be targeted to see maximum outcomes. These exercises are used in the graduate setting but could be translated to undergraduate as well. Currently, the students using these technologies in the classroom are in a traditional team based learning classroom with mostly English as a second language learners. Application of these tools in the classroom can be within any course and over a variety of content areas as it can be customised for other use. Designing effective and engaging assessments is not an easy task – these tools can help with that process as well. The session connects to the large group teaching theme, in particular:

- o Designing effective and engaging *assessments;*
- o Managing *behaviour* in large groups compared to small;
- o Identifying, integrating, or abandoning, *technological supports* to aid large group teaching.

Theoretical Foundation/Teaching Implications

Teaching today involves working with a generation that is saturated with technology. The expectation is that technology will be used in our teaching. Students expect modern digital technology to be integrated and optimise pedagogical effects (Yeung, Taylor, Hui, Lam-Chiang & Low, 2012). The main query is "do we have to use technology in teaching?". To maintain a sense of equity and quality in large classes it is critical to incorporate forms for technology (Maringe & Sing, 2014). These new tools enable students to engage that may otherwise passively learn in the classroom.

Teaching is about providing opportunities for deep learning for all and these tools can provide that in a large group setting. From the teachers' perspective as class size rises active learning needs to be a focus and identifying current practices (Exeter, Ameratunga, Ratima, Morton, Dickson, Hsu & Jackson, 2010). Technological tools allow for scalable learning opportunities and engagement during lectures. As programmes have growing pains the use of technology becomes more crucial to allow equal student engagement opportunities. Active learning results in development of independent learning skills and application of knowledge (Sivan, Leung, Woon & Kember, 2000). These are two skills we want to instil and develop in our students. Students shift from passive recipients to exploring deeper levels of learning when we engage active learning. This session couples literature streams together to display practices to be mimicked and implemented in the classroom.

Learning Objectives

Participants will explore two ways to easily integrate technology into large group sessions generating more engagement and positive outcomes.

Participants will be able to articulate the benefits of identifying technology supports to aid in large group sessions.

Exercise Overview

The two exercises proposed during this session will be cloud based. Participants will only need a device such as a smart phone, tablet or computer to participate. The session will be done within 60 minutes with each exercise taking 15 minutes. Currently, this has been done with class sizes of about 70 students – it is scalable to any size classroom based on the technology being used. Student response to both of these tools has been positive and they comment on the high level of engagement it provides. The activity will be using Mentimeter

and QR codes to show participants ways to use various technology in the classroom for engagement and managing behaviour. Mentimeter can be used for various means in the classroom such as questions, surveys, polls, word clouds and image discussion. QR codes can be used for links to anything in the classroom – in this instance a link to a form for attendance purposes, registration and helpful links. Positive and negative learnings will be shared in this session around the two technologies.

Session Description

This session will engage participants through the use of two technologies that can be utilised in the classroom. Mentimeter and QR codes will be demonstrated with audience engagement. Participants will actively be using their devices to engage with the two technologies to form information during the session. The Mentimeter demonstration will show participants how to utilise it in large group learning to create engagement for groups and individuals. The QR code demonstration will use Google cloud based tools to show how behaviour can be altered to create classroom awareness. The QR code will show participants how to take attendance quickly and easily in the classroom. This tool also provides unanticipated effects on behaviour, engagement and classroom management.

This session will primarily be made up of participant engagement with the tools being presented and discussed. Demonstrations will be included so participants can try the tools and see the benefits first-hand. The session will also show participants how the tools can be scaled for various class size and use. These tools are diverse in their application which will be shown to participants of the session. Engagement will be incorporated throughout the session to place participants in the role of student. This role will provide the maximum experience and discussion around the implementation. The unique aspect of these tools is the ability to generalise use across class size, disciplines and universities. Also collaboration opportunities will be noted for discussion so participants can visualise how to easily share between departments and teaching teams.

Timeline for session:
Start to 0:05 – Welcome and introduction
0:05 – 0:15 – Introducing the purpose and outcomes of the technology
0:15 – 0:30 – Mentimeter demonstration
0:30 – 0:45 – QR code demonstration – how to use to alter behaviour and create classroom awareness
0:45 – 0:50 – Debrief on outcomes of two technologies in classroom – other learnings
0:50 – 1:00 – Questions, feedback and wrap up

- **Appendices**. None needed – all cloud based

References

Exeter, D. J., Ameratunga, S., Ratima, M., Morton, S., Dickson, M., Hsu, D., & Jackson, R. (2010). Student engagement in very large classes: The teachers' perspective. *Studies in Higher Education*, *35*(7), 761-775.

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Sivan, A., Leung, R. W., Woon, C. C., & Kember, D. (2000). An implementation of active learning and its effect on the quality of student learning. *Innovations in education and training international*, *37*(4), 381-389.

Yeung, A. S., Taylor, P. G., Hui, C., Lam-Chiang, A. C., & Low, E. L. (2012). Mandatory use of technology in teaching: Who cares and so what?. *British Journal of Educational Technology*, *43*(6), 859-870.