4P SHORT COMMUNICATIONS: Teaching and Learning – The Lecture
Location: Theatre Room 13, Level 0, MiCo

4P1 (21659)
Repurposing Lectures towards Active Learning: A Successful Model in a Medical School

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Background: The value of “active learning” in promoting deeper levels of engagement and performance improvement has been theoretically well-established. In this study we evaluated a model for repurposing a traditional lecture designed to teach radiology imaging concepts to medical students into an active learning environment. We determined the efficacy of this model by comparing student perceptions of the active learning intervention with a traditional lecture delivered by the same faculty.

Summary of Work: We repurposed a 90-minute traditional lecture delivered to 150 second year students into an active learning format with the help of successfully implemented, evidence-based interventions. These included advance review and preparation outside the lab session, student investigations of imaging embedded in clinical cases via small group discussions, use of computers and multiple projection screens, presentation of findings by designated group leaders, and questions and clarifications facilitated by faculty.

Summary of Results: Students in both groups were asked to rate instructor helpfulness in facilitating learning on a Likert scale (1=Strongly disagree to 5=Strongly agree). An independent sample t-test showed a statistically significant difference between groups (t = 3.73, p = .05), with perceptions of active learning group (N=140, Mean=4.52, S.D=.64) significantly higher than those in the traditional lecture group (N=147, Mean=4.10, S.D=.98).

Discussion and Conclusions: Students value and respond positively to active learning environments. Repurposing of the lecture was enabled by selecting evidence-supported interventions, employing technology, careful planning, and judicious use of existing resources.

Take-home messages: Restructuring traditional lectures towards active learning is a worthwhile experience to improve student engagement. Prudent selection of resources and interventions can enable this transition efficaciously.

4P2 (21772)
Alternating large group seminars using the white board with small group discussions helps students be active and reflective

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Background: Discussion and reflection are important in university education, and in healthcare education patient cases are commonly used for this purpose. Learning in case seminars has recently been the topic of a systematic BEME review, which called for more qualitative research on how students learn and how much structure is required.

Summary of Work: The number of students in healthcare education is increasing, and case seminars can involve as many as twenty students. How can we increase students’ opportunities for reflection? To address this question, we alternated large group with small group (three students) discussion approximately four times during a case. Large group discussion including white board notes was unaltered. To understand more about how students learn, we asked them to describe their learning in these kinds of seminars. Written data were collected in September 2013 from 68/80 students in a Swedish nursing program with case seminars. The narratives were analyzed using manifest qualitative content analysis.

Summary of Results: Three categories describing how students learn were identified in the analysis: Being active, Being part of a discussion and Seeing new problems and solutions. The analysis with categories, sub-categories and examples of quotations will be presented at the conference.

Discussion and Conclusions: In the small group, students were able to test ideas and build self-confidence, allowing them to act as problem-solvers in the large group discussion. Alternating large group seminars using the white board with small group discussions helps students be active and reflective and allows larger numbers of students per seminar.
4P3 (19319)
Can mobile technology replace lectures before student simulation?

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Background: Elearning with blended learning has become the norm (Ellaway et al., 2008). Incorporating mobile technology (mlearning: Clay 2011) increases flexibility, enabling learners to control the time and place in which learning occurs. We explored the impact of mobile learning within medical simulation.

Summary of Work: We recruited 5th year medical students to a quasi-experimental cross over trial, comparing mlearning technologies with a didactic lecture prior to simulation-based teaching. M-learning content, with pre and post session MCQs, were delivered through an Apple app (Nearpod). An anonymous email linked survey explored participant perceptions. Nominal and ordinal data were analysed descriptively, and text responses with content analysis.

Summary of Results: Forty-one students were enrolled, 37 completed questionnaires, 11 completed MCQs. MCQ scores improved from 68% to 81%. 94% of students were comfortable with Nearpod learning. 97% felt materials were presented at the correct level and 88% perceived that embedded quizzes contributed toward learning. Ordinal data and text responses agreed, that whilst students generally preferred face to face teaching methods, despite valuing the mobile platform. Pre simulation preparation can enhance time spent practicing and debriefing simulation episodes. Despite clarification of knowledge prior to simulation, students felt they ‘missed’ the personal experiences of the tutor through the mobile platform.

4P4 (19262)
Situation analysis of large group teaching sessions in the medical colleges of Dhaka city

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Background: This study was carried out to analyze the situation of the large group teaching scenario in the medical colleges in Dhaka city. Large group teaching method has its wide variety of usefulness as well as numerous shortcomings. This study was conducted with the objective to study quality of current practices of large group teaching in selected medical colleges.

Summary of Work: This cross sectional study was conducted at different government and non-government medical colleges adopting the convenient sampling using a checklist filled up by participatory observation of 36 lecture classes.

Summary of Results: The study revealed that the characteristics of the effective lecture are not visible in the present lecture classes in the medical colleges. More than thirty percent of the teachers did not attend any teaching methodology course. The medical colleges are lack in instructional media. More than twenty seven percent teachers did not mention objectives at the beginning of the teaching session. More than eleven percent teachers did not use any visual aid and more than half of the teachers used visuals that could not be read from the last bench. Fifty percent of the medical teachers do not summarize their lecture at the end. About seventeen percent lecture classes the students only opened their mouth to respond to the attendance call.

Discussion and Conclusions: The study recommended that all the medical teachers should attend the teaching methodology course as a must. Students’ evaluation, lecturers’ self rating may really trigger the teachers to identify their deficiencies, and can make a real difference. The Institute should ensure that teachers are given the support necessary for them to function effectively.

Take-home messages: Teachers of Medical and Dental colleges should have training on teaching methodology as a pre-requisite for applying for a lecturer post. We were unable to fully explore impact on learning outcomes with the MCQ response rate.

Take-home messages: Most students value face to face teaching despite acknowledging the benefits of a mobile platform.
Lecture video capture: Student friend or staff foe?

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Background: The introduction of lecture video capture (Lecture Echo) and subsequent release to students proved controversial with some staff. Initially some staff opted out because of concerns that lecture recordings would be made freely available on the internet; errors and style in presentation would become internet sensations and have an adverse effect on attendance.

Summary of Work: All 3 years of phase 1 students at St Andrews Medical School and their lecture staff were asked to identify perceived benefits for students and concerns for staff. Data was collected by student questionnaire; from viewing figures of individual lectures; from opt in and out VLE records and from a qualitative staff questionnaire.

Summary of Results: 242 from 456 students responded to the questionnaire. The main findings were that students used the recording to clarify content, focused on areas of difficulty and enhanced their note taking. Knowing that a lecture was being recorded made no difference to their decision to attend. The majority, but not all, of the staff opted to have their lectures recorded and the reasons for opting out will be reported at the conference.

Discussion and Conclusions: Students are overwhelmingly in favour of the lecture capture system and find it a useful tool to support their learning. There is no evidence of an adverse change in student attitude or lecture attendance. Staff are more at ease with the technology as their initial fears have proved unfounded.

Take-home messages: The positive response from students and the educational benefits of Lecture Echo far outweighs staff fears about the consequences of its deployment.