

## AMEE conference Glasgow 2010

Title: Promoting Long Term Knowledge Retention by use of KeePad Audience Response Systems  
Author name: Dr Marina Sawdon  
Author department: School of Medicine, Durham University  
Author email: marina.sawdon@durham.ac.uk

Submitted for both eLearning symposia & main event

**Background:** Knowledge retention following didactic teaching decays at an undesirable rate. The use of audience response systems (ARSs) has been suggested to improve and facilitate learning in a lecture by increasing student participation, giving feedback, and improving knowledge retention.

**Summary of work:** 102 medical students attended lectures incorporating the use of the ARS KEEpad. KEEpad was used to ask the students an MCQ before the lecture; at the end of the lecture; and 1 & 4 weeks later. Evaluation forms (Likert scale) completed by students included the following statements; *The KEEpad audience response system; gives me feedback on my progress, aids my knowledge recall and consolidates my knowledge.*

**Summary of results:** On first exposure to the question  $46 \pm 16\%$  (mean  $\pm$  SD of 19 questions) of the class selected the correct answer using KEEpad. Immediately post lecture this increased to  $66 \pm 20\%$ . One week post lecture  $77 \pm 22\%$  and 4 weeks post lecture  $79 \pm 14\%$ . Evaluation forms showed student satisfaction regarding use of KEEpad was 99%, 99% and 98% for the above statements.

**Conclusions:** We have found that knowledge retention is better than by conventional methods using KEEpad, and students love it! The low cost and flexibility of this approach makes it ideal in a number of teaching settings.

**Take home message:** KEEpad increases knowledge following lectures