Author's response to reviews

Title: Electronic Voting to Encourage Interactive Lectures: A Randomised Trial

Authors:

Paul M Duggan (paul.duggan@adelaide.edu.au)
Edward Palmer (edward.palmer@adelaide.edu.au)
Peter Devitt (peter.devitt@adelaide.edu.au)

Version: 3 Date: 6 July 2007

Author's response to reviews: see over
Cover letter response to reviewers (second revision)

Thanks again to both reviewers for their efforts to improve this paper.

Reviewer Wofford

We have included the changes suggested by this reviewer.

Reviewer Wong

The reviewer was concerned that some data had been stripped from the paper. The authors responded to a request from the reviewers to re-orient the data. This has been done, but we do not believe data has been removed.

There was also a concern about the statistical analysis.

“…in order to execute the study in order to show the effects of EVS, all differences between the 'control' and 'EVS' arms should be eliminated but for the EVS (i.e. the EVS should be the only 'variable'). If the lectures the students were exposed to were so different, then there were other variables too, namely the lectures. This would therefore affect the finding that the EVS made no difference to student performance.”

The General Linear Model statistical analysis takes account of the variability in lectures (see Figure 1, which displays the results separately for each lecture). This was addressed in the results section, but the authors have reworded this to make it clearer (amendment underlined).

There was no difference in the change in MCQ scores between baseline and at subsequent testing for students who had attended EVS or traditional lectures for either breast cancer or cervical cancer topics (p=0.785, Figure 1).

The reviewer was also concerned about the lack of power in the study. As he stated, we have acknowledged this limitation in the paper. The trend in the MCQ data was for the EVS MCQ results to be worse than the Traditional Lecture MCQ results. Therefore, the observation that the data do not support a superiority of EVS is reasonable and has been stated in our discussion. This suggests that increasing the power of the study is unlikely (although not impossible) to change this conclusion.