Reviewer's report

Title: How effective is blended learning in teaching evidence-based medicine? A mixed methods study

Version: 2 Date: 5 September 2014

Reviewer: Stephen Maloney

Reviewer's report:

Thank you for the opportunity to review this manuscript in my area of expertise. I read it with great interest.

My comments are from the point of view of maximising the impact of this work, from the perspective of the reader, and my comments are not designed to point out 'errors' or suggest poor workmanship on behalf of the authors. The level of work and strategic planning in the document is clearly evident.

I should state that I have recently reviewed other articles that touch on the theme of quantitative evaluations of blended learning, mostly in other disciplines. Most of these previous articles have been unsuitable in my view for publication, with glaring flaws in their methods and conclusions. However, the current article under review is champagne in a year of water...a beautifully designed, implemented, and analysed piece of work, which I would anticipate is of great interest to the educational research community.

I see no major or minor revisions required, only discretionary items for the authorship group to consider.

In my opinion:
- The question is clearly defined
- The methods are well described, including the context that the study is being applied.
- The discussion is well-balanced, highlighting both the strengths and deficits on the intervention, whilst maintaining a focus on student learning and the students likely ability to carry this into improved health care.
- Limitations are explored, from both a statistical stand-point, and the interpretations of the outcomes.
- The work on which the article builds is well mentioned in the background, and respectfully contrasted in the discussion.
- The abstract clearly represents the study undertaken.

The only discretionary revisions suggested are:
1. to consider adding clarity to whether the qualitative themes reached saturation, and a curiosity as to whether the same focus group facilitator was used across
the multiple sites.

2. I'm more familiar with journals also requesting the ethics approval numbers, however I am not aware of the journals policy on this issue.

3. I thought the paragraph beginning line 377 was slightly unclear, and could perhaps be reworded to better highlight the limitation you're referring to.

I was surprised that the authors were able to gain such buy in from the respective departments and students to take the opportunity to so thoroughly measure the impact of what I anticipate was a planned change to their EBM curriculum. My congratulations go to the authorship team.

Regards,

Reviewer

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests