Reviewer's report

Title: Information literacy skills in a biomedical science curriculum: assessment and intervention.

Version: 1 Date: 1 September 2010

Reviewer: Susan Hawken

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Major Compulsory Revisions (which the author must respond to before a decision on publication can be reached)

This paper explores the interesting and important topic of graduate biomedical science students' information literacy skills. It reports on students' baseline preferences and use of online search engines, describes how to assess information literacy skills, and outlines an intervention of providing information literacy skills training.

However there are a few concerns that need clarification or addressing in order to improve the clarity of the paper.

1. The specific educational research question/s the authors posed were unclear to me in that they describe an assignment, a needs analysis and the go on to put in place an intervention which in the end is the interesting finding and one that is focused in in the conclusion. The interesting question “Why not just Google it” posed at the end of the fifth paragraph in the background is not addressed directly yet is a pertinent question.

2. The methods are appropriate but I would place less emphasis on the description of the assignment. Instead the authors could refer to their previous published paper which outlines this clearly. This would allow for ease of reading and also more emphasis could be placed on the needs analysis and describing the intervention. That is, paragraph 8 of the results could be moved into, or at least alluded to, in the methods section.

3. The study does not clearly state that every student enrolled completed the assignment and the needs analysis although I have made that assumption since the ethics committee allowed them to use all student assessment data.

4. There is no overall demographic description of the students provided to assess the generalisability of the study findings, and in the discussion there is no mention of how student characteristics or previous experience may influence the use of the online resources and their skill level.

5. The discussion was brief and there needs to be wider consideration as to the implications of findings and perhaps linked more to literature in other discipline areas. No limitations are discussed at all, yet some things could have been
addressed. eg. the background of the students. I think the claim in the second paragraph of the discussions “that students ... apply them... in different contexts” is not really supported by the data from this study. The assignment was completed 6 weeks after the intervention. What evidence is there that the skills will be retained, be recalled, and transferred to future practice in different contexts?

6. The writing is acceptable but the paper could be shortened by removing a few details that do not add value to the overall message of the paper. For example it is not necessary to have the lecturer’s names and so much detail, e.g. first paragraph of the methods, and in the first paragraph of the needs assessment.

Level of interest: An article of importance 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.