Reviewer's report

Title: A randomized controlled study to determine the difference in the quality of scientific writing under standard writing and online writing groups

Version: 2 Date: 12 December 2008

Reviewer: James Wofford

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MAJOR COMPULSORY REVISIONS

General Comments – All components of the manuscript had been greatly improved in the revision. As this skill is often learned on an individual basis with or without a mentor, where is the experience with a group intervention on the impact of scientific writing? Have there ever been any studies of the impact of group interventions on teaching scientific writing? This would seem to me to be an important part of the background. As this is a manuscript on improving scientific writing, I think it is particularly important that the authors "practice what they preach" and offer the best presentation of this research.

Abstract

-- The background section of the abstract is too long.
-- In the methods section, omit the sentence on the STATA statistical software.
-- The interventions should be stated in the methods section, not in the background section.
-- In the results section, omit one instance of the numbers that are stated twice in the same sentence (4.3+0.73).

Introduction

-- Why is online always capitalized? There are several grammatical errors scattered throughout the introduction. Careful rereading or internal peer-review would help improve the grammar and even make more concise.

Methods

-- Were there any exclusion criteria. This should be stated, one way or the other
-- The first sentence in the section entitled “Online writing workshop group“ is potentially confusing to the reader as to what the intervention is in this study versus what is possible in a virtual environment. Omit the first sentence, as the second sentence suffices.
-- The simple checklist for the SSQS should be attached as an appendix.
-- Were the participants in the qualitative study drawn from the pool of participants in the quantitative study?
-- If the results of the qualitative study are not presented here, it should not be presented in the methods section.
-- The sections on sample size and randomization should come earlier in the methods section, perhaps after the recruitment inclusion criteria sections.

-- Consider combining “interventions” and “implementations” sections for the two groups (arms) of the study, as the methods section is getting a little too long to sustain the reader’s interest.

-- The section on blinding should come near or be included in the section on outcomes and assessment strategies, especially since it is a single sentence.

- The two arms of the study in Figure 1 are still named with a different terminology than in the manuscript.

-- How does the “quality rating guidelines” included as an appendix/additional file relate to the manuscript?

Results

-- The timeline suggesting that recruitment as early as 2005 and ending in 2007 could mean that twice a week communications between mentor and student could have lasted for greater than a year. Is that correct? The timeline is important as many online tasks get pushed back. If completion of this timeline took more than six months, I would be concerned, if it were not by design, that this may be a drawback of online learning.

-- Table 3 is unreadable in my version. Authors should make sure that it comes across as understandable in the final version.

DISCUSSION

-- As the author knows, statistical significance is not the same as clinical significance. Does the difference in SSQS truly mean a clinical difference as well? Especially in light of the need for better tools for measuring writing quality, as you have stated, some interpretation of the multicomponent SSQS could be helpful.

-- The mention of “vital thinking” simulation and its relationship to user satisfaction may raise more questions then is beneficial.

-- With paragraph 3 of the discussion, an important distinction is that, the lack of significant differences between outcomes in these studies actually argues for the online strategy, if the outcomes are the same. The other advantages of online learning (easy scalability, scheduling/timing) become more important, if the new approach is at least as good as traditional teaching.

-- In the paragraph on blackboards, blackboard is a proprietary name and should be treated as such (trademark, etc). The generic term blackboards means something else. Nevertheless, the comparison with Google docs is useful.

- In the paragraph on limitations (line 7), a “not” is missing that totally reverses the meaning of the sentence.

-- In the paragraph entitled future studies, “future studies should address this issue” should reference specifically which issue you are talking about. The suggestion that better tools should be developed to objectively measure writing quality suggests uncertainty that the SSQS is a good tool for this purpose. If that
indeed is the case, perhaps it should be a limitation, or at least mentioned in the discussion.

MISCELLANEOUS
-- Capitalization of words such as online, post hoc and misspellings such as self-reported are distracting and are inconsistently used throughout the manuscript. The title itself poses a grammatical problems and should be reworded.
-- The references are still not in the format required by the journal.

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests