Volume **01** (2022) Issue 1 *Peer Review*

Open Peer Review

Lo, L. (2022, October). [Review of the article Case study exploring the development of a quality open education clinical microbiology lab manual and online experiential lab course, by N. Lindsey, J. Pate, & L. Blankenship]. Journal of Open Educational Resources in Higher Education, 1(1), 71-74. doi:10.13001/joerhe.v1i1.7181

Reviewer: Leo Lo

Recommendation: Revisions Required

Scope, Objectives, Content

Is the article in scope for Journal of Open Educational Resources in Higher Education? Does the topic discuss an element related to open education, open data, open access, or other open topics? Is the topic an important one, or is it trivial or of low priority?

The article is in scope for JOERHE. The article uses a case study to illustrate how to solve the problem of developing an OER (at-home) lab manual for a microbiology course. This is a valuable topic to explore as the authors noted, "traditional experiments may not readily transition to an "at home" environment nor are virtual lab instruction platforms considered "equal" by many hard science departments." By sharing this case study, it could help others in developing OER for other natural sciences courses with lab requirements. This topic is especially timely because of how the pandemic has forced many lab-based courses to online platforms.

Organization

Does the article proceed logically? As applicable, does the article adhere to a recommended structure and the section guideline?

The article proceeds logically. It begins by presenting a difficult problem of transitioning in-person lab activities to a virtual/at-home format. The authors presented background information for context, and explained the different frameworks and standards that went into the development of the lab manual.

The authors did a great job explaining the steps of the development process of the proposed outcome - an OER lab manual. However, I believe it would help improve the "roadmap" of the paper if the measurement of the project (the QM/ NCD Internal Review in the Results section) was stated in the

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Introduction section. While the internal review is not the ultimate score of the project, stating it early could help readers anticipate that some type of formal evaluation of the project would be discussed.

Methodology, Approach, Conclusions

The methodology for data gathering and analysis should be appropriate for the problem addressed. Inferences from data should be sound-the author should not reach unsupported conclusions. Not all papers will use a scientific research methodology, but all should employ sound reasoning and an adequate balance between description and critical analysis. Consider: Is the article factually accurate? Is it clear the author knows, or has investigated, previous work on the subject of the article? Has the author failed to reference recent or seminal work on the subject?

As this is not a research article, the Methods section explains the different frameworks and standards, and how the authors merged them to develop the lab manual. The different frameworks and standards were clearly explained. However, the section would be stronger to elaborate more on the merging of the frameworks.

Writing Style, References

Please indicate whether there are problems with expression or flow, but do not comment about grammar or basic edits. Do NOT take the time to do copy editing - that will be handled later in the process. However, general comments pointing out problems with style or format are useful.

The article was written in an easy to follow way. Tables were properly used to compare the at-home lab activities and the traditional lab activities.

Application:

Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?

The article contributes a valuable practical example that will benefit others who are plan to develop OER for lab-based microbiology courses.

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What are the stronger points/qualities of the article?

This is a clearly written case study of the development of an OER lab manual for at home/virtual lab activities. The tables that illustrate the differences between Lab@Home and traditional lab manuals are especially useful for readers.

What are the weaker points/qualities of the article? How could they be strengthened?

From a narrative standpoint, a minor critique is that the article could provide a clearer "roadmap" for the readers in the Introduction section. For example, an internal review is discussed in the Results section, which could be mentioned earlier in the paper to guide the readers to that point. The merging of the frameworks section in the Design/Methods section would benefit from a bit more elaboration.

Peer Review Ranking: Scope

Does the topic discuss an element related to open education, open data, open access, or other open topics?

Highly Relevant

Peer Review Ranking: Clarity

Clarity of expression and flow? Does the article proceed logically?

Very Clear

Peer Review Ranking: Contribution

Contribution to Higher Education research and/or practice

Highly Contributes

Peer Review Ranking: Research Assessment

If this is a research paper, is the methodology appropriate?

Not Appropriate
Peer Review Ranking: Research Assessment
If this is a research paper, is the methodology appropriate? Does the article contribute knowledge or practical examples that will inform/improve others' practice or education?
Sound
Overall Evaluation
3- Strong Accept

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