

Open Peer Review

Martin, J. (2022, October). [Review of the article Understanding mathematics instructors' perceptions of OER: A mixed methods study, by A. Freeman, H. Tang, & J. Geary]. Journal of Open Educational Resources in Higher Education, 1(1), 170-173. doi:10.13001/joerhe.v1i1.7147

Reviewer: Joyce Martin

Recommendation: Accept Submission

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 authors of "Understanding Mathematics Instructors' Perceptions of OER: A Mixed Methods Study" examine why, despite a coordinated OER initiative at their institution, faculty in the Department of Mathematics continue to rely on commercial text and digital courseware. Given the noted lack of literature around OER and college level math instruction, this topic seems both timely and important. The authors discuss how the results of their study can be used to develop materials which address the barriers to use brought to light through their quantitative and qualitative data collection.

Organization

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

The article flows logically from a statement of the current situation with OER at the authors' institution, to their desire to increase OER usage in high enrollment courses most students need to fulfill graduate requirements. This introduction is followed by a literature review covering the benefits of OER adoption in higher education in general and mathematics in particular. A discussion of methods, findings from the quantitative study, and supporting data and themes from the qualitative data, are followed by a helpful discussion of how these results can help libraries and institutions develop materials to promote OER which address concerns brought to light by this study.

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?

The methodology employed by the author team is sound. The use of both quantitative and qualitative data, collected and analyzed separately, created richer and more nuanced data. The conclusions drawn by the authors were logical and I believe they will be helpful to academic libraries and institutions looking to promote the use of OER's in their institutions.

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 writing is clear, and free of jargon. This article is accessible to all, there is no need to be a mathematician to understand the concerns and barriers regarding the integration of OER from the set of faculty who responded to this study.

Application:

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

Theme one from the qualitative data notes that faculty often are not fully in control over the textbook decisions for the large lower-level math courses which might have the broadest financial impact for students. For those promoting OER in higher education, the authors correctly explore who those decisions makers are as well as other key factors holding back use of OER such as the need for easy-to-use online homework platforms that facilitate grading.

What are the stronger points/qualities of the article?

The thematic analysis of the qualitative data was quite clear and useful.

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

The authors note in their "limitations" section one weakness in their article, which is the small size of their sample. They had only six respondents to their quantitative survey (15 % response rate) and four respondents to the qualitative interview from the original six respondents. The study was conducted during COVID which the authors note could have affected their response rate. I think the authors acknowledgement of this weakness as a limitation is helpful.

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?

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?

Highly Sound

Overall Evaluation

3- Strong Accept
