

# Technology-enhanced learning influence on chemical literacy: A systematic review

The article went through 3 rounds of review and all 2 reviewers agreed in advance to publish their review reports anonymously.

The authors agreed to disclose the reviewer's reports and their responses to the reviewers' comments.

**Disclaimer:** The peer review report content is the entire copy of the reviewers' and authors' comments. Typing and punctuation errors are not edited.

## **ROUND 1**

## Reviewer A Recommendation: Resubmit for Review

The decisive argument for convincing readers that this review is necessary is still blurry. You have to prove a substantial gap in order to back up your work.

Table 1: I suggest deleting the title of articles in order to avoid a high percentage of similarity. Using a code could be a better choice.

Another issue related to the reviewer articles is that there are too many Indonesian authors. If this is the case, narrowing the scope to Indonesian scholars could be a more rational choice.

Please find my other comment within the document.

The structure of this paper, particularly the method, result, and discussion, and the conclusion should be reformated.

All of the results presented should be in accordance with how the data will be gained, as explained in the method.

What papers were reviewed, and what aspect of papers were you looking for?

Your discussion must interpret your data/results.

Currently, I don't see a strong connection between your results and your discussion.

Your conclusion is also going around. You have to connect it to the research question presented in the introduction.

Another issue is that your review is in the area of science education, not chemistry education. If you are going to resubmit it here, please focus on chemistry education articles

#### Reviewer B

#### Recommendation: Revisions Required

More attention is paid to punctuation and writing consistency. The reference journal used should have been published in the last 10 years.



## **ANSWERS TO ROUND 1**

Comments	Changed	
Reviewer #1		
I suggest deleting the title of articles in order to avoid a high percentage of similarity. Using a code could be a better choice.	Thank you for your feedback; we have revised it to display only the author's name.	
Another issue related to the reviewer articles is that there are too many Indonesian authors. If this is the case, narrowing the scope to Indonesian scholars could be a more rational choice.	We did not restrict the origin of the articles, but those we found were primarily from Indonesia. However, we believe this did not significantly influence the results of our analysis, given our focus on qualitative research.	
You should explain this inthe introduction	We have included an explanation of our framework in the introduction.	
This must be arranged in proper manner for answering the first rresearch question	We have reorganized our discussion.	
This must be arrenged accordingly for answering research question 2.	We have reorganized our discussion.	
Another issue is that your review is in the area of science education, not chemistry education. If you are going to resubmit it here, please focus on chemistry education articles	We have refocused the purpose of our article discussion from scientific literacy to chemical literacy. Consequently, we have repeated our literature review from the beginning to align with this new focus.	
Reviewer #2		
The first letter in the key word must be capitalized	Done	
choose one of the commonly used terms Pay attention to the consistency of the terms used 9 Scientific literacy or science literacy	we have used "scientific literacy" in the manuscript	
It is best to use the latest references (maximum 10 years)	Apologies for the inclusion of many fundamental references that are over 10 years old. We believe it is more appropriate to use the original references.	

## **ROUND 2**

#### Reviewer A Recommendation: Revisions Required

The authors have addressed my feedback accordingly. My only remaining issue is that in considering the articles reviewed in this study are mainly in Indonesia, the conclusion that "the most widely used technology for improving chemical literacy is the E-module" is still overgeneralisation.

I will accept the conclusion that "the most widely used technology for improving chemical literacy in Indonesia is the Emodule. Because it could be the case that E-modules are only popular in improving chemical literacy for Indonesians but not for other countries

#### Reviewer B Recommendation: Accept Submission

The article has been revised properly. the article is worthy of publication



Peer Review Reports

## **ANSWERS TO ROUND 2**

Comments	Changed	
Reviewer #1		
The authors have addressed my feedback accordingly. My only remaining issue is that in considering the articles reviewed in this study are mainly in Indonesia, the conclusion that "the most widely used technology for improving chemical literacy is the E-module" is still overgeneralisation. I will accept the conclusion that "the most widely used technology for improving chemical literacy in Indonesia is the E-module. Because it could be the case that E-modules are only popular in improving chemical literacy for Indonesians but not for other countries	We have emphasized this in the limitations of the study and also mentioned it in the conclusion.	

## **ROUND 3**

## Reviewer A Recommendation: Accept Submission

I am ok with the paper now.