

## Overview of difficulties and material identification of chemical based on multiple representations: Teacher's view

The article went through 3 rounds of review and all 3 reviewers agreed in advance to publish their review reports without disclosing all identities.

The authors agreed to disclose the reviewers' 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: Anonymous

**Recommendation:** Revisions Required

Please do English proofreading because the English is still unsatisfactory.  
Please find my comments within the document.

[Reviewer Files](#)

#### Reviewer B: Anonymous

**Recommendation:** Revisions Required

In introduction, please explain the GAP of this research. The methodology of experiment not clearly, please explain the qualitative and quantitative data and how to qualitative and quantitative data analysis techniques. In result and discussion, please (1) show the number 73.3% and 63.3% that you written in the conclusion, (2) show and explain the result and discussion about the data qualitative of your research. Please revise the reference. The grammar must be great revision.

[Reviewer Files](#)

#### Reviewer C: Anonymous

**Recommendation:** Revisions Required

There are several parts in the manuscript that should be removed or added. I've written it in the manuscript.

[Reviewer Files](#)

### ANSWERS TO ROUND 1

[Author's file](#)

## ROUND 2

### Reviewer A: Anonymous

**Recommendation:** Accept Submission

The editor has worked well.

[Reviewer Files](#)

### Reviewer B: Anonymous

**Recommendation:** Revisions Required

1. ABSTRACT: briefly explain the key findings.
2. In the Introduction section, the authors stated that "The use of appropriate chemical representations in the learning process can reduce students' misconceptions and help students understand chemical concepts as a whole (Hasanah et al., 2024)." The authors should explain what have been done by other studies/researchers and what have not been done to identify the GAP. The gap is not clearly stated in the Introduction section.
3. Please revise the English grammatical errors in the entire text. For instances, if the "work" has been done, use the past tense or perfect tense. Only common or routine situations use present tense.
4. Please write a more detailed methodology. The setting, subject, the data collection and analysis should be explained clearly and in details.
5. The authors should explain the reasons of the phenomena found in this study. For example, "Molecular geometry is a challenging topic, both in terms of conceptual understanding and in teaching.", the authors should explain more the reasons: how and why. Connect with the topic discussed in this study. Please do for other results.
6. I am wondering, why the authors only cite references using Indonesian language. Please cite more papers from internationally reputable journals. It should be minimum 80% of the total cited references.

[Reviewer Files](#)

### Reviewer C: Anonymous

**Recommendation:** Revisions Required

Why the respondent are teachers not students? Make the connection

Explain why the respondents are teachers non students?

Indicators aren't still clearly, please explain clearly include the multi representation test

Explain the aspect of measure using questionnaires! Explain the data form respondents' notes!

Data from respondent's notes need to use in result and discussion

Used the correct sentences for: 1) absolutely never, (2) never, (3) quite once, (4) ever, and (5) very ever

The conclusion should refer to the results and discussion of the research above.

Please add main references about multiple representations.

[Reviewer Files](#)

## ANSWERS TO ROUND 2

[Author's file.](#)

## ROUND 3

**Reviewer B: Anonymous**

**Recommendation:** Accept Submission

The proofreading is still needed.

[Reviewer Files](#)

**Reviewer C: Anonymous**

**Recommendation:** Accept Submission

The proofreading is still needed.

[No Reviewer Files](#)

## ANSWERS TO ROUND 3

[Author's file](#)

**ARTICLE ACCEPTED**