



Paper: “Understanding of stoichiometry by learners from Form Four to final year of general secondary education in Cameroon”

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Peer review:

Reviewer 1: Blinded

Reviewer 2: Blinded

Reviewer A:

Recommendation: Accept Submission

The TITLE is clear and it is adequate to the content of the article.

The title accurately reflects the content of the article.

The ABSTRACT clearly presents objects, methods, and results.

The abstract of the paper clearly states the research object, methods, and results of the research.

There are a few grammatical errors and spelling mistakes in this article.

The article does not contain grammatical or spelling errors.

The study METHODS are explained clearly.

The authors employed an eight-point questionnaire developed through a prior didactic analysis.

This approach ensures methodological accuracy and aligns with the objectives of the study.

The body of the paper is clear and does not contain errors.

The main body of the paper is clear and no errors are noted.

The CONCLUSION or summary is accurate and supported by the content.

The research reveals that a majority of students grasp stoichiometric concepts at a symbolic level and struggle to shift between microscopic and macroscopic representations. The authors'

conclusions reinforce the idea that teaching stoichiometry should involve an integrated approach to concepts rather than focusing solely on balancing equations.

The list of REFERENCES is comprehensive and appropriate.

The list of references cited in the article is relevant.

Please rate the TITLE of this paper.

[Poor] 1-5 [Excellent]

5

Please rate the ABSTRACT of this paper.

[Poor] 1-5 [Excellent]

5

Please rate the LANGUAGE of this paper.

[Poor] 1-5 [Excellent]

5

Please rate the METHODS of this paper.

[Poor] 1-5 [Excellent]

4

Please rate the BODY of this paper.

[Poor] 1-5 [Excellent]

5

Please rate the CONCLUSION of this paper.

[Poor] 1-5 [Excellent]
5

Please rate the REFERENCES of this paper.

[Poor] 1-5 [Excellent]
5

Overall Recommendation!!!

Accepted, no revision needed

Comments and Suggestions to the Author(s):

The study is based on data from five schools, which is acceptable given the aims of the article. However, it would be desirable for the authors to continue the research and expand the scale of the study population.

Reviewer C:

Recommendation: Resubmit for Review

The TITLE is clear and it is adequate to the content of the article.

yes

The ABSTRACT clearly presents objects, methods, and results.

yes

There are a few grammatical errors and spelling mistakes in this article.

yes

The study METHODS are explained clearly.

yes

The body of the paper is clear and does not contain errors.

yes

The CONCLUSION or summary is accurate and supported by the content.

yes

The list of REFERENCES is comprehensive and appropriate.

yes

Please rate the TITLE of this paper.

[Poor] 1-5 [Excellent]
4

Please rate the ABSTRACT of this paper.

[Poor] 1-5 [Excellent]
4

Please rate the LANGUAGE of this paper.

[Poor] **1-5** [Excellent]

4

Please rate the METHODS of this paper.

[Poor] **1-5** [Excellent]

4

Please rate the BODY of this paper.

[Poor] **1-5** [Excellent]

4

Please rate the CONCLUSION of this paper.

[Poor] **1-5** [Excellent]

4

Please rate the REFERENCES of this paper.

[Poor] **1-5** [Excellent]

4

Overall Recommendation!!!

Accepted, minor revision needed

Comments and Suggestions to the Author(s):

This manuscript entitled " Understanding of stoichiometry by learners from Form Four to final year of general secondary education in Cameroon"; could be good European Scientific Journal. The aim of the present research is to determine the conceptions of learners from Form Four to upper sixth (13-19 years) of general secondary education in Cameroon about the concept of stoichiometry. A preliminary analysis of the didactic transposition of the concept of chemical reaction in the Form Four textbook, combined with an epistemological study of the concept of stoichiometry, enabled us to design an 8-item paper-and-pencil questionnaire.

1. Abstract:

Abstract can be reduced, remove unwanted information. The word reassurance can be rewritten as re-assure.

2. Introduction:

Expand the discussion section to better connect the findings to existing literature, highlighting the novelty and significance of this study. Recheck and correct minor typographical and grammatical errors for improved clarity and readability. So, in your study you must develop a critical appraisal of the state of the art. This is an essential element of any article. There are important scientific questions (both conceptual and methodological) which need to be addressed with the primary studies. A study must highlight this. The introduction, which is written in clear language, covers a number of relevant issues. Information are noteworthy, and not are correct supported by similar results from the specialty Try to rewrite the abstract and conclusions, I also recommend the nuance of the introduction, the way of working is not very well explained, the procedure is tedious and unsustainable. For this reason, I recommend that the authors try to use more sustainable methodologies, the interpretation of the results can be improved/ reformulated,

3. General comments:

Conclusion can be rewritten by removing unwanted information.

Title can be reframed in a proper way. Recent references must be added.

1. Insufficient Critical Evaluation of Evidence: The paper mainly relies on in vitro and animal studies to support its claims, which limits the generalizability and applicability. The authors should critically evaluate the limitations of these studies and discuss potential differences in physiology that could affect the observed effects.

2. The paper tends to highlight positive findings while underreporting or glossing over negative or inconclusive results. A more balanced and objective approach is necessary to provide a comprehensive understanding of effects.

3. Incomplete Discussion of Mechanisms.

4. Overstatement of Mechanisms: The authors sometimes overstate the mechanisms without providing sufficient evidence to support their claims.
