Paper: **"Addressing the self-directed learning culture gap in Kenya's Junior School Science Curriculum"**

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Peer review:

ESJ *Manuscript Evaluation Form 2024*
This form is designed to summarize the manuscript peer review that you have completed and to ensure that you have considered all appropriate criteria in your review. Your review should provide a clear statement, to the authors and editors, of the modifications necessary before the paper can be published or the specific reasons for rejection.

Please respond within the appointed time so that we can give the authors timely responses and feedback.

NOTE: ESJ promotes peer review procedure based on scientific validity and technical quality of the paper (not perceived the impact). You are also not required to do proofreading of the paper. It could be recommended as part of the revision.
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Reviewer Name: İsmail İPEK	
University/Country: Istanbul Aydın University- TURKEY	
Date Manuscript Received: Oct. 22, 2024	Date Review Report Submitted: 30.10.2024
Manuscript Title: Addressing the self-directed learning culture gap in Kenya's competency-based Curriculum Junior School integrated Science post-COVID-19	
ESJ Manuscript Number: 74.09.2024-	
You agree your name is revealed to the author of the paper: Yes	
You approve, your name as a reviewer of this paper, is available in the "review history" of the paper: Yes You approve, this review report is available in the "review history" of the paper: Yes	

Evaluation Criteria:
Please give each evaluation item a numeric rating on a 5-point scale, along with a thorough explanation for each point rating.

Questions	*Rating Result* [Poor] **1-5** [Excellent]
1. The title is clear and it is adequate to the content of the article.	4
The tittle is clear and good enough to explain the content and its details	
2. The abstract presents objects, methods, and results.	4
The abstract clearly presents all objects, methods and results very well.	
3. There are a few grammatical errors and spelling mistakes in this article.	5
Writing and spelling are looking good.	
4. The study methods are explained clearly.	4
Methods are clearly designed and applied in process.	
5. The results are clear and do not contain errors.	4
It would be better that the results should be connected to instructional model in details such as Instructional design approach as well as curriculum design.	

6. The conclusions or summary are accurate and supported by the content.	**5**
The conclusions or summary are supported by the content.	
7. The references are comprehensive and appropriate.	**5**
New publications and data have been used in this article and are valuable references for the paper.	

Overall Recommendation (mark an X with your recommendation) :

Accepted, no revision needed	
Accepted, minor revision needed	**X**
Return for major revision and resubmission	
Reject	

Comments and Suggestions to the Author(s):
You should discuss all technological tools such as online- or e-learning part. based on designing lessons in curriculum design or using Instructional design models in project development to suggest a new Kenya SDLC model.

Comments and Suggestions to the Editors Only:

Reviewer A:
Recommendation: Revisions Required

The TITLE is clear and it is adequate to the content of the article.
The title is clear but is too long. The title is descriptive and reflects the focus of the article on addressing the self-directed learning culture (SDLC) gap in Kenya's competency-based curriculum (CBC) for junior schools, particularly in integrated science post-COVID-19. However, it is notably long and could benefit from being more concise. Simplifying the title while retaining its key elements may enhance readability and impact, for example: "Addressing the Self-Directed Learning Culture Gap in Kenya's CBC Junior School Integrated Science Post-COVID-19."

The ABSTRACT clearly presents objects, methods, and results.
The abstract clearly outlines the study's objectives, focusing on developing a self-directed learning culture (SDLC) in Kenyan junior schools under the competency-based curriculum (CBC) post-COVID-19. It mentions the methods used (Kantian critical judgment theory and RSIM model) and highlights key findings. However, a clearer summary of the final results would enhance its impact. Including major findings could underscore the study's significance.

There are a few grammatical errors and spelling mistakes in this article.
The article contains minor grammatical and stylistic issues, particularly in the use of definite articles and verb tenses. For example, there are occasional inconsistencies in article usage. A thorough editing process is recommended to improve the clarity and fluency of the language.

The study METHODS are explained clearly.
The methodology is well-articulated, describing the documentary analysis and reflection on secondary data. The use of the RSIM model is a strong point. However, it would be beneficial to include concrete examples of documents and materials analyzed to illustrate the practical application of the methodology.

The body of the paper is clear and does not contain errors.
The body of the article is well-structured and thoroughly addresses the main themes, including gaps in the self-directed learning culture within CBC. However, some sections, such as 4.1 and 4.2, are overly detailed and could benefit from a concise summary to maintain readability and flow.

The CONCLUSION or summary is accurate and supported by the content.
The conclusion is accurate and well-supported by the content of the paper. It effectively summarizes the findings and emphasizes the need for a new model to develop SDL within CBC. Nevertheless, including more specific recommendations for policymakers and educators would enhance the practical relevance of the study.

The list of REFERENCES is comprehensive and appropriate.
The reference list is extensive and includes important sources. However, some in-text citations, such as "Ng'ang'a (2021)" and "Ongesa et al. (2024)," should be verified to ensure they are accurately included in the reference list. A review is suggested to ensure full alignment between in-text citations and the reference list.

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]
5

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):
The comments and suggestions are included in the review file for the authors.

Reviewer B:
Recommendation: Revisions Required

The TITLE is clear and it is adequate to the content of the article.
The title of the study could be improved by focusing on integration, highlighting the specific culture of self-directed learning, and addressing the target audience, such as educators or policymakers, for better clarity.

Suggested title: Improving Self-Directed Learning in Kenya's Junior School Integrated Science Curriculum: Lessons from the Post-COVID-19 Period

The ABSTRACT clearly presents objects, methods, and results.

This abstract needs revision with respect to the following points:

• Several technical terms and phrases (e.g., self-directed learning culture," "Kantian critical judgment theory model," "reflective self-directed instructional model") are used without clear definitions or context, making it difficult for readers unfamiliar with these concepts to understand the study's core focus.

• The study's purpose is not clearly stated, and it does not articulate how the model differs from existing ones or what specific gaps it aims to fill.

• The research methodology is not detailed, and the abstract is dense, which could overwhelm readers.

• The findings are mentioned briefly but do not provide enough detail about what was discovered during the research or specific insights related to the development of SDLC in Kenyan CBC junior schools.

• The last sentence implicitly emphasizes the limitations of current reforms without positive framing or suggestions about practical implications or potential benefits of the proposed novel model.

Addressing the above points could improve the abstract's effectiveness; additionally, I advise the researchers to break down complex sentences and prioritize the most important information.

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

minor revisions

The study METHODS are explained clearly.

The methodology for addressing the SDLC gap in Kenya's CBC integrated science curriculum needs some revision with respect to the following points:

• it lacks a clear methodological framework, highlighting the reliance on speculation and reflection methods. This could introduce bias in interpreting the secondary data.

• the methodology does not explicitly discuss the limitations of using secondary data, which could strengthen its credibility.

• the method lacks detail on data analysis, despite critiquing and assessing documents. The findings may be limited in generalizability due to the specific focus on Kenyan CBC integrated science.

• Fourthly, the methodology does not address any ethical considerations associated with the use of secondary data, including how data selection criteria were determined or how potential conflicts of interest were managed.

• Finally, the terminology used, such as' and'reflection', could benefit from a clearer definition.

Despite these shortcomings, the methodology presents a thoughtful approach to addressing the SDLC gap in Kenya's CBC integrated science curriculum. Addressing the above points could strengthen the study's credibility and enhance the richness of the findings.

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

The analysis is comprehensive and detailed, but some improvements include
• The analysis highlights numerous challenges in implementing a robust SDLC, but it could benefit from a deeper understanding of their interrelationship, such as how ICT infrastructure issues affect teachers' innovative teaching strategies.
• The curriculum and teaching approaches recommendations could be enhanced by incorporating successful case studies or models from other regions or schools, offering a roadmap for implementation.
• The methodology section could enhance the connection between the findings and the data collection and analysis methodology. While RSIM is referenced, clear connections would demonstrate how the analysis adheres to RSIM principles.
• The focus on identifying curriculum gaps may be overemphasized, neglecting to highlight existing strengths and successful practices that can be leveraged.
• The analysis primarily focuses on educators and curricula's perspectives, potentially overlooking student voices. Incorporating student experiences and feedback could enhance the findings and provide a comprehensive view of SDLC development.
• The findings suggest that low critical thinking skills may be a significant issue, but specific examples or citations could help illustrate how these deficiencies manifest in classroom behavior or student performance.
• While some mention is made of teacher competency, the body could further discuss the effectiveness of teacher training programs in implementing self-directed learning strategies and critical thinking skills in the curriculum.

Addressing the above points would enhance recommendations for fostering a self-directed learning culture in Kenyan junior schools; moreover, emphasizing practical solutions and evidence-based strategies presents a hopeful path for an effective educational framework.

The CONCLUSION or summary is accurate and supported by the content.
Conclusion:
The conclusion suggests a new model for SDLC development, but could be improved by offering specific recommendations or examples on what aspects it should focus on and how it might be implemented in classrooms?
The conclusion asserts that critical thinking skills are underdeveloped in institutions; however this argument could be strengthened by providing brief evidence or examples to support the claim and provide context for the urgency of the issue.
It may be beneficial to briefly highlight the significance of integrating SDLC in Kenyan schools into broader educational objectives and social needs, highlighting its implications for future generations.
This conclusion could also shed light on the impact of fostering a self-directed learning culture on students and society in the long term. Such a step is critical for preparing students to navigate an increasingly complex and dynamic world.
The list of REFERENCES is comprehensive and appropriate.
One reference should be aligned with the other references.
(in the attached revised text)
Please rate the TITLE of this paper.
[Poor] **1-5** [Excellent]
3

Please rate the ABSTRACT of this paper.
[Poor] **1-5** [Excellent]
3

Please rate the LANGUAGE of this paper.
[Poor] **1-5** [Excellent]
4

Please rate the METHODS of this paper.
[Poor] **1-5** [Excellent]
3

Please rate the BODY of this paper.
[Poor] **1-5** [Excellent]
3

Please rate the CONCLUSION of this paper.
[Poor] **1-5** [Excellent]
3

Please rate the REFERENCES of this paper.
[Poor] **1-5** [Excellent]
3

Overall Recommendation!!!
Return for major revision and resubmission

Comments and Suggestions to the Author(s):
needs revision
more comments are found in the attached file