Science Publications

Article Information

Article Information

ID:	6527-JCS
Manuscript Category:	Research Articles
Submitted On:	Jan 4, 2021

Title

Reciprocity Effect between Cognitive Style and Mixed Learning Method on Computer Programming Skill

Abstract

Many universities undertake mixed learning to meet the required needs. Mixed learning is a blend of F2F classroom education and online learning education. The strength of mixed learning is that it supports students' cognitive styles more than non-mixed learning. The right blend of mixed learning provides more constructive and conducive learning. Meanwhile, programming language is the main skill that students must master well in order to be able to create computer application programs. The question is there an effect on students 'cognitive style and learning methods on mixed material 30% F2F and 70% asynchronous online on student's programming skill? Therefore, the objective of this study is to determine the effect of reciprocal interaction between cognitive styles and mixed learning methods on programming skill achievement. The method of this research is experimental research. The study found that: although there is no difference in the achievement of student learning skills based on tests on mixed learning methods, but further test on students' cognitive styles found that there are differences in the achievement of student learning skills in mixed learning methods; students with auditory and visual cognitive style who learn with mixed-1 learning have better programming skill achievement than students with auditory cognitive style who learn with mixed-2 learning; students with kinesthetic and visual cognitive styles who learn with mixed learning-2 have superior programming skill achievement compared to students with kinesthetic cognitive styles who learn with mixed learning-1. The novelty of the research is there has been no previous research on the reciprocal effect of cognitive styles and mixed learning methods with a mixture of 30% F2F and 70% online and vice versa.

Novelty Statement

The novelty of the research is there has been no previous research on the reciprocal effect of cognitive styles and mixed learning methods with a mixture of 30% F2F and 70% online and vice versa.

Subject Area

Computers and Society

Computers and Education

Impact of Computers on Society

Programming Languages

Applicative (Functional) Programming

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Dr. Anthony Anggrawan

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My Uploaded Files

File Name	File Type	Date
Article_JournalofComputerScience_Reciprocity Effect between Cognitive Style and Mixed Learning Method_Revised Second Round_ reviewers 1 to 4.docx	Revised File	Mar 5, 2021
Revision list_original (2).docx	Revised File	Mar 5, 2021
	Revised File	Mar 5, 2021
Article_JournalofComputerScience_Reciprocity Effect between Cognitive Style and Mixed Learning Method_Revised Second Round_ reviewers 1 to 4.docx	Revised File	Mar 5, 2021
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Article_JournalofComputerScience_Reciprocity Effect between Cognitive Style and Mixed Learning Method_Revised Second Round_reviewers 3 and 4.docx	Revised File	Mar 5, 2021
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6527-JCS Revised file- after revised file.docx	Revised File	Feb 26, 2021

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	Revised File	Feb 19, 2021
SimilarityChecking_Feb2021_Reciprocity_Effect_betw (1).pdf	Revised File	Feb 19, 2021
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Anthony et al article_JournalofComputerScience_Reciprocity Effect between Cognitive Style and Mixed Learning Method.doc	Revised File	Feb 19, 2021
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Authors Contribution Form_Anthony Christofer Mayadi and Gusti Ayu.doc	Supplementary Material	Jan 7, 2021
Cover Letter -Anthony_Christofer_Mayadi and Gusti Ayu.docx	Revised File	Jan 7, 2021
Anthony_JournalofComputerScience.2021Jan.pdf	Main Document	Jan 4, 2021

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Review Rounds

Round	Editor	Actions
Round #2	Francesca Fallucchi	View Review Decision Submit Revised Manuscript

Final Decision (Close)

Decision Letter

Dear Dr. Anthony Anggrawan,

I am writing regarding your manuscript, "Reciprocity Effect between Cognitive Style and Mixed Learning Method on Computer Programming Skill" (6527-JCS), which you submitted to the Journal of Computer Science for review on Jan 4, 2021.

We have now completed the 2nd review round with comments from colleagues whose expertise I am sure you would recognize. In addition, I, along with one of my editors (Mrs. Francesca Fallucchi), have read your manuscript.

Based on the Reviewer feedback as well as our own reading of your manuscript, Mrs. Francesca Fallucchi and I want to strongly encourage you to undertake major revisions and then resubmit your manuscript for consideration for publication in the Journal of Computer Science. Our Editorial Board has made the following decision:

Decision: Major Revision

Comments:

Review #1

Importance of the Topics

Modest

Quality of Writing and Presentation

Good

Conceptual Rigor

Good

Methodological Rigor

Good

General Discussion and Conclusions

Good

Contribution in Current Form

Modest

Contribution in Revised Form

Modest

Recommendation

Accept

Comments

Research methodology is good Introduction is good Background information with external references of the subject matter might be missing Results and analysis is great Conclusion is too vast, please separate the future enhancements and additions Good work

Review #2

Importance of the Topics

Important

Quality of Writing and Presentation

Minor Problems

Conceptual Rigor

Minor Problems

Methodological Rigor

Good

General Discussion and Conclusions

Minor Problems

Contribution in Current Form

Important

Contribution in Revised Form

Important

Recommendation

Minor Revisions

Comments

-need more explanation on the result. -need more discussion tables. -need more enhancement on language. -need more discussion on implications, limitations, future research.

Review #3

Importance of the Topics

Trivial

Quality of Writing and Presentation

Major Problems

Conceptual Rigor

Major Problems

Methodological Rigor

Minor Problems

General Discussion and Conclusions

Major Problems

Contribution in Current Form

Modest

Contribution in Revised Form

Trivial

Recommendation

Major Revisions

Comments

The aim of the author's research is to examine the effects on programmatic efficiency of the reciprocal relationship between cognitive styles and mixed learning methods. Experimental testing is the tool of this inquiry. The study found: while student abilities based on the assessments of blended learning approaches are accomplished no differently. The work idea of this paper is good, however there are many notes : - The paper has a poor structure and has a lot of grammatical mistakes as well as the language used is not well-written academically, that can affect the readability level negatively. - The paper structure should be illustrated in the last paragraph of the introduction section. - The related work in the introduction should be moved into a separate part, with a well-comparative analysis; to show the strength of the authors' contribution. - The references style is weak -many in text citations without linked references- and it is difficult to follow the papers idea arrangement, as many citations were missing. - The authors have jumped directly from the introduction to the research methodology section and the started in describing the experiment environments. - The experiments results should be compared with some recent works to prove the strengths of the contribution as well as the weakness points for the future work. In general, there is a good idea behind the contribution in this paper, but it was poorly represented and written. As a result, it is not advised to publish this paper under such a form; as it is not meet both the journal standards and quality.

Importance of the Topics

Important

Quality of Writing and Presentation

Good

Conceptual Rigor

Good

Methodological Rigor

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General Discussion and Conclusions

Good

Contribution in Current Form

Important

Contribution in Revised Form

Important

Recommendation

Minor Revisions

Comments

1. The manuscript is appropriate for the Journal of Computer Science-Science Publication. 2. The subject addressed in this article is worthy of investigation. 3. Uniform the calling of (Table) instead of (table) throughout the manuscript. 4. Rewriting Table 3 and Table 8. Also, put 0 before the fixed point for each real number (all Tables). Thank you and good luck

Mrs. Francesca Fallucchi and I hope that this feedback will be helpful to you in developing your research, and that you will be encouraged to undertake the revisions within the next few weeks. You should know that manuscripts normally are revised at least once (often involving more than one series of Reviewer comments) before being accepted for publication in the Journal of Computer Science. Please don’t hesitate to contact me if you have any questions about the comments above.

To submit a revision, go to http://thescipub.com/es/info.php?id=6527-JCS and log in. You will be able to upload the revision and detailed response to Reviewer comments.

When you submit a revised version of your paper, please include a statement explaining how this version reflects the feedback received from the Reviewers and the editors. Also, note if, and explain why, you decided not to follow any points made by Reviewers or editors.

When we receive your revised manuscript, we will send it to at least some of the previous Reviewers and ask them to assess whether you have addressed the main issues and, thus, whether your work should be accepted for publication.

Finally, we would appreciate it if you would acknowledge receipt of this message and, as soon as possible, let us know a) whether you plan to rewrite your paper as well as b) when you would plan to submit a new version to the Journal of Computer Science for review.

Sincerely,

Prof. Abedallah Rababah
Editor in Chief
Journal of Computer Science

Reviewer Comments

Reviewer # 1

Research methodology is good Introduction is good Background information with external references of the subject matter might be missing Results and analysis is great Conclusion is too vast, please separate the future enhancements and additions Good work

Reviewer # 2

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Reviewer # 3

The aim of the author's research is to examine the effects on programmatic efficiency of the reciprocal relationship between cognitive styles and mixed learning methods. Experimental testing is the tool of this inquiry. The study found: while student abilities based on the assessments of blended learning approaches are accomplished no differently. The work idea of this paper is good, however there are many notes : - The paper has a poor structure and has a lot of grammatical mistakes as well as the language used is not well-written academically, that can affect the readability level negatively. - The paper structure should be illustrated in the last paragraph of the introduction section. - The related work in the introduction should be moved into a separate part, with a well-comparative analysis; to show the strength of the authors' contribution. - The references style is weak -many in text citations without linked references- and it is difficult to follow the papers idea arrangement, as many citations were missing. - The authors have jumped directly from the introduction to the research methodology section and the started in describing the experiment environments. - The experiments results should be compared with some recent works to prove the strengths of the contribution as well as the weakness points for the future work. In general, there is a good idea behind the contribution in this paper, but it was poorly represented and written. As a result, it is not advised to publish this paper under such a form; as it is not meet both the journal standards and quality.

Reviewer # 4

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