

#### Article Information

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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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