

Improving Performance and Progression of Novice Programmers: Factors Considerations

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Abstract : Teaching computer programming is recognized to be difficult and a real challenge. The biggest problem faced by novice programmers is their lack of understanding of basic programming concepts. A visualized learning tool was developed and used by volunteered first-year students for two semesters. The purposes of this paper are firstly, to emphasize factors which directly affect the performance of our students negatively. Secondly, to examine whether the proposed tool would improve their performance and learning progression. The results of adopting this tool were conducted using a pre-survey and post-survey questionnaire. As a result, students who used the learning tool showed better performance in their programming subject.

Keywords : factors, novice, programming, visualization

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