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## A Review of Programming Code Assessment Approaches (Conference Paper)

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### Abstract

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Learning computer programming language in harmony with practical coding activity while ensuring proper content progression is critical in introductory programming courses. Novice programmers usually face difficulty in acquiring the foundation level programming concepts adequately that usually lead to disappointment and ultimately back off. Bloom's Taxonomy has been generally adopted by educators as a standard for assessing learning progression of students. In past there have been lot of research work on adopting Bloom's taxonomy and its variants for computer programming languages, however none has specifically looked at an automatic mechanism to evaluate the six levels of Bloom's taxonomy on code level directly. In this paper we reviewed different approaches for assessment of programming code and discusses the challenges involved to implement the Bloom's taxonomy in programming languages directly on code level. © 2018 IEEE.

### SciVal Topic Prominence ⓘ

Topic: Students | Teaching | learning programming

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assessment Bloom's taxonomy competency Programming

### Indexed keywords

Engineering controlled terms: Blooms (metal) Codes (symbols) Curricula Engineering research Mathematical programming Taxonomies

Engineering uncontrolled terms: assessment Automatic mechanisms Bloom's taxonomy competency Introductory programming course Learning progressions Novice programmer Programming concepts

Engineering main heading: Computer programming languages

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