Abstract

There are many factors that influence the high rate of failure of students in computer programming courses. This paper focuses on the teaching methodologies and strategies that are implemented in teaching programming courses. This is a major factor for consideration; hence an investigation into the causes of failure of students in programming courses from the learner perspective with regard to the teaching methodology used by teachers to teach these courses is relevant. Programming courses form part of the core concentration areas for students especially studying Information Technology (IT) and Computer Science (CS) as an undergraduate degree program. Programming students are expected to demonstrate competencies in the principles of programming and logic that are being taught in the course; even though some of these concepts are highly abstract and complex. Their opinions to the usefulness of the teaching methods being implemented in programming courses were sought for. The needs and concerns about the teaching methods are highlighted in the survey and discussed thereby leading to the making of suggestions about the ways to improve the teaching methods that are used in computer programming courses in order to improve understanding of programming, when studied by students thereby minimizing failure rates.
Causes of Failure of Students in Computer Programming Courses: The Teacher – Learner Perspective


Index Terms

Computer Science

Information Technology
Keywords

Computer programming teaching methodology minimizing failure programming logic