

Exam as an assessment instrument in computer programming



courses



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INTRODUCTION

Assessment can take many forms, and it can be argued that the greater the diversity in the methods of assessment, the fairer, assessment is to students (Race 2007). The most effective form of assessment is one that appropriately examines the learning outcomes of the module. Assessment methods are also known to play an important role in how students learn (Brown 2004). The traditional assessment approach, in which one single written examination counts towards a student's total score, no longer meets new demands of programming language education (Wang, Li et al. 2012). Students tend to gain higher marks from coursework assignments than they do from examinations (Gibbs and Simpson, 2004). Students consider coursework to be fairer than exams, to measure a greater range of abilities than exams and to allow students to organize their own work patterns to a greater extent (Kniveton, 1996, cited in Gibbs and Simpson, 2004). Do students really hate exams? Are exams ineffective as an assessment approach in computer programming courses? A university wide research survey regarding assessment approaches in computer programming was conducted among students of undergraduate computing courses (including all three levels). 167 students participated in the survey. The author discusses some interesting results obtained from the survey. More than 50% of the students surveyed indicated that they would like examination to be a part of the assessment approach.

References:

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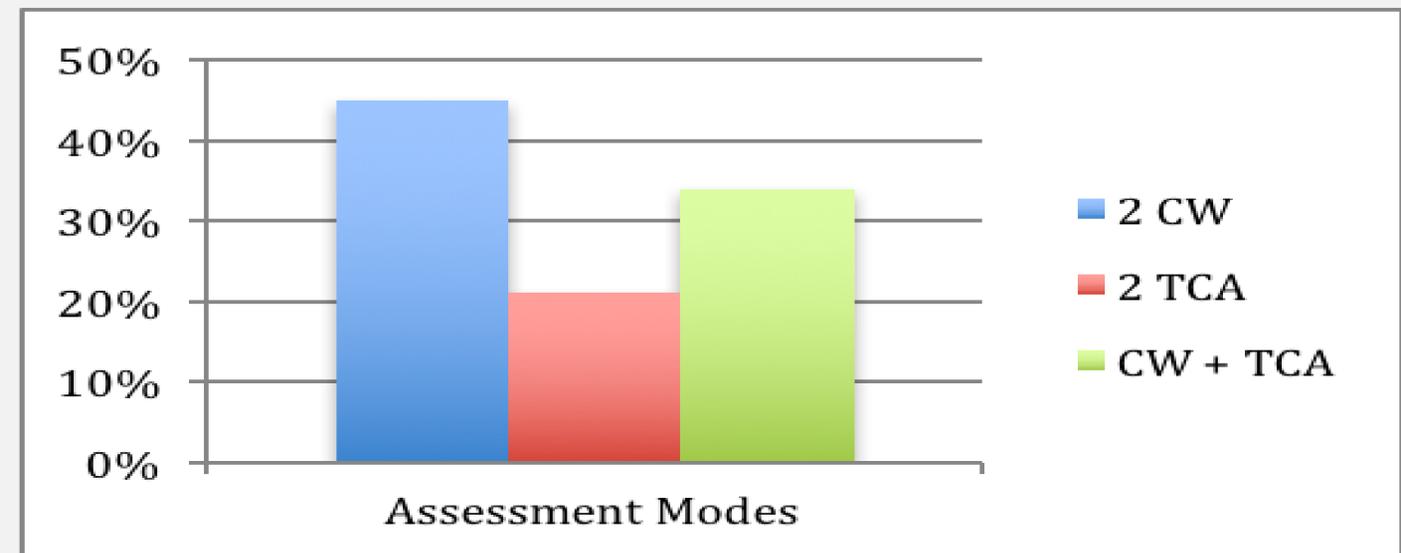
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SURVEY RESPONSES



CW – Course Work TCA – Time Constrained Assessment

SUMMARY

TCA is a closed book written test. Questions test your logical reasoning ability, problem solving skills and programming knowledge.

- + Eliminates plagiarism
- + Trains students for graduate technical tests asked by employers
- Does not test ability to work on practical real world type projects
- Dependent on performance on the day, state of mind, health and other factors creep in.
- Limited/No Feedback given

CW is an open book assignment. Students are required to develop and test a project, produce a demo and report.

- + Assess practical skills and resemble real life project scenarios
- + Detailed Feedback given
- Plagiarism/Contract Cheating is common
- Students tend to focus solely on assignment without in-depth understanding of each topic