

A QUASI-EXPERIMENTAL STUDY OF THREE ONLINE LEARNING COURSES IN COMPUTING

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ABSTRACT

This paper presents the results of a three-year quasi-experimental study of three Masters courses in computing. The purpose of this study was to investigate the extent to which the teaching and learning of these courses were enhanced by being developed and delivered in an online format as compared to face-to-face full-time and part-time delivery. Key methodological questions and issues to be examined were: a) any observable difference in student performance as measured by end-of-module grades/marks; b) any observable difference between coursework and exam performance in the technically-oriented modules; c) any observable difference in dropout rates, student satisfaction and Faculty satisfaction. The study examined the results from 4,684 module enrolments, consisting of 269 online students, 796 part-time students, and 3,619 full-time students distributed across 7 modules and 79 module instantiations. The data was gathered using a variety of different means which included interviews, end of module questionnaires, student records and enrolment data. The results show that the online students consistently perform better than the face-to-face students and the paper reflects on this finding.

KEYWORDS

Adult learning; interactive learning environments; evaluation of CAL systems; learning communities; pedagogical issues.