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# Student Performance and Confidence Analysis on Education Virtual Environments through Different Assessment Strategies

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**Abstract :** Hand in hand with the evolution of technology, education systems have moved to virtual environments to provide increased coverage and facilitate the access to education. However, measuring student performance in virtual environments presents significant challenges to ensure students are acquiring the expected skills. In this study, the confidence and performance of engineering students in virtual environments is analyzed through different evaluation strategies. The effect of the assessment strategy in student confidence is identified using educational data mining techniques. Four assessment strategies were used. First, a conventional multiple choice test; second, a multiple choice test with feedback; third, a multiple choice test with a second chance; and fourth; a multiple choice test with feedback and second chance. Our results show that applying testing with online feedback strategies can influence positively student confidence.

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