Lessons Learned: Outcomes from the Development and Delivery of an Online Games Based Learning Platform using Silverlight 5/XNA and Windows Azure

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Abstract

Online learning has grown rapidly in recent years with the adoption of learning platforms [1][2][3][4][5] such as Moodle, Coursera, Udacity and edX all of which offer learning options such as closed captioned videos of lectures, multiple choice questions, essays and other online submissions [6] for assessments. The technologies behind these offerings are well known and many platforms exist for those who wish to follow this route. However groups looking to deliver interactive 2D or 3D game based learning experiences with automatic grading over the internet have limited choices in what technologies can be used [7][8][9][10] and the impact of the selected technology varies for both learner and educator.

This study outlines the methodology and outcomes of delivering interactive browser based educational applications developed using Silverlight\XNA and Windows Azure [11] throughout a three month period in 2012 to a group of over 80 third level students and lecturers in the field of medical biotechnology. The students logged over 253 hours in playtime over the course of 9 individual lessons and the recorded data has provided an insight into the learning habits of the users and the effectiveness of automatic assessment grading.

References

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