An Evaluation of Using a Social Network Group within a 3D collaborative Learning Environment

A Case Study: Open Wonderland and Facebook

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Abstract

Although extensive research has been carried out on 3D collaborative learning environments and the role of groups and communities in social networks, few studies exist which adequately cover the relationship between these two. In this dissertation, the author articulates the effectiveness of the integrated environment of these two factors by suggesting a novel prototype and conducting an evaluation session. For the proposed model, a *Facebook Group* was utilised as a repository for learning content and its members were applied as system actors. On the other hand, the *Open Wonderland* platform was selected as an environment for 3D virtual collaborative activities. Since tacit knowledge can be gained via collaborative group-based activities and discussions, a new Wonderland module was developed to integrate this platform with the Facebook Group. Similarly, explicit knowledge can be learnt directly via the prepared contents and files which are provided within the group repository. Furthermore, this integration may result in enhancement of the accessibility issue for learning content since the content can be available both in the 3D world and the 2D Facebook Group. In other word, this system can be applied both for synchronous interaction as well as asynchronous data retrieval. Finally, the proposed model was evaluated by means of a two-hour task-based assessment and a user-satisfaction questionnaire by ten postgraduate Iranian students at the University of Essex and the University of Manchester, the outcome of which was enormously promising.

Keywords

Web 2.0, Social Network Groups, Learning System, 3D Virtual Collaborative learning Environment, Human-Computer Interaction, Usability Evaluation