Developing the Historical Culture Course by using the Ubiquitous Game-Based Learning Environment

陳瑞宏,王德華,張文智,趙榮耀
Information Management
Computer Science and Informatics
earnest@chu.edu.tw

Abstract

With the advance of information technologies, it is much easier to provide and construct various powerful e-learning platforms. Nevertheless, such
kinds of e-learning platforms are available worldwide, but the percentage of using
these platforms is still unsatisfactory. The main reason lies in the learning
content and learning activities couldn't attract learner. Accordingly these
e-learning platforms are not able to fit the needs of either learners or instructors.
In this paper, we proposed an integrated learning environment called U-GBL (Ubiquitous Game-Based Learning) system. We used the technologies in interactive
video, GPS (Global Positioning System), GIS (Geographic Information System) and RFID (Radio Frequency Identification) to construct the interactive
game-based learning environment. Learners could utilize PPC (Pocket PC) to have the game-based learning activities anytime and anywhere. And we also demonstrated an example of the historical culture course content to explain the
gaming scenario in our learning environment. We hope this U-GBL learning platform could help to enrich the learning motivation and to improve the learning
efficiency.