

An RFID-Based Learning System Supporting Ubiquitous Context-Aware Bloom's
Cognition Knowledge Analysis

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Abstract

With the rapidly developed internet technology, knowledge can be delivered to learners in an efficient way and the learning activities are becoming various and attractive comparing to traditional classroom learning. In this research, we use PDA combined with RFID technology to setup a Ubiquitous Context-Aware Mobile Learning System for learners to learn the history of Tamsui, Taiwan. By using RFID with ubiquitous context-aware technology, students can learn the Tamsui history outdoors to truly experience the location-aware context existed in the learning content. As a result, the learning impact will be much more improved by taking such a ubiquitous learning activity. The proposed sequence knowledge system will analyze learners' cognition knowledge distribution which refers to the six cognition levels in Bloom's cognition taxonomy. Furthermore, with the exam question analysis mechanism, teachers can use the RFID-based Ubiquitous Context-Aware Mobile Learning System to realize learners' learning status and correct learners' misconceptions.

Keyword : RFID, Mobile Learning, Sequence knowledge, Bloom' s cognition taxonomy,