

CONTEXT-AWARE MOBILE CREATIVE LEARNING USING DIGITAL STORY TELLING APPROACH

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Abstract

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Abstract

Inquiry based learning is considered as one of the promising approaches for learning science education. Students are encouraged to collect information from the real world; they collect information to formulate and test their hypotheses and findings using “learning through doing” process. With the advancement of ubiquitous technologies, students can use their mobile and sensor devices to collect data from the environment and learn science through inquiry based learning. Conventionally, students are not involved in an inquiry based learning environment where they can understand the scientific phenomena and use their critical thinking skills to learn science education.

Therefore, we need such an environment where students can use their classroom knowledge to perform experiments in a real world using advanced technologies. For this purpose, this thesis implements an application for context-aware ubiquitous learning environment named M-DISTIL, where school students can learn science through mobile and sensor technologies. Further, they use digital story telling approach in which students may generate an interactive and engaging story about a particular activity performed using digital tools. Thus, the aim of this conceptual and applied framework and application is a twofold; to create a context-aware mobile learning application using digital storytelling approach and to provide an interactive environment for context-aware inquiry based learning.

For the evaluation purposes, an experiment was performed with a cluster of students of a school. The promising results have achieved that prove that context-aware inquiry based learning along with digital story telling approach are far better than conventional teaching methodologies.

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