



Developing a Taiwan library history digital library with reader knowledge archiving and sharing mechanisms based on the DSpace platform

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Abstract

Purpose – This work seeks to present a reading annotation and knowledge sharing tool, which can annotate a web page with HTML format archived by the Taiwan libraries' history digital library based on Web 2.0 technologies.

Design/methodology/approach – This work adopted DSpace, an open-source institutional repository system, to implement a Taiwan Digital Library History Library with the reading annotation tool for knowledge archiving and sharing services. A quasi-experimental design method was employed to randomly assign participants to an experimental group and control group to evaluate differences in the reading performance of learners who used the proposed annotation system. A statistical analysis scheme was employed to evaluate differences in learning performance of learners while reading and learning with the proposed annotation tool.

Findings – The paper finds that annotated digital material provides useful knowledge to readers. The values to those annotating and subsequent readers are the acquisition of in-depth knowledge and efficient reading. Additionally, the effect on digital libraries is that digital library content grows dynamically as readers contribute knowledge. More importantly, annotated information from different readers has very high potential for the discovery of value-added knowledge utilizing data mining techniques.

Originality/value – Collecting user-generated content is a novel research issue in the library sciences field, and few studies have developed useful tools that allow readers to actively contribute their knowledge to digital libraries. This work shows how to implement such digital library systems and how the annotation tool benefits the growth of digital archives and promotes learning performance.

Keywords Digital libraries, Annotation, DSpace, Knowledge archiving, Knowledge sharing, Knowledge management, Taiwan

Paper type Technical paper

