

Public Abstract

First Name:Dan

Middle Name:

Last Name:Cernusca

Adviser's First Name:David

Adviser's Last Name:Jonassen

Co-Adviser's First Name:

Co-Adviser's Last Name:

Graduation Term:SS 2007

Department:Information Science & Learning Technologies

Degree:PhD

Title:A DESIGN-BASED RESEARCH APPROACH TO THE IMPLEMENTATION AND EXAMINATION OF A COGNITIVE FLEXIBILITY HYPERTEXT IN A LARGE UNDERGRADUATE COURSE

Dealing with classroom diversity while trying to engage students in meaningful and rewarding instructional activities has proven to be a real challenge for both researchers and practitioners in the field of education. One set of answers to such classroom learning challenges was offered by proponents of constructivist epistemologies.

The overall purpose of this longitudinal study was to investigate the interaction between the learning process and the design of an innovative online learning environment. This learning environment was implemented in a large undergraduate religious studies course for two consecutive years. The empirical research results from the first year's implementation were used to redesign the learning environment.

From a learning perspective this study found consistent significant increase of students' performance outcome mean scores when the online learning environment was part of the instructional process. The analysis of students' conceptual understanding revealed potential areas of improvements of the design used for this study.

From a research perspective the reported findings for the two consecutive years and researcher's reflective analysis represent significant contributions to an emerging field in educational research, the Design-Based Research.