

Research Trends of Learning and Technology in Japan: A Critical Review of Two Journals by Japanese Society for Information and Systems in Education (JSiSE)

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Abstract: This panel introduces a critical review of research trends of learning and technology from two points of view: domestic and international. Editors of both domestic journal, *Transactions of Japanese Society for Information and Systems in Education*, and international journal, *The Journal of Information and Systems in Education*, published by Japanese Society for Information and Systems in Education (JSiSE), will introduce latest trends by analyzing papers appeared in each journal. The panel the invite questions and opinions of the audience to familiarize Japanese trends, to exchange comparative views regarding the trends of research among countries, and to solicit international corporations for future research activities.

Introduction

Japanese Society for Information and Systems in Education (JSiSE), established in 1974, has been active in promoting academic research and exchange of opinions on the use of the information and communication technology in education. This society is registered as an academic research association with the Science Council of Japan, with about 1,600 members from universities, corporate sectors, as well as K-12 teachers. Aside from its annual national conference, JSiSE hold six workshops each year with the themes related to topical issues, including e-Learning, Computer-supported Collaborative Learning, among others.

A domestic journal of JSiSE, *Transactions of Japanese Society for Information and Systems in Education*, has been published four times in each volume to its current volume 26 in 2009. On the other hand, an international journal of JSiSE, *The Journal of Information and Systems in Education*, was first published in 2002 with an open policy of submission. Currently, the international journal is published once a year, attracting high quality papers from various parts of the world.

The aim of this panel is first to introduce a critical review of research trends of learning and technology from two points of view: domestic and international. Editors of both domestic and international journals will introduce latest trends by analyzing papers appeared in each journal. The panel then invites questions and opinions of the audience to familiarize Japanese trends, to exchange comparative views regarding the trends of research among countries, and to solicit international corporations for future research activities.

Current Research Trends in the Domestic Journal of JSiSE

Table 1 contains partial list of titles of papers appeared in the 26th volume of the domestic journal of JSiSE, *Transactions of Japanese Society for Information and Systems in Education*. In the panel, an editor will describe trends of research from a domestic perspective based on the critical analysis of the papers.

Table 1: Paper Titles appeared in Volume 26 of the Domestic Journal of JSiSE

The summary and main points of "Information study" in national curriculum standards reform
A network-model-based simulation for teaching assistants of process experimental exercise
Practice and evaluation of the comprehensive support and advice activities system for adult students of distance learning
Current status and future issues of SCORM specification dissemination from the view point of the SCORM assessor program in Japan
Development and implementation of a refuse segregation game for environmental education
Study on learners' understanding in a business gaming practice through their behavior analysis
A method for automatic generation of multiple-choice questions adapted to students' understanding
An introduction of balanced scorecard to designing of educational SCM simulator
e-testing: advanced theories and technologies
School support activities for encouragement of ICT use and planning ability
A method of evaluating Japanese learners' composition based on literal translation
A relationship between learners' FDI cognitive style and site structure of Web resources in case of junior high school
Let's go go! Magical spoons: a learning program for the fundamentals of coding at high-school-level information study: its educational practices and results
The effect of receiver-buffering control on subjective quality and response time of real-time distance interactive environments in multipoint IP communications
Development and evaluation of a computer-based tool for "Manga-representation method": a training method for presentation focusing on social networking activity
Regional information dissemination learning using news flash type videos by high school students
Learning Kanji using handheld game machines: research on the potential of the Nintendo DS
Development and evaluation of the hands-on 3D digital picture-card show system
A comparison of general ICT textbooks by analyzing knowledge structure graph
Class improvement based on a barometer to identify the students' dislike in an information tutorial class and its evaluation
The high-definition automatic lecture recording and streaming system that an instructor does not feel in load
Development of the computer system for education in the department of Information Engineering
The effects of report management system to promote appropriate time to wait for correction
Development of the student dependency detection system: using the time-series analysis of the similarities of reports
Development of HSP teaching material for foreign students
Programming learning support system with programming judge function using test cases made by teachers
Effects of C programming education which makes a point of process with evaluation activity
Investigations of beginners in programming course based on learning strategies and gradual level test, and development of support-rules

Current Research Trends in the International Journal of JSiSE

Table 2 shows a partial list of titles of papers appeared in the 7th volume of the international journal of JSiSE, *The Journal of Information and Systems in Education*, published in 2008. In the panel, an editor will provide more recent list from Volume 8 and analyze trends of research from an international perspective based on the critical analysis of the papers.

Table 2: Paper Titles appeared in Volume 7 of the International Journal of JSiSE

Analysis of Collaboration in Creative Problem Solving Based on Thinking Styles
Focusing Support Interface for Collaborative Learning
PSI: A System for Creating English Vocabulary Materials Based on Short Movies
E-Learning System Development for Technological Literacy in a Pre-College Program
Creating an Educational Program and Information Support System for Fostering Entrepreneurship
Evaluation of How Students Use an Integrated Web Site Containing Multi-media Materials for a College Japanese Reading Course
Development of a Student ID System Using a Cell Phone
Construction and Evaluation of an Educational System that can Explain and Visualize Behavior of Programs on the Domain World Model –A system for 'greater or lesser world' model and its evaluation–
Analysis of Collaboration in Creative Problem Solving Based on Thinking Styles
Focusing Support Interface for Collaborative Learning
PSI: A System for Creating English Vocabulary Materials Based on Short Movies
E-Learning System Development for Technological Literacy in a Pre-College Program
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Construction and Evaluation of an Educational System that can Explain and Visualize Behavior of Programs on the Domain World Model –A system for 'greater or lesser world' model and its evaluation–
Analysis of Collaboration in Creative Problem Solving Based on Thinking Styles
Focusing Support Interface for Collaborative Learning
PSI: A System for Creating English Vocabulary Materials Based on Short Movies
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