

Cognitive Idea Processor --- Modified Mandal-Art

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The new idea processor called modified Mandal-Art which can assist a user in his associative thinking between given item have been developed in which a user can communicate with the system using eye movement, finger-hand motion and voice. A user of this idea processor is forced to associate by seeing only nine items on the matrix called Mandala on CRT at a time. We have measured this information retrieve behavior from item pool of our testee putting on eye mark recorder and data gloves. Human associative thinking in his problem solving is accelerated by using this cognitive idea processor. This type of idea processor may brings us innovation of educational style on the computer by using the student model which take account the real time associative behavior of a learner.

Dilemma of Inquiry and Reflection Through and With Technology: New Directions for Research in Post-Secondary Teaching

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The study explored the issues of pedagogy for teaching reflective inquiry in the undergraduate program in Educational Psychology. The analysis focused on the role of the learners' imagination and the use of instructional hyper-media texts in construction of meanings associated with the course content. Particular attention was paid to the development of student design ideas that they use for the arrangement of images, which reflect, as a special form of narrative, on their understanding of the disciplinary concepts, personalities and life experiences. The data illuminate the instructional conditions when the student's act of arranging information becomes an act of insight. The computer-based student projects (Teacher's Portfolio, Multi-Media Gallery), along with the instructional hyper-media texts, reveal a critical instructional shift in the pedagogy of teaching reflective thinking-from structure to process, from enforcing students' competence to engaging them into performance-that fosters a deeper understanding of the dialectics of socio-cultural processes.

Assessing and Training Admunct Faculty with Technology: Enhancing their Classroom Learning

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Increasing numbers of adjunct faculty at all major institutions of higher education has made it imperative that institutions examine the technology competencies of this large contingent of faculty who now instruct 40% of the courses on the undergraduate level. Very little effort is being made to provide development or training for these faculty in technology applications that would keep their students current in the rapidly altering global world of the 21st century. Metropolitan State College of Denver reviewed their 650 adjunct faculty and found many interesting factors that will be reported during this poster session. It is evident that adjunct faculty need assistance in both learning specific technology programs and in applying the technology into their coursework.

Design an Enhanced Virtual Experiment Environment Using Science Process Skills on WWW

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This paper proposes a methodology of applying a proper distance learning system following Seven Steps of Problem Solving and Science Process Skills. To complete this process of distance learning, this paper also suggests some tools for student undergoing all the process needed in the problem solving. Virtual Experiment Environment and Experiment Record are presented for some new notions in this paper. In Virtual Experiment Environment, Visual Lab is a new idea to operate experiment in Internet and show the reality of experiment. Experiment Record solves the difficult of implementing sheet and chart in HTML document. An environment for teacher design Science Process Skills is also presented in this paper.

Analysis of messages on the Only One Earth Club; TV-based collaborative learning site on the Internet

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Messages sent to our BBS for collaborative learning can be classified to 10 categories. Each of these categories has some types of interactions among participants and site-staffs. The types of interactions are promotion of in-depth learning, discussion, and question & answers.