21st century teaching

(aka “how I think about my teaching with technology”)

dmboyer
al881: fall07
According to The Partnership for 21st Century Skills, the items below are the “skills, knowledge and expertise students should master to succeed in work and life in the 21st century.” To be successful, the “21st Century Student” needs to learn the following:

1. Core Subjects and 21st Century Themes
2. Learning and Innovation Skills
3. Information, Media and Technology Skills
4. Life and Career Skills

http://www.21stcenturyskills.org/
For me, being a 21st century teacher means that I need to...

- create authentic learning activities
- facilitate cooperative, information-rich learning environments
- balance direct instruction and project-based learning
- cultivate self-directed exploration in a community of practice
- actively assess ongoing development
- practice reflective teaching and collaborate with fellow professionals
create authentic learning activities

Welcome to the MIT Teacher Education Program's Handheld Augmented Reality Simulations Site

The MIT Teacher Education Program, in conjunction with The Education Arcade, has been working on creating "Augmented Reality" simulations to engage people in simulation games that combine real world experiences with additional information supplied to them by handheld computers.

The first of these games, Environmental Detectives (ED), is an outdoor game in which players using GPS guided handheld computers try to uncover the source of a toxic spill by interviewing virtual characters and conducting large scale simulated environmental measurements and analyzing data. This game has been run at three sites, including MIT, a nearby nature center, and a local high school. Early research has shown that this mode of learning is successful in engaging university and secondary school students in large scale environmental engineering studies, and providing an authentic mode of scientific investigation.

http://education.mit.edu/ar/
facilitate cooperative, information-rich learning environments

Welcome

Quest Atlantis (QA) is a learning and teaching project that uses a 3D multi-user environment to immerse children, ages 9-12, in educational tasks. Building on strategies from online role-playing games, QA combines strategies used in the commercial gaming environment with lessons from educational research on learning and motivation. It allows users to travel to virtual places to perform educational activities (known as Quests), talk with other users and mentors, and build virtual personae. A Quest is an engaging curricular task designed to be entertaining yet

http://atlantis.crlt.indiana.edu/public/welcome.pl
balance direct instruction and project-based learning

The Water Habitat Project:
Local to Global Environmental Education
Sunnyside School, Pullman, Washington USA

OVERVIEW OF THE UNIT AND ITS CONTEXT

OVERVIEW OF THE UNIT

The "Water Habitat Project: Local to Global Environmental Education" is an STEM initiative developed by Kristi Rennebohm Franz's class at Sunnyside Elementary School in Pullman, Washington. The project focused on the water habitat in the school's vicinity. The students documented their scientific observations with a narrative approach and created a photojournal to collaborate with peers around the world on integrated lessons designed to meet state and National Standards in Environmental Education Technology, Behavior Studies, and Civics/Government. The Water Habitat Project began when the class started observing a nearby city park pond, and they began collaborating with peers around the world on understanding and issues of water habitat conservation.

http://learnweb.harvard.edu/ent/gallery/pop3/pop3_1.cfm
cultivate self-directed exploration in a community of practice

http://www.knowledgeforum.com
actively assess ongoing development

http://teach-nology.com/web_tools/rubrics/
practice reflective teaching and collaborate with fellow professionals

http://tappedin.org/

http://www.ndsu.nodak.edu/ndsu/kbrooks/blog/
To be a 21st century teacher, it is important that I be reflective and innovative in my practice, iterative in my instructional design, and continuously active in my professional learning.
and, for the Luddites...

teaching with non-digital technologies

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Eastlake Elementary