MIT 512: A Railroad WebQuest and ADA Compliance Proposal

Railroad WebQuest

ADA Compliant Computer Lab Proposal

Context & Conditions:

There were a number of products completed in the fall of 2005 in partial fulfillment of a course entitled: MIT 512: Computers in Education. I have decided to profile only two here. An ADA compliant computer lab was designed to ensure accessibility for all students and a web quest which included both a lesson and unit plan, was also designed and developed. Both projects were developed under the guidance of Dr. Sue-Jen Chen. The web quest was designed to fit into the into the North Carolina fifth grade social studies curriculum. It covered American train history, the impact of trains in America, and the current status of trains.

Scope:

For this WebQuest students were assigned the authentic role of a travel agent and are required to research various aspects of train history, compile the information, design a presentation, and plan a cross-country journey by train. Students were required to use the internet and Microsoft Power Point. A unit plan was initially developed and then appropriate railroad resource web sites were found. The unit plan was then used as a guide to the design and development of the web site and lesson plan portions of the WebQuest.

For the ADA compliant computer lab ADA regulations were followed as well as standards required by the “No Child Left Behind” legislation. Recommendations for required classroom modifications, as well as furniture, hardware, and software purchases were made.

Role:

I completed the WebQuest project by myself undertaking various roles. I worked primarily as curriculum designer in designing the unit and lesson plans and web developer in developing the actual WebQuest.

The ADA Compliant computer lab was completed as as a group effort. At various points in the process we all worked as designers and researchers.

Reflection:

The Railroad WebQuest has been included in this e-portfolio because it reflects my ability to quickly adapt to and apply new skills. Coming from a non-education related background this project proved challenging. I am proud of this project because of my quick adjustment and the final draft's quality. I also see how the proper structure (objectives, content, assessment) can be applied to the K-12 setting. If I was to create this WebQuest again I would include a little more group interaction and inquiry-based learning.

The ADA compliant computer lab project was an eye-opening experience. Designing learning spaces for students with disabilities is not easy but is the right thing to do and it is illegal not to. This project introduced me to the concept of universal design.

Domains/MIT Competencies/Job Qualifications/Artifacts

Design . Development . Utilization . Management . Evaluation

Domain of Instructional Design			
MIT Competencies	**Job Qualifications**	**Artifacts**	**Rationale**
Sequence learner outcome.	Sound understanding of content development and curriculum design	MIT 512 -WebQuest	These products represent my understanding of the sequencing of learner outcome.

Determine instructional resources (media/computer technology) appropriate to instructional activities.	Researches the effectiveness of various teaching strategies and instructional technologies. Effectively assesses the feasibility of solutions in terms of client needs and available resources.	MIT 512 -WebQuest	Selecting the appropriate resource to augment or deliver instruction is imperative in effective instructional design. This product effectively represents this competency.
Domain of Instructional Development			
MIT Competencies	**Job Qualifications**	**Artifacts**	**Rationale**
Demonstrate knowledge of computer utilization practices and the ability to apply them in instructional settings including: computer literacy, software selection and evaluation, instructional management, hypermedia development and distance learning.	Experience designing and developing online courses using WebCT, Blackboard, or Moodle Experience using computer and online based learning solutions.	MIT 512 -WebQuest	The WebQuest demonstrates my ability to develop basic, web-based instruction to be used with a facilitator, while the CBI is much more interactive and can be completed individually by the learner.
Design and produce computer-based instruction including drill-and-practice and tutorial programs.	Experience creating computer-based instruction using Toolbook or Authorware	MIT 512 -WebQuest	This CBI shows a good example of the drill and practice format that computer-based-instruction is very good for.

Design and produce interactive multimedia systems.	Experience using various development tools (video, graphics, sound) to develop multimedia enhanced courses	MIT 512 -WebQuest	Interactivity was incorporated into each of this products in an attempt to keep the learner engaged and increase retention.
Domain of Utilization			
MIT Competencies	**Job Qualifications**	**Artifacts**	**Rationale**
Apply leadership techniques with individuals and groups (interpersonal skills, group dynamics, team building and diffusion of innovations).	Excellent written and verbal communication skills Ability to mange projects within deadlines and budgets	MIT 512 -ADA Compliant Computer Lab	The Taskstream Video demonstrates my ability to work with others in producing a quality product, and the Macro-Level Design project shows how I can incorporate team building into my design.
Demonstrate knowledge of the laws and regulations which govern the selection and utilization of media/emerging technology, including copyright, censorship, State Board Regulations, Local Board Policies, etc.	Knowledge of copyright and "fair use" as it applied to online learning and university courses	MIT 512 -ADA Compliant Computer Lab -WebQuest	These products demonstrate an awareness and knowledge of laws and regulations as they relate to education and learning.
Domain of Evaluation			

MIT Competencies	Job Qualifications	Artifacts	Rationale
Plan and conduct product evaluation.	Evaluate learning tools and provide recommendations for their future use	MIT 512 -WebQuest Unit Plan	These products represent a through understanding of individual product evaluation.