Demonstration of Responsibility #2: Designs instruction or human performance strategy to meet the needs of learners (e.g., analysis of problem situation, design of instructional strategy consistent with analysis of the learning situation, use of situated learning models, use of collaborative learning strategies, experience as a facilitator vs. deliverer of knowledge)

Artifact 2: Web Design 1 (GWHS) – Denver Public Schools New Course Development

THE PROBLEM

In today's educational climate of testing and the CSAP, schools are focusing not just on teaching students technical skills, but also on how technology can enhance student performance in basic skill areas. Traditionally, the Vocational Business Department (where I teach) has taught marketing, basic word processing, and business lecture classes (Management and Law). The district knew that this would not continue to serve the needs or the interest of the students and predicted that enrollment in Vocational Business courses would dwindle. Another target for this shift in instructional focus is to attempt to reach students who are difficult to engage in the educational process. Integrating technology into learning core academics may be the defining factor that helps some students succeed.

BACKGROUND

Learning Situation - To begin to address this problem the Denver Public Schools technology planning team has made drastic changes to the vocational educational model and course offerings. Instructional delivery continues to be project-based and focused on developing student vocational skills. The district technology education philosophy is modeled after the work of John Dewey (1916, Democracy and Education), which suggests "learners are most successful when students are encouraged to actively pursue interests in cooperation with others in self-directed learning." (Field) Course offerings themselves have changed significantly to reflect corporate, parent and student interest. The first modification was to change the department title from the Business Department to Career and Technology Education. The district team felt the new name clearly focused and communicated the mission of the department. Second, Denver Public Schools has also completely changed course offerings, creating several new courses to address the needs and interests of secondary students.

(Reference: The Dewey Center)

Instructional Strategy - One new course is the addition of Web Page Design. Last year I was assigned the responsibility of creating the district curriculum for Web Page Design and have now completed the first month of teaching the class to four sections of students (n=120). It is highly unusual to have a new elective class attract so many students its first year, but it is an accurate reflection of the interest and value of

technology by our students. A tremendous number of students have enrolled and they have shown a great deal of success already. Every student is working beyond expectations.

When creating the *course syllabus* for this class, I incorporated much of my experience from *5600: Web Authoring*. This course taught me the importance of understanding HTML code instead of solely relying on Web Authoring tools. I also emailed a draft to several other teachers familiar with web authoring to gain their input. The course covers four basic sections: Wed Design Principles, HTML Code, Basic Dreamweaver Skills, and Web Authoring. The course design also included principles of evaluation and learning such as rubrics, web delivery, and project based learning.

Rubrics - I try to make my expectations very clear to the students. Whenever possible I use *rubrics and checklists* and post them to the class web site. Each assessment states the objective of the lesson, directions for its completion, and a clearly delineated grading scale. Many rubrics also include a *student self-assessment.* Students can be self-directed assume increased responsibility for their work.

Web Delivery (teacher as facilitator) – I have created a *web site* corresponding to the class. Students *and parents* can check the course syllabus, assignment due dates, print assessment sheets, download assignment files, access web resources, and contact the instructor. This capability is a big step forward for supporting student learning and expanding their ability to access many technical resources from home and other settings. Several students have printed assessments from home and continue their work. A traditional model of instructional delivery would impede this. This site does not currently reflect all web and instructional design principles. I have found initial web development to be a very dynamic process – it is a work in progress. Site design can be very time consuming and will change greatly depending on the site content. My current primary objective is to get content distributed to students. After I evaluate what works and what doesn't, I plan to re-design the course site to reflect any necessary modifications and then devote more attention to the design of the site.

Project Based Learning – One of the most exciting components of this course is the cumulative final project. It relies heavily on students engaging in collaborative relationships. Students must collaborate with a core academic teacher to create a web site as the medium that demonstrates their learning about a topic (e.g. a web site about American history meets the needs of Web Page Design 1 and AP American History.) Students create project proposals, navigational flowcharts, screen mock-ups, a draft site, and the final site. The sponsoring teacher "signs off" each step of the way. A repeated formative evaluation process is built into the sign off for each phase of the site development, ensuring the student and the teacher (the client) that their goals and communication regarding the site is consistent. Students develop skills in project management (The Systems Development Life Cycle), user needs and communication, and academic content -- all embedded into the context of web design and authoring.

RATIONALE

Through my experience teaching Multimedia for the last four years, I have seen the benefit of collaborating with students and other instructors with integrated academic projects. Teachers see their content being reinforced in other areas and students see how the class subject is applied in real life situations.

RESULTS

In six years of teaching I have never experienced so much success with a new class quite like Web Design 1. In the urban teaching environment of Denver Public Schools, about one of every five of my students is generally difficult to motivate. This semester is different. I have only one student, so far, having trouble staying focused on the work ahead. Expectations are high and the workload demanding, but the students are stepping up, staying focused, and staying energized.

REFLECTIONS

Web based delivery opens new avenues of communication with students and parents. Students can check due dates, get assignments, and work beyond the confines of the classroom. Soon, I hope to establish email with students as another tool to encourage communication after class hours and even in times of my absence.

With any new course there are struggles. Two primary concerns related to the Web Design course are access to technology and the distractions of the Internet. In any school, but especially in the urban environment of George Washington, not all students have access to technology at home. Their temptation to surf the web sometimes overrides good judgement and educational discipline. We plan on combating the concerns in two ways. First, I allot ample time to complete assignments. Due dates are assigned so that students can complete the work at school provided they are focused. For the few students that fall behind, I extend the their due date, allowing them to catch-up outside of regular class time. Advanced students are encouraged to guide others during class and I make myself available before school, during lunch, during study halls, and after school.

During Meet the Teacher Night I expressed a concern that the Internet is a great distraction to students *and adults*. I am constantly stressing the importance of staying focused on assignments of the day and not allowing any time for web surfing. If students spend 15 minutes out of a 45-minute period checking hockey scores on *ESPN.com* or reading email from friends we will not accomplish much in class. But if students can learn to use the Internet as a tool and not an entertainment device and if they can develop the self control that the Internet needs, students will have learned a very valuable skill that will last a lifetime.