prior to the class. By witnessing and at times being involved in "working out" these and other classroom challenges openly, students are learning higher levels of problem-solving, interaction, and decision-making, not merely essential content.

While the collaborative approach "sounds good," there are obstacles. The obstacles originate from faculty, from students, and from colleagues.

Faculty may find that collaborative approaches expose them to perceptions of reduced control over content and class activity. They may perceive the exchange of personal feedback during class time as threatening. Collaborative planning is time-consuming at first. Faculty experience "content crisis," a term our faculty has coined to describe fear of losing control over the class to the extent that essential content (by faculty perception) is not covered. Over time faculty gain confidence with the process and with each other. The resulting gains in student critical thinking negate the concerns about content.

Often students perceive the experience as a radical departure from previous classes. Resistance often centers upon fear of missing information which may appear on tests. Fear of ridicule from peers or instructors accompanies the risking of sharing thought processes as they are developing and being shared. Students must surrender traditional and familiar modes of receiving spoon-fed information to new ways of thinking. As this process begins to unfold students begin to think critically about information, application and consequences. Creating a safe learning environment reduces feelings of insecurity. This also encourages students to take risks.

Colleagues may question the practicality of this use of manpower and time. However the consequences of this approach to classroom teaching have been significant increases in retention of students in this community college setting.'

Developing a Technology Learning Community

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These presenters describe a model for developing interactive problem-solving exercises that incorporate international and interdisciplinary concepts and issues. The Global Citizen Project is an internet-based project that requires a team approach to fulfill its potential as a learning tool across the curriculum.

THE WORD IS OUT: redesign the delivery of education. Studies documentated by the Office of Technology Assessment (1990) show that technology-based education can provide greater mastery of material in less time and with higher retention than can the typical classroom lecture. Furthermore, businesses see a gap between current workplace needs and the skills students learn in college. Understanding the power of technology and its application makes students valued workers. Teachers need to develop new approaches and adapt to the change in their traditional role from the expert to the partner in learning.

Teachers, when faced with the challenge of technology innovation, raise these questions. Is learning taking place? How do we benefit as teachers? Who will support us in this additional effort and with what resources?

To address these questions and begin an ambitious internet-based, interdisciplinary project called the Global Citizen Project, we believed we needed to develop a model for change that would incorporate the above mentioned issues and provide us with the structure to support the myriad expertise levels of the faculty involved. The process we have followed in the development of this project are discussed after a brief description of the project itself.

As research shows, nonlinear structures as exhibited by the world wide web actually facilitate the growth of relational thinking and make effective tools in the learning environment (Yang, 1996). In the Global Citizen Project, the power of the web is harnessed to deliver solutions to a complex group of needs. It is based on the conceptual framework of the Global Citizen, Inc. a hypothetical international conglomerate that employs graduates of the University System of Georgia. Students in every class in the core curriculum are given job assignments prepared by a collaborative effort of academic and technology specialists from the College. These as-

signments focus on timely and relevant topics ranging from genetic engineering to marketing a newly patented product in the Middle East. To successfully complete an assignment, students must examine at least five interdisciplinary topics that are international in scope. In doing so, students should gain an understanding of a variety of international issues ranging from politics and languages to economics and cultural philosophy.

As project leaders we must have a clear vision of what the project will do and strong communication skills to ensure that the project teams share that vision. To successfully organize and monitor the efforts of a team of faculty to create these interdisciplinary modules, the following guidelines have been effective in providing accountability and structure to our project.

Select a team with complementary skills.

Ideally, a technology project of this scope should have co-chairs: a faculty chair to lead the subject matter experts and a technology chair to lead the technology portion of the project. In this way, faculty are encouraged to be creative and concern themselves with the quality of their instructional links rather than the computer issues that may arise.

The faculty chosen to participate in our project have these similarities: an expressed interest in using technology; and a demonstrated creativeness in their classroom. Their differences lie in their expertise in using technology; this level of expertise ranges from the novice to the award-winning innovator.

Explore the background of team members

Explore the background of each team member so that you can work to their area of strength. Some faculty will be delighted to learn how to create home pages, others will be totally disinterested. Our faculty teams were told to focus on their interests so that the project benefits from their creativity. We developed an inventory of skills form which was filled out by each participant to record their entry skills and general interests.

Link project with rewards: grants, publications, presentations.

State and federal grants can support release time for faculty. The originators of the project have already been recognized by their college with an award for interdisciplinary work. Numerous national presentations have been given by faculty on the modules developed for this project.

Inform faculty.

Oftentimes faculty, while interested in integrating computerized applications into their class, are unaware of the many tools and approaches that are available. Alerting them to presentations of successful computer applications and seeing demonstrations can give them an appreciation for what can be developed. We scheduled small group training to give faculty the supportive environment they needed to begin working with these new technology approaches.

Develop a shared vision of the project.

During initial meetings, we established the time line for the project and presented a sample of an instructional piece. We found this to be effective in nurturing the brainstorming of ideas for future modules and in encouraging faculty to share ideas freely.

Start small, think big.

Limiting the original participants to a workable group enables the support staff to provide the individualized support as promised. As faculty become familiar with the Internet and other tools they will link up for future projects with other faculty.

Spin the web.

Internet projects are, by nature of the web, modular and easily shared. This project can be demonstrated to other faculty and organizations to encourage participation.

References

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