Beyond Point and Click:
Taking Web Based Pedagogy to a New Level

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Introduction

A group of faculty that currently teach asynchronous online courses were motivated to ensure that course quality remained high. Many of us have seen the online courses that throw some written content up on the web and then have some tests and quizzes and call it an online course. To us that is not suitable in many ways on many levels. Our goal was to look at how we can maintain and help others maintain high quality, media rich, interactive courses. We started by receiving an Ohio Learning Network Learning Community Initiatives grant and this is our story.

We received an Ohio Learning Network Learning Community Initiative Grant. The initiative was to take place over a period of one year beginning with spring of 2004. There were also some other requirements such as a kick-off event and workshops for all of the state's learning communities for us to attend.

The purpose of our project was to investigate and review various types of software that could be used to create online modules. Our community consisted of five faculty members from various departments: Beth Dietz-Uhler – Psychology, Amy Fisher – Math/Statistics, Ellenmarie Wahlrab – English, Janet E. Hurn – Physics, Tammy Allen – Spanish. We also had three staff members: Teri Newton – Computer Center, John Burke – Library, Andrea Han – Educational Technology Center. In addition we had two students: Gabe Campbell, Jessica Cope.

As with any project our initial goal changed and evolved. As we investigated different types of software, we continually had to address the question, "What can we do with that?" We realized that no one was getting especially excited about any of the technologies we were finding. Then we realized that we were going about things all wrong. At one of our frequent meetings, we decided to discuss what it was that we had problems with in our courses that might be solved with technology. We made a list of our pedagogical needs and started there.

Why a Learning Community?

We found that our learning community had many benefits. It allowed us to find solutions to problems more efficiently. It allowed us to share thoughts and ideas. Other members forced each other to clarify and explain their ideas which served to make clear those thoughts. It kept us all accountable for our work. We all have great ideas that do not ever seem to materialize. Some of us in the sciences would think we had a great idea and then the humanities folks would make us find a way that it could be used in their discipline. This was a very useful and eye-opening exer-

cise. The students were useful in that we faculty would have a "great" idea and the students would give is an honest perspective on how truly "great" it really was or was not in some cases.

Structure

The Ohio Learning Network suggests a kick-off even for each Learning Community. Our core group of four members planned a technology show case and invited faculty and staff to show technology that they used in their classrooms and how they used it. This was helpful in getting members excited about various technologies. It was also very beneficial to the campus. We had 10 short presentations with over 30 people attending. We served breakfast as well. Our group of 10 members then met over lunch and engaged in several technology-based activities to get to know one another better.

We began the next fall with a lunch and ice-breaker activities. We scheduled biweekly meetings for the rest of the semester. As members explored their pedagogical needs we formed teams that focused on four specific projects.

- Web-based Critical Thinking Module
- Online Spanish Modules
- Problem Based Research Module
- Statistics Online Modules

We will explore these modules in detail.

Web-based Critical Thinking Module

This project arose out of the need for Dr. Beth Dietz-Uhler to enhance her students' ability to analyze information critically. She has many activities that require her students to analyze information and sources, and she found many of her students were unable to do that. She did not want to spend valuable class time in her Introduction to Psychology Course or her Social Psychology class to teach them this. She ultimately used a php script on a web site to have her students respond to various questions and then apply some critical thinking to several situations.

The module consists of four assignments. Each small assignment contains instructions, objective(s), background information, and then an activity to illustrate the concepts covered. There is also a grading rubric included so the students know what is acceptable and what is not. The first assignment is on the scientific method. The background explains the scientific method and the parts included in the method. The activity asks the students to choose from several hypotheses and it guides them through each step of the process. They then submit their responses which goes to the instructor's e-mail.

The next assignment is about critical thinking. The students are given background information once again. They then have a series of statements that they are to critically analyze and choose which one is more convincing and why. They again submit their answers in a form that sends the answers to the instructor's e-mail. After they complete this second assignment, they are directed to another script that serves as an evaluation tool for the assignments.

Part three of the module is a long-term assignment. The students are asked to participate in a discussion board on their Blackboard site. Here questions are posted that the students must respond to and support their responses. The instructor randomly "grades" the students' responses all semester to see if they are thinking and communicating critically.

The fourth module was only for the Social Psychology classes to complete. This module is also all semester long. It instructs the students that when they read short articles they will be assigned that they need to answer five basic questions. These questions lead them through a critical evaluation of the articles.

Dr. Uhler was pleased with the outcomes in her first two courses. She found the students were better at recognizing critical thinking than explaining why it was critical thinking. The students scored better that a nine average on recognition and a seven on rationale. She also asked them about their confidence level with the scientific method and critical thinking prior to the activity and after the activity. They showed an increase in confidence post-activity. Keep in mind the questions were all asked post-activity. The students reported a minimal increase in knowledge as a result of both activities. As far as the student's skill in engaging in critical thinking discussions, the Intro course showed a high use of critical thinking after the activity but it declined as time went on. After being reminded that they needed to use critical thinking in their discussion boards, the use increased again. In the Social Psych course, the use increased as the class wore on. Dr. Uhler considers it a worthwhile module and will continue to use it with her classes.

Online Spanish Module

Tammy Allen, our Spanish instructor, wanted to engage her students more out of the classroom in Spanish activities and discussion. She wanted to get away from the typical workbook kind of assignments. She has explored two different paths to that end. Her first and most simple idea was to put some of the workbook kind of activities on-line to reach the more technology-driven generation and to make it a little more fun. She used Hot Potatoes from Half-Baked Software to do this. This software allows the instructor to create crosswords, multiple choice quizzes, fill-in-the-blank quizzes, and scrambles to then be put on the Web. The students can then work on these assignments anywhere they have an Internet connection. Tammy linked them to her Blackboard site.

Her second idea was to improve the students' vocabulary and conversation skills through a virtual Spanish experience. Several options were explored. The one still being explored is to modify the Sims to have a Spanish speaking world with English hints. There is also the option of possibly creating a world that would be housed on our campus servers. The team also explored several companies that "rent" virtual world space.

Tammy reports that her students enjoy the on-line activities. They find it a much more enjoyable method to learn vocabulary. Her group is exploring other options for on-line learning of vocabulary such as flash cards.

Problem Based Research Module

The goal of this project is to assist students in collecting, organizing and sharing information for group research projects through a variety of online communication tools. The original project utilized a web-based program named Furl which allows users to store, share, and evaluate online resources including web pages, graphics and multimedia. Some other resources were also investigated. Currently the students are using Blogs to share and reflect on the research paths they are using. They have found that students are more willing to share on a Blog as opposed to in class. They also find it more convenient and valuable if class time is not used for projects. The goal is to have the students post their projects to the Blog and share their research with a larger population.

Statistics Online Modules

Dr. Amy Fisher jumped into our learning community with both feet. Her goal was to create media-rich online modules for an online statistics course. Her group discussed multiple ways to accomplish this but settled on Microsoft Producer to create her modules. Producer is free if you have PowerPoint and is fairly versatile. She broke her course up into modules and set up three students to do an independent study and critique her modules. One of the students was a member of the learning community. Her next job was to create PowerPoints for each module. Some modules ultimately needed to be broken into smaller lessons.

Microsoft Producer allows one to use a multitude of templates to deliver content. She chose to primarily use a small video and large slides format. After a short lesson she was off and running. She would give her lectures into a video camera and sync this video to her slides. She then burned the finished lecture to a CD for the students. The students are able to view the lectures at their leisure and run them as slow or fast as they want. They can rewind and cover difficult topics more than once.

The pleasant surprise for Amy with Producer was that she could also do screen capture with Producer. She made several lessons with Excel and showed some statistics that way. The students saw exactly how to do the spreadsheets themselves. She used audio with it. Another template she used was large video which allowed her to video her TI calculator and show students how to perform statistics on their calculator. They see each step and can do it as she does it. These are things we once thought could only be done in the classroom. The students reacted very positively about these lessons. She can now use these modules for this class or as part of her other courses. They took a lot of time to create but the results were worth it.

Lessons Learned

This learning community has been so beneficial for us as a group as well as individually. We have learned a lot, made new friends and colleagues, and produced some useful materials. We do have some suggestions for a successful learning community.
- Frequent meetings – We tried to meet every two weeks if possible.
- Assignments – Give the members small assignments to bring to the next meeting. That is how work gets done.

- Fun meetings – Have a theme or small contest, door prizes or games. Keep it fun.
- Food – This is a no brainer. Food is always good. We had a lot of lunch meetings. It also helped to combine lunch and meeting for people's busy schedules.
- Diverse group – Choose people for the learning community that do not normally work together. Also choose people that are not as comfortable with technology as everyone else is. It gave us another perspective. We also chose people from different disciplines. The students were a huge asset.
- Project flexibility – The projects were dynamic. They evolved over time. This was a good thing. Do not handcuff your members.

I recommend the learning community structure to jump start any projects or initiatives you are working on.

Resources

Examples - http://www.mid.muohio.edu/oln/oln.cfm

Hot Potatoes - http://web.uvic.ca/hrd/halfbaked/index.htm

Microsoft Producer –
       http://www.microsoft.com/office/powerpoint/producer/prodinfo/overview.mspx

Members

Amy Fisher -- *Associate Professor, Department of Mathematics and Statistics*
Andrea Han -- *Educational Technology Coordinator*
Beth Dietz Uhler -- *Associate Professor, Department of Psychology*
Ellenmarie Wahlrab -- *Visiting Instructor, Department of EnglishCoordinator,*
       Communication Across the Curriculum
       Coordinator, Center for Teaching and Learning
Tammy Allen -- *Senior Instructor, Department of Spanish and Portuguese*
Janet E. Hurn -- *Senior Instructor, Department of Physics*
John Burke -- *Interim Director of the Miami Middletown Library*
Teri Newton -- *Interim Network Manager*
Gabe Campbell -- *Student*
Jessica Cope -- *Student*