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Collaborate, Engage, and Interact in Online Learning:

Successes with Wikis and Synchronous Virtual Classrooms at Athens State University

Paper presented at the 14th Annual Instructional Technology Conference

March 30 – April 1, 2009

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ABSTRACT

The purpose of this paper is to provide faculty with creative ways to use tools such as wikis and synchronous virtual classrooms to build a sense of community within their distance classes. A review of the literature provides an understanding of the many significant benefits of including collaboration, engagement, and interaction in e-learning courses. This paper details a variety of pedagogical approaches based on the experiences of faculty at Athens State University to successfully incorporate collaborative technologies into online courses. Student and faculty commentaries are included to support how these approaches have indeed enhanced online, undergraduate courses in business and education at Athens State University. An accompanying wiki site that includes step-by-step directions for designing and implementing these strategies, sources of research on the subject, and opportunities for interested faculty to collaborate on these issues can be found at http://athensstateuniversity.pbwiki.com.

INTRODUCTION

As online course offerings increase in colleges and universities, it is of the utmost importance for faculty to employ teaching methodologies that will engage students, provide forums for collaboration, and encourage student interaction (Sudweeks, 2003; Swan, 2006). According to the annual Horizon Report (The New Media Consortium, 2008; EDUCAUSE Learning Initiative, 2008), there is a significant trend of educators developing new forms of interaction and collaborative experiences for educational use.

The convergence of evolving e-learning systems, the advent of social software, and the maturity of the "Net Generation" have provided faculty members with exciting, new opportunities to develop a sense of community among students in online classes (MacKey; Swan, 2006). By integrating technologies like wikis and synchronous virtual classrooms into e-learning environments, interpersonal communication, which has always been a part of traditional classrooms, can now be successfully achieved in online classes (Curtis & Lawson, 2001). The challenge for educators is to determine how best to utilize these new technologies to engage and educate this new generation of e-learners (Bartlett-Bragg, 2006).

In most early implementations of online education, faculty worked to mirror their traditional course design and pedagogy using learning management systems (Sudweeks). Initial online courses in higher education focused on the distribution and delivery of course content, and the ability of students to access this content in primarily asynchronous, internet environments (Bartlett & Bragg, 2006). The result was often high failure and drop-out rates, and complaints from students that while they enjoyed the convenience of e-learning, these early online courses did not increase or even maintain interest in the course subject matter (Fricker, 2007). Students

complained that while they enjoyed the convenience of e-learning, they missed communication with faculty and collaboration with classmates.

Faculty, too were disenchanted with this new method of delivering higher education (Maguire, 2005). Many faculty members simply refused to embrace online education and the associated technologies for course delivery (Allen & Seaman, 2007). In fact, according to a survey conducted by the National Education Association (NEA, 2000), 50% of faculty conveyed negative or uncertain feelings towards distance learning (Maguire, 2005). Research suggests that many faculty members desire to enhance student participation, but struggle with engaging learners in the social software environments (Haythornthwaite, 2006).

WIKIS AT ATHENS STATE UNIVERSITY

According to Smith (2003), "learning is social and comes largely from our experience of participating in daily life." Wikis, when structured for collaborative coursework, promote peer interaction and facilitate the sharing and distribution of knowledge and expertise amongst a group of learners (Lipponen, 2002). Using collaborative wikis in e-learning courses has the potential to build online communities where students work together to achieve common goals and objectives related to their assignments (Mackey, 2007).

Wikis for Student Introductions

A natural tool for collaborative distance education, wikis have enabled instructors to create interactive assignments for their students and build a collective repository of subject-related information. While the implementation of wikis in higher education is varied, this paper focuses on a few specific examples of wiki utilization at Athens State University. These include student introductions, collaborative group work, electronic portfolios (e-portfolio), a course bibliography, and a knowledgebase of training materials about technology.

Wikis for Group Work

At Athens State University, wikis are often used to support project-based courses where students work in groups. Because of the team aspect of project courses and the importance of student interaction, one of the wiki assignments is for students to create personal wiki pages. While some parameters are provided, it is primarily a free-form space in which students introduce themselves to the class. Most students include information about their families, hobbies and interests, work experiences, and learning goals for the course. It is suggested that photographs be included so that a face can be associated with each name, lending a more personal feel to the exercise. Students are informed that the entire class will have access to their wiki page with ability to comment, so that information of a personal nature or other inappropriate content is not included.

These personal wiki pages then serve as the basis for another wiki assignment, the formation of work groups. Using the personal wiki pages for background, students interact through an instant messaging tool to converse about the project, get to know one another, and determine compatibility for group work. Once students form their teams, each group interacts to design a team wiki which includes a home page that describes their project and its key deliverables, and contains links to the introductory pages of each team member. This collaborative wiki exercise promotes camaraderie and a healthy competition among groups. One professor commented, "I like wikis because they encourage collaborative work and you can easily review what students working together are doing."

Using their team wikis and instant messaging tools, students discuss group work electronically rather than talking or meeting face-to-face. This is extremely convenient for online

students who are separated by geographic distance and cannot meet physically to discuss class

work. Joseph Motley, an Athens State business student, commented,

> "With the tools we have at Athens, I seldom have problems corresponding
> with the instructors or, in a team environment, with my fellow students.
> Many tools allow team chats in real-time and afford the convenience of
> individuals not having to schedule meetings in person at times that are
> inconvenient. Wikis also allow students to view each other's work for
> presentations and give them and instructors another tool to instantly solve
> problems that would have historically required a drive to the Athens campus
> for a face-to-face meeting. I am appreciative of the tools at our disposal, so
> that we can ask questions that involve the class at large or just individual
> teams. Kudos to Athens State for all of our collaborative tools - they add a
> 'human element' to our distance experience."

Wikis for Project Management and Electronic Portfolios

Project management is another interactive process which is accommodated through the use of

wiki technology at Athens State University. Student groups are able to create project plans and

wiki page content by collaboratively adding and editing project documents. Students work

together to write, prepare presentations, and create wiki pages which organize this content. The

resulting wiki is an electronic portfolio (e-portfolio) which represents all of the work products

created by student collaboration on the group project. This project e-portfolio can be saved and

shared with other students, instructors, and potential employers during the job search process. It

is an outstanding representation of each student's ability to work collaboratively in teams,

complete cooperative work products, and use sophisticated new technology like wikis and

audio/text messaging tools. Lynn Frank, another Athens State student remarked,

> "I hear a lot of discussion in the community about the effectiveness of
> distance learning classes and can a person truly 'earn' a degree by
> participating in them versus the traditional classroom. The answer I always
> give is 'yes'. The technology that we have today at Athens State, if used
> properly, is not only a way for students and instructors to collaborate, but, it
> can also hold the student to a higher level of accountability than the old

distance learning classes, and in some cases to a higher level than the traditional classroom. The technology that is available at Athens State gives the instructor a window in which to 'see' each student and effectively instruct them as individuals. It will be exciting to see where technology will take us next!"

Wikis for Course-Specific Bibliographies

In addition to interacting with learning groups, collaborating on team projects, and producing e-portfolios, students at Athens State University have interacted using wiki tools to create a collaborative, course-specific bibliography. Students in an introductory management information systems (MIS) course worked together to create a series of interconnected wiki pages that allowed anyone in the class to easily create, edit, and link web pages of key MIS terms. The end result was an MIS bibliography wiki that included over 500 unique terms and associated resources. This exercise introduced students to wiki technology and how it is used by businesses to provide affordable and effective repositories of information that support collaboration between workers. It also resulted in the creation of a student-generated research resource to be used by students in future MIS classes.

Wikis for Training Repositories and Technology Knowledgebases

While many other uses are possible, one additional application of wikis at Athens State University involves the use of wikis to create knowledge bases of shared technology information. The first example is a wiki website that was created to serve as a repository of training materials related to Livetext, an e-portfolio software tool. To assist in training, a wiki, http://wendycowanlivetexttraining.pbwiki.com/FrontPage, was created to house a series of video tutorials for students and faculty members on how to use LiveText. As part of the wiki, there are "how to" guides and video tutorials that provide step-by-step instructions for students to create

an e-portfolio and submit assignments. For faculty, the wiki site features instructional materials about how to assess e-portfolios and assignments according to standardized rubric. This wiki website has assisted faculty and students at colleges and universities outside of Athens State, and is open for enhancement by any who wish to collaborate to improve the wiki site.

Finally, as a last example of the use of wikis as a knowledgebase, a group of Information Systems Management students created a wiki website which provides an orientation for distance students new to Athens State University. Located at http://studentknowledge.pbwiki.com, new and current students have found this a useful resource for getting help regarding the use of the many, varied technologies employed by the University to support distance education.

Wiki Tools

Two different wiki tools have been used by faculty and student groups to create these wikis. First, Learning Objects provides a wiki tool which is integrated into Blackboard, the course management system used by Athens State University. The primary benefit of this tool is its integration with Blackboard and the grade book feature. It is simple for students to use and for faculty to assess. There are, however, limitations with regard to adding creative elements such as embedded video and applying sophisticated design templates. An additional weakness is the temporary nature of wikis created with Learning Objects. Because they reside within a Blackboard course container, once the term is over and the course completed, the wiki is no longer available for students to view, update, or share. This proves to be a huge disadvantage for students who wish to make their wiki a part of their electronic portfolio for potential employers to view. These constraints make the wiki tool from Learning Objects less appealing than others such as Pbwiki.

Pbwiki is the tool preferred by many students and faculty at Athens State University. Students enjoy using Pbwiki because it is free, flexible, customizable, and easy to use. In addition, wiki sites created with Pbwiki are permanent and can be added to, updated, and shared, even after a course has ended or a student graduates. Therefore, Pbwiki is the ideal solution for students who wish to create an electronic portfolio of their college coursework and make it available to firms during their job search. Comparisons of the many wiki tools available can be found at http://wikimatrix.com.

VIRTUAL CLASSROOMS AT ATHENS STATE UNIVERSITY

Many faculty members at Athens State University have been teaching distance classes for 10 years or longer. Yet, until the availability of technology for synchronous virtual classes, the consensus was that not all subjects lend themselves to the online format. Depending on the nature of the subject being taught, several professors elected to use the synchronous chat format to explain important concepts regarding the theory in their particular discipline. These synchronous chats were supplemented with asynchronous recorded lectures and online discussion questions.

Still, however, many teachers expressed disappointment with asynchronous forms of online teaching because they felt that the material did not lend itself to this format. They believe that in most subjects there are too many new concepts in each chapter which require explanation to try to cover with asynchronous lectures and discussion questions. Likewise, students do not appear to fully benefit from the discussion questions and many don't watch the asynchronous lectures. However, students have enjoyed the use of synchronous chat sessions and claim that it

helps them learn the material. Typically, these chat sessions are archived for students who

cannot attend the synchronous chat session.

Wimba for Live, Virtual Classes, Discussions and Chat

Until the availability of Wimba in Fall of 2008, most live synchronous chat sessions were

conducted in the "text" mode with teachers typing entries into the chat sessions and students

responding by typing questions into a textbox. This was very time consuming and not a very

good use of the valuable time allotted to the chat session. However, beginning Fall 2008, many

faculty members started using Wimba as a live, synchronous audio-enhanced chat tool. They are

delighted with the results. The ability to pre-load lecture material into Wimba in PowerPoint

format, using either the "content" or "e-board" format, greatly speeds up the process of teaching

the material. Students have the ability to "raise their hand" when they want to ask a question,

just like in a traditional classroom setting.

Wimba as an Electronic Whiteboard and Tool for Guest Lecturers

Professors particularly like the "e-board" format where they can draw on a slide, just like

a white board in the physical classroom, and highlight the important aspects of a graph or table,

at the same time as explaining the concepts. Again, these virtual classes are recorded so students

can access them later if they missed the live classroom session. Also, these archived classroom

sessions can be made available to "guests" when the virtual classroom is set up to invite

individuals who are not enrolled in the class. This feature offers another benefit as well. Not

only can guests view archived classes, but Wimba facilitates the use of guest lecturers in a

course.

Students really like and appreciate the use of Wimba and believe that it overcomes the

sense of isolation that many distance students feel. One student in an economics class stated,

"I wanted to express to you my satisfaction with Wimba. It is a very positive complement to on-line courses. It allows a 'classroom' feel to the course by allowing real-time interaction between students and the professor. I have taken many on-line courses and this is, by far, much better than the standard 'Discussion Board' format and in many ways more 'user friendly.' I hope that Athens considers using it in more on-line courses."

Students also comment that it speeds up the presentation and makes it clearer. They can ask questions as the material is being discussed which brings the DL classroom as close to a live environment as possible. Other testimonials from a number of students have reinforced this view. The following student tribute best sums up the use of Wimba synchronous virtual classroom technology,

"I am writing to discuss the Wimba sessions for this class. I think this a great addition to the class. It is easily a leap forward over a traditional 'chat' session for an online course. I have taken classroom and online classes before and I can say that a Wimba-based class is already my favorite format. It combines the positive aspects of both types of classes. It is convenient, allows me to take classes at Athens State, although I live in Alabaster, and permits me to interact with my classmates and you, my instructor. Additionally, it is almost as 'visual' as a class in a physical classroom. Through the use of PowerPoint, combined with Wimba's ability to speak, be heard, and listen, honestly, I did not feel like I was missing out by not being in a class on campus. Through Wimba, I am re-energized about continuing my education at Athens State, especially if there are enough forward-thinking instructors and administrators willing to embrace this next leap forward in educational technology. Thank you for your time and I look forward to continuing our discussion next week in Wimba!"

Other Uses of Wimba

Being able to display PowerPoint slides, draw and annotate using the e-board, and utilize the audio-enhanced chat feature make Wimba a very powerful and valuable teaching tool in the online learning environment. Other uses of Wimba at Athens State include: orientations for distance courses, virtual study groups, team project collaborations, and student presentations.

Teachers do, however, recommend a phased approach to using Wimba as a virtual live classroom tool. There are many features of Wimba that have not been discussed here, yet offer powerful additions to online learning. However, initially limiting the features used in a virtual class to audio chat, e-board, and PowerPoint prevents students and faculty from being overwhelmed with the technology and distracted from the basic benefit of Wimba -- having a "quasi-live" classroom in a DL environment.

CONCLUSION

When striving to create effective collaboration in online learning, educators must employ new teaching approaches and educational technologies. Understandably, selecting among the many pedagogical approaches and technologies can be a confusing maze. However, these elements must be incorporated to enhance student learning in internet courses. A review of the literature has shown that the more interaction faculty members and students have with one another, the more meaningful their learning experience can be. While the experiences of faculty at Athens State University are limited, faculty and students have met with great success using wikis to support group project work, produce electronic portfolios, develop a course bibliography, and create repositories of instructions for use of instructional technologies. In addition, synchronous virtual classrooms have been extremely helpful when utilized for class lectures, e-board annotations, and virtual discussions and chats. Course orientations, virtual study groups, student presentations, and exam reviews are other uses of the virtual classroom technology that can be used to enhance online teaching and learning.

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