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Introducing the Video Web-board as a Technologic Enhancement to Your Honors Course

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Introducing the Video Web-board as a Technologic Enhancement to Your Honors Course

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INTRODUCTION

Most instructors of honors courses strive to engage students in interactive, interdisciplinary and experiential learning. Small class sizes are almost universal, and discussion format is common. While no one learning style is common to all honors students, academically talented students tend to be intuitive learners; that is, they are abstract and insightful thinkers (Clark, 2000). They look for patterns and new relationships. Technology, such as multimedia and Internet resources, has been recommended as a pedagogical tool to enhance honors and non-honors teaching (Cooley & Johnston, 2001; Hagner & Barone, 2002; Lea, Clatyon, Draude, & Barlow, 2001; King, 1997), and here we describe ways to incorporate technology into the intuitive process.

There are several ways technology can contribute to learning. In general, incorporating websites and Internet research assignments provides a means to address multiple learning styles through myriad venues of presenting course content (Clark & Crockett, 2000; Grasha & Yangarber-Hicks, 2000; Hung, 2001). Course websites and Internet-based assignments allow students access to information that can be read, seen and heard, printed, and visited more than one time, for any length of time, through the use of text, digitized images, sound clips, digitized audio and or video clips, etc. Although professors may present course material in a variety of formats in class, such as lecture, discussion, overhead transparencies, slides, video and audio tapes and so forth, the benefit of course materials and assignments posted and/or processed online is that students can review the content as many times as they like for any length of time beyond the one-time offering in a classroom setting. For students who take a bit longer to process information, or who process information in unique ways, course materials posted online and Internet-based assignments are indeed an added bonus.

Technology in an honors class is meant to *add to* the experience of the class as opposed to *replacing* something. We believe teaching should drive the technology

rather than having technology drive the teaching, a point supported by Pyle and Dziuban (2001). Instructional technology was not incorporated into our class simply because it was fancy or novel; we strongly believed it would engage students and encourage more in-depth reflections on course content. In our case, the video web-board was useful because it employs both visual and audio components and is used outside of class time. Thus, we capitalized on assignments that allowed the students *time* to think about opinions, reflect on impressions and convey their ideas. Students created their own video clips and reviewed those of other students. A critical feature was that the video clips could be viewed and reviewed. Whereas in a class discussion each person may not have a chance to comment on the topic, the use of technology allows each person the chance to participate after reflection. Further, each person has a chance to review what others in the group report; this allows more opportunity for reflection on individual comments than is possible in a more traditional seminar style course.

The specific content of the seminar was conducive to video web-board technology. We used the video web-board in an interdisciplinary sophomore level honors seminar entitled Anthropology of Human Sexuality, team-taught by a physical anthropologist (AMA) and an experimental psychologist (KEB). Because the subject matter of the class related to such an emotionally charged topic and required students to integrate several different perspectives and readings each week, we developed a way for students to "interact" with each other outside class, to hear opinions and conclusions about discussion topics, and summarize them. Topics in the seminar included evolutionary perspectives on mate choice, parenting, gender roles, and sexual orientation. Cultural and species similarities and differences were discussed. In honors and non-honors sections of Human Sexuality (a psychology course taught by KEB) and Physical Anthropology (an anthropology course taught by AMA), it is often the case that some students are reluctant to share their questions, comments and opinions about evolutionary theory and human sexuality topics in class. Even with a small seminar, we expected that there would be differing opinions and differing levels of comfort expressing questions and comments. Using the video web-board was a way to give all students equal voices, especially when topics were controversial. An added feature was the heavy use of the web to give assignments, review questions, and suggest additional readings (i.e., through a course website with an online syllabus). Appropriate Internet links to informational sites were provided via the class website, and students were urged to search related sites. As the Internet has been touted as an important, but sometimes unreliable, source of information about sexuality for teens and adults (e.g., Flowers-Coulson, Kushner, & Bankowski, 2000), we included discussion of ways to assess the validity of Internet sites.

METHOD

SAMPLE

We present features and characteristics of the novel video web-board technology as a pedagogical aid for honors courses based on our experiences in and

evaluation of a team-taught honors seminar: Anthropology of Human Sexuality. Ten sophomores were enrolled in this honors seminar elective; nine were female, one was male. Student majors were in the sciences, social sciences, arts and humanities. While we recognize the sample size is small, we believe the student feedback was generally reflective of what a majority of students might experience. Moreover, our methods of teaching the course, and the way we designed and evaluated the video web-board assignments were no different than if the class size had been larger. Indeed, many of the points we discuss later would most likely be reinforced by a larger sample size.

VIDEO WEB-BOARD ASSIGNMENTS: DESCRIPTION AND ASSESSMENT

Four video web-board projects were assigned over the course of a 17-week semester. One assignment was due roughly every three to four weeks. Each assignment was composed of two parts: (1) responses to an issue or question related to class topics, articulated in video format, and (2) written summaries discussing key points of each student's response. More specifically, each video web-board assignment entailed our proposing in class a discussion question based on recent topics presented in class, where one week's time was allotted for students to research information to be used in the response to the question posed (each student responded to the same question) and articulate their responses through a video recording. This was followed by one weeks' time to review other students' responses and submit a written summary of each person's key points through a discussion of similarities and differences. Thus, students had two week's time to complete two parts to each video web-board assignment.

A two-minute time limit was set for each student video web-board response, and each written summary was one to two pages in length. Students received separate written instructions for each of the four video web-board assignments, thoroughly explaining requirements for each part of the assignment, due dates, and examples of items to reflect upon. There was little to no student-professor confusion or misunderstanding concerning what was required and or how to go about completing the assignment.

Each video web-board assignment was scored according to both the student's development of the video clip and the written summaries. Assessment criteria for the video clips included how well the student addressed the question posed and adherence to the two-minute time limit. Grading was fairly lenient for the video clips as we did not want to imply a "performance" aspect to this part of the assignment. We were aware of the sensitive nature of the subject matter (human sexuality) and focused on recognizing effort rather than an abstract level of perfection in delivery *per se*. We assessed written summaries more stringently than the video clips, considering how well the student expressed key points made by other students, how well similarities and differences in responses were compared, whether or not the student included every other student's response (i.e., did the student view all video clips and understand the major theme of each one?), and how well the one- to two-page summary was written overall in terms of flow, continuity, and grammar.

Introducing the Video Web-board

Four video web-board assignments accounted for 30% of the course grade. In designing a course using video web-board assignments, it is important to consider the workload for the overall course. The honors seminar we taught required, in addition to the above mentioned video web-board assignments, weekly written summaries of readings for class discussions (20% of the total grade), a mid-term essay examination (25%), and a final essay examination (25%). Thus, the four video web-board assignments together were worth more points than each of the other components of the course grade. We believe the strong effort and good quality work on the video web-board assignments resulted from this higher assigned point value, thus encouraging students to perceive the assignments as important and meaningful for understanding how both to express their own ideas and to observe and learn from others' ideas.

Technical Assistance

We were fortunate to have the assistance of a campus computing consultant from our Center for Teaching Excellence (CTE) at the University of North Carolina at Wilmington (UNCW). Students scheduled video recording appointments with the computing consultant, who then digitized the videos and posted them to our class website. It is noteworthy that, while a technical assistant was indeed helpful, it was not necessary. New low-cost computer hardware and software packages on the market today make the creation of individual video recordings quite feasible for college students and professors.

Evaluating the Efficacy of the Video Web-board as a Technologic Teaching Tool

At the end of the semester, we conducted a brief evaluation of student perceptions of the effectiveness and likeability of the video web-board technology. All ten students completed subjective evaluation forms anonymously. The forms were composed of six questions, and a section at the end where students could add any extra comments. The six questions were as follows:

1. Did you find creating your own video clip an interesting addition to classroom discussions? Why/why not?
2. Did you like the video web-board? Why/why not?
3. Do you feel that viewing other students' video clips helped you see other points of view whereas you might not have during classroom discussions? Why/why not?
4. How would you assess the workload you put into the video web-board: light, moderate, heavy?
5. What aspect(s) of the video web-boards did you like the most and why?
6. What aspect(s) of the video web-boards did you like least and why?

RESULTS

STUDENTS' EVALUATION

Seven of the ten (70%) students agreed that the vide web-board assignments were "interesting." Student responses to question 1 included comments such as:

- "Yes, I enjoyed the different format and new form of expression"
- "Yes, it allowed me to see my reactions that I was not aware of, like gestures that demonstrated nervousness and uncomfortability [sic] discomfort"
- "I thought that it was an interesting feature because it was an interesting integration of technology in the class that I haven't seen done before."

Similarly, only two students (20%) did not like the video web-board technology while most liked the assignments. Comments to question 2 included:

- "Yes—nice change of pace"
- "Not really; I do not like being videoed and therefore I did not feel as free to discuss my opinions ad I did in class"
- "I did like the video web-boards…it gave me a chance to express myself"
- "Yes I thought it was interesting and an enjoyable opportunity"
- "Not personally. I don't enjoy being videotaped alone. It was very discomforting"
- "Yes it is part of cutting edge technology but with a more personal note, more classes should incorporate it into the curriculum"

Only half of the students (5 of 10, 50%) deemed the video web-board technology and assignments as especially helpful for seeing the viewpoints of others (question 3). Thus, while some students thought the video web-board technology enabled them to better understand other student opinions on class subject matter, other students thought the video web-board assignments made no difference. Comments included:

- "Yes, I could see their facial expressions and hear their tone of voice <u>after</u> they had time to think about their responses"
- "In a way—I think that most of the points brought up in class were repeated a lot with the videos, but there were a few times when other points of view were introduced"
- Yes, because not everyone always expressed their opinions in our (class) discussions"
- "Not really. People basically repeated what had been said in class or in the readings"
- "Yeah—because it allowed me to hear others' opinions and relate them to my own"

Students also evaluated the "workload" of the video web-board assignments in question 4. While eight of the ten students rated the workload as moderate to heavy, this was not necessarily perceived as a negative quality, as seen in the comments:

- "Moderate. Video web-boards required of me to not only give my opinion, but also to support it with examples"

- "Heavy—considering the time it takes to get there, rehearse to fit 2 minutes and paper and watching others"
- "Heavy—the heaviest part was trying to find time in my schedule to come out here and tape it—then the next week watch all of them and write a summary in addition to the readings and paper for that"
- "Heavy. I worked really hard to make the video concise and accurately corresponding to what I thought"

Comments for questions 5 and 6, addressing what aspects of the video web-board concept or assignments were liked most and least, respectively, are presented in the following table:

VIDEO WEB-BOARD STUDENT ASSESSMENT: QUALITATIVE FEEDBACK FROM QUESTIONS 5 AND 6 ON SPECIFIC ASPECTS LIKED AND DISLIKED

Aspects liked	Number mentioning aspect*
Novelty, "cool" factor	3
Seeing what others had to say, even if in disagreement	2
Chance to reflect on topics, beyond the classroom	1
Chance to reflect on topics in a different way than in the classroom	1
Provoked a different type of thought from standard in-class questions	1
Performance—fun	1
Liked viewing facial expressions, people talking	1
Privacy, no pressure from others in a classroom	1
Aspects disliked	
Having to write summaries in addition to watching the videos	3
Workload, assignment plus regular outside work was heavy	2
Too many, or assignments too close together	1
2-minute time limit	1
Some questions were difficult, but not too bad	1
Questions were not open ended	1

* Note that total number of aspects liked is greater than ten because some students mentioned more than one aspect.

The most commonly liked aspects of the video web-board technology and assignments (question 5) were the novelty or "cool factor" and seeing what other student opinions were. The least commonly liked aspects of the video web-board technology and assignments (question 6) were having the video web-board assignment due along with regular outside work (outside readings and weekly summaries of those readings) and having to write summaries of the video clips in addition to having watched the videos. While we are somewhat sympathetic to the workload issue, we continue to support the summary-writing component of the video web-board to ensure that students do watch all other student videos and so we can see what they have learned from seeing and listening to other people's points of view. Ironically, students commented on liking the opportunity to see and hear what their peers'

opinions or views were, but did not like writing about them. We strongly feel that restating what another individual said is a useful communication tool. Restating or summarizing in writing what another individual's opinions are is an effective means of checking one's accuracy of comprehension and level of understanding.

PROFESSORS' EVALUATION

In assessing the efficacy of the video web-board technology, it is important to note what we observed the students to have learned. Overall, we believe students learned the value of spending time reflecting on others' opinions regarding various sensitive topics. Moreover, students learned how to better listen to other people's opinions and to consider how to organize and compare the range of responses offered for a discussion question since the video web-board assignments required both the expression of ideas and the written summarizing of all ideas. Indeed, one of the major criticisms of college teaching today, in a high-tech world, is that "Students are losing the ability to listen, especially mindfully, and with pleasure" (O'Hara, 2002). In addressing this criticism, the video web-board is one use of technology *enabling and requiring* strong listening skills, particularly pertinent in a seminar-style course.

We support the continued use of the video web-board concept as a technologic aid facilitating better communication and understanding, and as an effective supplement to classroom discussion. We do not intend for video web-board assignments to be interpreted as a replacement for valuable in-class discussions. Rather, we see the video web-board tool as an aid to students to improve their awareness of themselves when speaking and reflecting upon an issue as well as improve their understanding of and appreciation for differing points of view on various topics. Further, we see the video web-board concept as a meaningful technologic tool for instructors to use to gain insights into what their learners are thinking and feeling about any given subject matter in any given course.

Honors students are often encouraged to study a variety of subjects more in-depth or with a broader scope. Indeed, instructors of honors courses often design in-class discussions or lectures with this idea in mind. Video web-board assignments can facilitate a student in demonstrating a more in-depth grasp of knowledge or a wider breadth of understanding. While students may certainly demonstrate their knowledge and understanding through in-class discussions, not all classes may be small enough in size to allow time for each student to share his or her thoughts during the class period. Likewise, a discussion period may not be feasible for every honors course due to the subject matter or format of the course (i.e., lecture or laboratory).

Moreover, given the myriad learning styles, not all students are able or willing to immediately pose an answer during a class period, particularly if the subject matter is sensitive or controversial. While instructors can offer questions in advance to be answered in an upcoming class, there will most likely be a few students who still feel pressured when having to speak in front of others. The video web-board exercise, while not comfortable for everyone (as indicated by some comments shared earlier), is a good first step toward a student's seeing him or herself in action and enables a critical evaluation of his or her style of conveying ideas when speaking—body

language, facial expression, inflection, intonation, rhythm of speech, and so forth. The opportunity for students to learn about others' opinions, and perhaps view and review others' video clips as well as their own, can be an insightful supplement to any honors course, or any university course for that matter. The opportunity for instructors to hear from each student, orally and visually, is also an advantage. Video clips are unique in that not only can they be viewed and heard, they can be re-viewed and re-heard as many times as one desires.

Video web-board assignments do not have to be used solely as a discussion tool. Other applications include an assignment at the beginning of the semester for students to introduce themselves, such that all students can get acquainted without having to feel pressured on a first day of class, or if class time is not available for each student to make a thorough introduction. Another application of the video web-board concept is for class projects. Pairs or groups of students may work together on a video web-board assignment. In-class presentations or viewings of each group's work can add a novel dimension to a course. Instructors may choose to employ video web-board technology in collaboration with other instructors and classes—either on the same campus or with another campus across the country and even internationally.

DISCUSSION AND CONCLUSIONS

EFFICACY

The success of video web-board technology as an aid to classroom discourse was evident in three areas: First, the technology enabled students to hear one another's thoughts and opinions completely, uninterrupted, and in a low-pressure situation. To this end, student responses were generally quite positive. From the instructors' point of view, the video web-board assignments facilitated student learning in three major ways: students were required to (1) think through a particular question or issue beyond the classroom setting; (2) carefully articulate their opinions; and (3) assess peer opinions. While a few students complained about having to listen to others' comments, the fact that they were required to do so ensured that everyone was heard, and that all ideas were appreciated.

Second, the video web-board assignments provided us with insights into each student's grasp of course content. Knowing what students are thinking and feeling about the subject matter they are studying allows instructors to augment the course, lectures, discussions, and so forth during the semester to best meet pedagogical aims and student interest. In the absence of the evaluation component of video web-board assignments (i.e., the written summaries), it would have been difficult for us to note whether students were paying sufficient attention to their peers' comments during class. Sharing and understanding other ideas and not just one's own is vital to seminar pedagogy. To this end, the video web-board was deemed effective.

Third, students gained some experience with computer technology in a novel learning situation. Although students were not required to adopt video-recording skills, or editing, digitizing, and streaming capabilities, the video web-board exercises exposed honors students to alternate ways of using computer technology to learn

about others as well as oneself. Seeing and hearing oneself in a video provided the opportunity for self-analysis. For a student observing his or her speech cadence, vocabulary, body language and facial expressions, the self-analysis could be seen as a useful tool for self-improvement, assisting students in developing professional mannerisms, regardless of the subject matter of the course. More technically, students who were otherwise quite knowledgeable about Internet surfing, electronic mail, and word-processing were exposed to a unique, creative application of computer technology in learning.

BENEFIT TO THE STUDENTS

The aim of the video web-board assignments was to encourage student interest, raise awareness of the importance of hearing others' opinions, and help students learn to reflect more deeply on sensitive course topics. Students did not appear inhibited by the video web-board; rather, they seemed quite willing to convey ideas on highly sensitive topics. While we had no way of knowing if the video web-board responses were more revealing than what in-class discussion responses alone would demonstrate, students were at least given the opportunity beyond classroom time constraints to offer opinions on sensitive topics through the use of the video web-board. Further, while we had no way of measuring whether or not students had a *better* grasp of course material, we know from the oral presentations (i.e., the video clips) and the written summaries that students (1) took time to think about discussion questions and answer them, whereas not all students may proffer an opinion during classroom discussions or recall what other students said in class, (2) listened to each student's response since each student was required to write a summary of all video web-board responses where comparisons between similar and different responses needed to be considered.

RECOMMENDATIONS

Based on our experiences with the video web-board concept, it seems that few assignments with a generous time limit for preparation is ideal. Four assignments over one 17-week semester did not appear to burden the majority of students. Two or three assignments are also adequate; the number of assignments may vary by course content, instructor objectives, class size, and other course assignments such as readings, papers, examinations, and so forth. A two-minute time limit in our experience seemed to allow for either more detailed responses or responses that covered greater breadth. Only one student out of ten seemed constrained by the two-minute time limit. Similar to the ideal number of video web-board assignments, the time limit should correlate with the complexity of the question to be addressed as well as how much of the course grade the assignment is worth. We were careful to avoid evaluating students on their "performance"; rather, we emphasized the relevant content, accuracy, and thoroughness of their responses. The written summaries were necessary to ensure that students watched the video clips of their peers to learn what others were thinking and saying. Without the written summary portion, we would have not been able to gain insights into what student perceptions of each other were.

Student perceptions of other student thoughts and ideas were a useful aid in monitoring student progress and our own teaching effectiveness.

When planning the video web-board assignment due dates, the instructor must consider the time it takes to prepare a question that not only directs students to particular learning objectives, but also remains "open" enough to encourage multiple student perspectives upon feedback. The instructor must also be aware of student preparation times. Students require time to ponder the assignment question, research the question, compile information, compose a response, and finally record the response. Lastly, students will need time to evaluate peers' responses and write up a summary of key points. The majority of students are likely to find two to four assignments challenging yet not overwhelming, exciting without becoming monotonous, whereas too many assignments are likely to push the limit of novelty, resulting in lower quality work.

MINIMAL TECHNOLOGIC REQUIREMENTS

Funding for the development, integration, and execution of the video web-board technology in our honors course came from a grant from the Center for Teaching Excellence at UNCW, and we were fortunate to have staff assistance from CTE. A computing consultant scheduled appointments with students, videotaped student responses, digitized the videos and posted them to our class website. While having a staff person can greatly assist with the technical aspects of video web-board development, this is by no means a necessity. Students can create their own videos and send them to their instructor as an electronic mail attachment; the instructor can easily post the video files to a university media server, where they can be accessed for viewing via hyperlinks from a class website. Any student proficient in basic computer skills and any instructor proficient with basic HTML and web-design can employ the video web-board technology without a great deal of computer instruction or experience.

A webcam and the free RealVideo recorder package is recommended (information is available online, by using "webcam" and "RealVideo" as keywords in Internet searches) . The webcam costs about $60.00, and students can either purchase a webcam for their own computers, or a university honors program may be able to fund some webcams for on-campus use (e.g., in computer labs or residence halls). The $60.00 price entry point is more feasible than the alternative, explained below. One drawback to the webcam and RealVideo recorder software is the inability to edit a video clip once it is recorded. However, one can simply re-record. Given that video web-board assignment lengths will probably not be longer than two to five minutes, this should not pose a significant problem. The webcam and RealVideo availability, ease of use, and affordability make this the top choice for instructors planning video web-board assignments.

The second hardware-software option for developing video web-board assignments would be digital video (DV) editing. DV editing has a price entry point of around $99.00 for a firewire card bundled with editing software. For better quality

software and more powerful editing capacities, the cost could go up to around $1000. A digital video camera costs a minimum of $500 at present. DV editing does allow for the highest quality video, but the necessary skills to use it and the required equipment would be prohibitive to the majority of students and instructors.

CONCLUDING REMARKS

With a feasible low-cost, minimal effort video-recording setup, such as the webcam and RealVideo package explained above, and with some creativity and enthusiasm, video web-board technology can be used with ease while greatly enhancing an honors course, or any course. Video web-board technology allows for asynchronous communication, extended reflections upon course subject matter outside the classroom, and an opportunity for students and instructors to gain insights into multiple points of view. These assets are especially useful in courses where discussion, debate, and/or sensitive issues are addressed.

Future studies could explore comparisons and contrasts between seminar and lecture style courses taught with and without the video web-board concept. The purpose of this paper is to present preliminary findings and observations of the first known use of the innovative video web-board concept in teaching and learning. Given that research on the use of instructional technology in teaching addresses how multimedia can integrate various learning styles (Hung, 2001) and enhance student learning (King, 1997), and that the importance of investigating the effectiveness of technology in teaching has been emphasized (Grasha et al., 2000; Harris, 2002; Lea et al., 2001), further studies of the benefits and limitations of specific technologic applications to teaching should be examined.

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