## DISTANCE LEARNING VIA WEBCT

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## ABSTRACT

This paper shares our experience with teaching a course that had 100% electronic media based instructions. A secured Web site was created under Marshall University Web home page where all the study material was kept for this introductory class on Business Statistics (Management 218-e). This facilitated the student to take the entire class from a remote location at their own schedule with just a computer with the Internet access. The lessons learned from this case of teaching via electronic media were multifold. We learned that the ecourse required very different set of resources for both the instructor and the students in terms of skills and efforts than what we had expected or were accustomed to. We also found that the lack of the classroom environment requires an added control to prevent the student dishonesty. Lastly, trying to keep the e-course material on the Web independent of any particular textbook was challenging at various fronts.

## PAPER SUMMARY

The subject of instruction via electronic media has been discussed much in the recent time. The scope of the implementation varies from one institution to the next and from one course to another. Some education institutions have experimented with use of e-media in communication with their remote students while other institutions tried putting material on the Web pages for the students just as an additional study aid. At Marshall University, I have had an opportunity to teach a Web based course where all the study material for the student was put on our university's Web site. Secure access system was created for the registered students and the instructor who had the administrative privileges. The student could take the entire course without having to come to the university for a single day. The teaching material on Web for this introductory business statistic class included narratives, illustrative graphs, the programs for the student to perform on-line hands-on experiments with numbers, and the list of assignments which the student can complete and mail via regular mail at their own schedule before the end of the semester.

Although a textbook was listed in the on-line syllabus, the actual course material on the Web was designed to be "textbook independent". The startup pages on the Web included short introduction on how to navigate through the course material and the syllabus. To take the examination, the student were asked to select their own proctor and both of them needed to complete the attestation forms. Once the student completed the exams within the specified time, the proctor had to mail the exams via regular mail to the instructor.

It was an interesting learning experience in many different aspects. We will be discussing the following in our paper:

- (1) **Student self-motivation**: There was an extremely high drop out rate compared to any regular course. The lack of student-instructor face-to-face meetings might have added these requirements to the list of necessary student qualifications: high self-motivation and maturity. This hypothesis might also be supported by the fact the most students waited to send their first of 15 assignments about 1/3 way through the semester in addition to waiting half way through the semester before actually taking the first of three exams. Self-discipline was the price the student had to pay for the freedom they enjoyed of working at their own schedule.
- (2) Instructor's work load: Although the person-toperson teaching efforts were almost none (except for the rare occasions of helping the student on the phone), the course required much effort in areas where it was not expected as much at first: communicating via e-mail, interacting with the proctor selected by the student, and updating and administering the Web site. In addition, since the course was designed to be "textbook independent" it was time consuming to familiarize with all the material that was on the Web before helping the students or grading their mailed-in assignments. Preparing the exams was a challenge for the instructor since the study material on the Web was not covered fully in the recommended textbook and vice-versa. It required much effort to find the topics

which were covered in the both without leaving the questions on important topics out.

- (3) Student dishonesty: There were three cases which alarmed us of the possible student dishonesty conducted while taking or after the exam. The exams were supposed to be taken in the supervision of an independent proctor selected by the student such as his or her employer. In the first case, we later found that the proctor simply gave the test back to the student after proctoring to mail to the instructor! In the second case, we noticed a figure a student used from a Standard Normal Curve Area Table that was not given in the question paper. The only possible resources for this number were either from the text book or from the Web page both of which were not allowed during the exam. The third case was about the validity of the proctor the student had selected. We did not receive the agreement from the proctor on a standard company letterhead. Trying to confirm the required attestation also left us with some doubt as to the status of the relationship between the student and the proctor.
- (4) Steep learning curve for both the student and the instructor: Since neither the instructor nor the student are familiar with the new emergence of electronic courses, the new ways of doing things were challenging at the best and confusing at the worst. There were some students from whom we repeatedly received the request of assistance with how to use the electronic media. One student was completely confused as to what his role was ("Just look and the Web pages, and then what?") and what the instructor's role was in this new world of the electronic class. Even after writing three pieces of email to this student, he still remained unsure at large about what role the Web pages played for this ecourse. Another student thought that she had an entire year to finish the course as opposed to a semester for a regular course. The course required the instructor to be proficient in using e-mail features such as personalized group e-mail, updating and navigating through the Web pages, administrating the user access to the Web site, etc.
- (5) Textbook- e-material discrepancy: To make the course flexible, the study material on the Web site was designed to be textbook independent. However, a textbook had to be listed for the student to do the in-depth study. This created a challenge to keep both these in synchronization. This meant that

either the e-material (the topics discussed on the site) needed to be constantly updated depending on the textbook selected or additional books had to be suggested as the text or for the reference.

## REFERENCES

Hayes, J. 2002. "Energizing Software Engineering Education through Real-World Projects as Experimental Studies." *15th Conference on Software Engineering Education and Training*, Cincinnati, Ohio. February 25-26.

Hayes, J. 2001. "Affects on Maintenance of Web Software Applications." *Proceedings of the International Conference on Software & Systems Engineering and their Applications (ICSSEA)*, Paris, France, December 2001.