Ethical and Honesty Issues of Web-Based On-Line Courses Compared with Traditional Classroom Courses

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A number of Manufacturing Engineering Technology classes have been offered both on-line and, in other different years, as traditional face-to-face classroom presentations. Thus we had the opportunity to compare on-line and web-based courses. This paper discusses how issues of student honesty and copyright laws proved to be more problematic for web-enhanced and on-line classes. We found that material placed on-line requires significantly more time to apply and re-apply to receive copyright permission, while most printed materials, DVD's, and samples can be easily presented in face-to-face lectures without copyright problems. Exam and homework security was an issue.

Introduction

A number of Manufacturing Engineering Technology classes have been converted from traditional face-to-face classes to on-line web-based delivery, and later converted back to traditional face-to-face classroom presentations[1]. This gave us the opportunity to compare different features and advantages/disadvantages of on-line and web-based courses. Copyright, ethical, honesty, and security issues proved to be major considerations which consumed additional time and money when offering courses on-line[2].

There are a number of additional time issues with web-based courses, which gave less remaining time to handle copyright, ethical, honesty, and security issues. Filming, studio time, editing and submission for uploading to our web class-management system (D2L) were the most obvious issues which consumed instructors' time[2]. Quality of videos is a major issue in web-based instruction, so each lesson must be reviewed prior to release, if possible[3]. There sometimes were problems opening student submissions, and each submission took time to open, grade, and make available to students for review. If students scanned their submissions, the mailbox capacity was sometimes exceeded, and cleaning the memory took quite a bit of time. Yet, somehow we needed to find the time to handle security and copyright problems, along with handling ethical and student honesty problems.

Protecting the Privacy and Security of Student Work

Privacy and security of student work was an issue. Because University privacy rules (along with common decency) prohibit broadcasting private e-mail submissions, corrections, reprimands, and questions to all students in a class, without the opportunity for verbal classroom interaction we sometimes would answer the same questions multiple times using both telephone and e-mail. This meant that we often answered all inquiries individually. Care was required, because an e-mail sent can be forwarded to anyone by the recipient, including other students doing the same assignments. Care was (and always is) required to make sure that only the intended recipient receives a private e-mail. It is far too easy to accidently reply to all.

Copyrights and Intellectual Property

Protecting and complying with copyrights and intellectual property rights posed a major problem. Copyrighted materials require permission prior to putting it on-line, and some publishers charge a license fee. Many things are covered by copyrights. Circular 21 of the United States Copyright Office states,

> "What is copyright? Copyright is a form of protection grounded in the U.S. Constitution and granted by law for original works of authorship fixed in a tangible medium of expression. Copyright covers both published and unpublished works. What does copyright protect? Copyright, a form of intellectual property law, protects original works of authorship including literary, dramatic, musical, and artistic works, such as poetry, novels, movies, songs, computer software, and architecture. Copyright does not protect facts, ideas, systems, or methods of operation, although it may protect the way these things are expressed."[2]

An instructor cannot depend on the 'fair use' doctrine to justify putting copyrighted materials on-line. Circular 21 of the United States Copyright Office warns,

> "The safest course is always to get permission from the copyright owner before using copyrighted material. The Copyright Office cannot give this permission. When it is impracticable to obtain permission, use of copyrighted material should be avoided unless the doctrine of 'fair use' would clearly apply to the situation. The Copyright Office can neither determine if a certain use may be considered 'fair' nor advise on possible copyright violations. If there is any doubt, it is advisable to consult an attorney." [3]

When granted by the copyright holder, this permission is usually for only a limited time, so material carried over from one semester to the next required significant time and sometimes usage fees to re-apply and receive permission to put on-line. While we took reasonable efforts to protect copyrighted materials placed on-line with permission, we could not perfectly protect them. One protection was to change from downloadable Quick-time files to streaming video for copyrighted videos, but skilled students still could capture the streaming materials. In contrast, most materials, DVD's, and samples can be easily presented in face-to-face lectures without copyright problems, security issues, licenses, or fees under the educational fair-use principles.

Security for Exams and Quizzes

There was no reasonably secure way to proctor on-line exams or quizzes, except during the single face-to-face meeting which most on-line courses required. Some local institutions and libraries might be willing to offer remote exam proctoring services. However, a fair amount of effort, and possibly even some budget will be required to set up proctoring arrangements, preparing delivery, and arranging for returning exams and quizzes in a secure manner, taking additional time and money which may not be in the budget. But without some arrangement for remote proctoring, Security of quizzes and exams cannot be guaranteed.

Without proctoring, students are able to team up for exams, share information, and use any and all disallowed resources during an on-line exam. Some students allegedly participated in "quiz teams" where four or five students gather together for each quiz or exam. On a rotating basis,

one student takes the exam, while the others watch and take notes. Then the remaining students take the exam, doing much better, of course. The students' roles rotate from exam to exam, so each student has a chance to copy. While randomizing questions can offset this problem a bit, it still does not fully provide security.

There is temptation to reuse much of old material from earlier classes when update classes, making it easier for student dishonesty in later classes.

Conclusion

Protecting student privacy is more problematic on-line. License permission and fees for copyrighted materials usually apply for only a limited time, and require vigilant maintenance. Exam and quiz integrity i=requires great care, and cannot be guaranteed without the use of remote proctors. All of these additional concerns require time, and sometimes money when putting courses on-line.

References

1. **"Online Engineering Technology Courses – the Good, the Bad, and the Ugly",** Ms. Ann Goebel, Dr. William Petersen, and Dr. Harry C. Petersen, ASEE International Conference Proceedings, Austin, Texas, June, 2009

2. **"Converting Face-to-Face Classes to Web-Based On-Line College Classes"** Dr**.** Harry Petersen and Dr. William Peterson, ASEE International Conference Proceedings, Austin Texas, June 2009.

3. Web Teaching, David W. Brooks, 1997, Plenum Press

4. . Circular 21: Reproduction of Copyrighted Works by Educators and Librarians, Library of Congress, United States Copyright Office, Washington DC