

Keynote Address

Solving Ethical Issues in eLearning

Kuldeep Nagi

Fulbright Fellow-2006
SCCD, Seattle, WA , USA
College of Internet Distance Education
Assumption University, Bangkok, Thailand
knagi@sccd.ctc.edu

Abstract

The emergence of the information age has changed the world forever. The Internet and frantic growth in communication technologies have had one of the most profound and visible effects of any invention in modern history. Web technologies have changed how we communicate, how we make purchases, and how we learn and educate ourselves.

There is a strong belief in the education community that the traditional teaching-learning models do not scale to meet the new challenges created by emerging technologies. eLearning provides all the necessary tools to meet those challenges. eLearning is available to anyone, anywhere in the world; all a learner needs is the access to a Web browser.

eLearning is described as online delivery of information, communication, education, and training. eLearning is also a good example of the convergence of the learning and the Internet. While the global increase in the use of the Internet has provided numerous benefits to our colleges and universities, it has also extended traditional problems of cheating, plagiarism, and violation of privacy, vandalism, theft, and spying into the cyberspace. Although eLearning has provided the learner with all the freedom to access and manage information, it has also created new issues

around ethical learning practices, personal integrity and accountability. This paper will discuss these issues in an eLearning environment. It will also attempt to provide suggestions and possible solutions to some of these problems.

Introduction

While the global increase in the use of the Internet has provided numerous benefits to our colleges and universities, it has created an open resource arena with no clear ownership rights, resulting in a virtual free-for-all global facility for its users. When asked about the dual nature of the Internet, one of the professors in my college in USA replied, “between the astonishing reach of today’s search engines such as Google and the ingenuity of some software products used in eLearning, the Internet has proven a great resource to all those who use it. In a way, both the university faculty as well as the savvy students alike may be aided by this resource.” It has truly become a double-edged sword.

There are more than 200 eLearning products, some are commercial and others are free (open-source). All eLearning systems consist of three core components; the **technology**, **processes** and **the people**. The first component includes various Course Managements Systems (CMS) or Learning Managements Systems (LMS), secure

authentication and data encryption technologies, remote proctoring and a variety of end-to-end network security solutions. However, the technology alone can't help in creating an ethical learning environment. It is the behavioral aspects of the **people** (students) and the **processes** created for the delivery of an eLearning courseware, which are largely responsible for creating these issues. Poor courseware design and resource management can also add to these problems. However, the ethical issues mostly stem from improper use of this powerful resource called Internet.

It is easier to cheat online than Face-to-Face (F2F). Students whether enrolled in a traditional university or an eLearning program can very easily garner fraudulent information and use it for their assignments, projects, and term and research papers. Therefore it is very important that the courseware for eLearning is carefully crafted and managed with enough checks and balances to minimize unethical practices. Most of the ethical issues cited above can be resolved if the professors pay close attention to the design and management of the eLearning courseware.

Best Practices Recommendations

While it is undoubtedly somewhat dangerous given the newness and variety of some 200 eLearning products and services, I want to sketch out some best practices strategies for the eLearning. These strategies are not new. Most of these strategies are being used in some form in many colleges and universities in U.S.A. Based on the current articles published in various magazines, I have compiled a list of what strategies can be implemented within the framework of a given courseware. I myself have used some of these strategies in my eLearning classes. The following section of this paper largely focuses on how to tackle the issues of cheating, plagiarism, and

copyright violation within the framework of an eLearning courseware.

1. Basis Steps

Careful configuration and management of the technical components, tools and services provided within a Course Management Systems (CMS) or Learning Management Systems (LMS) being used in the eLearning can help in preventing the issue of cheating, plagiarism and copyright violations. Please consider modifying and implementing the given strategies for your discipline, your subject or class level on a case-by-case basis.

- Require students to take at least two on-campus proctored exams, a Midterm and the Final exam.
- As much as possible require your eLearning students to participate in online discussion groups.
- Assign work frequently throughout the semester. Whenever possible give periodic short quizzes and queries during online chat sessions.
- If the courseware modules contain multiple choices, T/F, short answer or essay type questions, try the tasks listed below:
 - When developing an online test, post it and make it available for only a few days (1-2 days)
 - Limit the time on the test
 - Limit the number of retries or no retries at all, depending on the objective of the test
 - Test more frequently to establish a "track record"
- Develop a database of test questions and give different questions to different students. Every Course Management Systems (WebCT, Blackboard, Angel Learning System and Moodle) have

built in capability to randomize the question, grade and give immediate feedback to the students.

- Provide prompt feedback to online or emailed inquiries. Interaction and communication lines need to be open and continuous. Instructors should address student concerns as soon as possible. If there is regular conversation going on, it is less likely that the student will cheat. In addition, the instructor will be able to see inconsistencies in behavior. There will be a track record available to review in case the instructor suspects plagiarism.
- Use different media types, audio, streaming video, animation, MP3 and Pod casting to work with different learning styles.
- Limit online classes to a maximum of 25 to 30 students or break up large classes into smaller groups for purposes of forum discussions and collaborative projects.

2. Restructure Assignments and Evaluation Techniques

-Consider alternatives to quizzes, tests and exams. Use multiple methods of measuring performance, mastery and skills. For example, give the students group projects to do, then have the students grade themselves and others on their team. Most of the examples given below are from the area of ICT. Depending on the area of studies or subject matter these projects may be modified.

- Ask students to create or design web site for eCommerce, eGovernment agency or some significant component of eEducation such as Students Record System with the right access controls or security elements

- Developing a database to perform a task such as Secure Payroll System or a Secure Transaction System
- In ICT classes provide hands-on projects and labs; ask students to submit a lab report
- Give students a complex technical problem to solve. Ask them to write down the logical steps taken to solve the problem
- Have the students provide a presentation using a web site tool or power point and post them to the web
- Give students Case studies and ask them to analyze using built-in forms for analysis
- Ask students to create Portfolios that contains samples of a variety of materials
- In ICT programming and animation course ask students to create original theme Games and Puzzles

-Whenever possible allow the students to choose a topic for a project, essay or a term- paper that relates to the student's personal interest and experience. The topic should be relevant to the student's real world work and life experiences.

3. Include Peer Assessment

If your university or college uses course management software such as Blackboard, WebCT, eCollege or Moodle, a variety of peer assessment tools are available within these systems. With little planning the following activities can help in including peer assessment in your courseware.

- Let student post personal information, develop a web page or allow other methods such as Instant Message (IM) or email to introduce themselves to the other students in the class. Most of the Course Management Systems (CMS) or Learning Management Systems

(LMS) have built-in forums that will allow students to introduce themselves and exchange ideas.

- Rubrics are a great way for students to assess themselves as well as their peers. Let students use the grading rubric as they develop their assignment. Have class peers use the rubric to grade their fellow classmates. Use a system where every student has a code name and the other students do not know which of their peers is grading their project. Have several anonymous students grade the same project using the rubric.
- Using the grading rubric, or other assessment tool, develop a peer review process. There are many web sites that will help you develop this kind of interactivity.
- Develop discussion questions and have the students discuss the issues. Group the students or allow the students to form their own groups. If possible, have one student moderate the group discussion each week.

What do you need to look for in a project, a term or research paper?

Careful examination of the material submitted for your course may yield signs of unethical behavior. Here is a list of some obvious and subtle signs of cheating, plagiarism and copyright violations.

- Is the formatting different from what you require? Check for the style, is Modern Language Association (MLA) or APA (American Psychological Association) or some other format is used; check for mixed styles of citation; mixing quotes such as straight quotes with curly quotes.
- Labels left at the end of papers (“Thank you for using this web site”), title pages stapled to web printouts (with dates and

URL in the corners), a title page claiming the paper is by Dr. Jintavee when subsequent pages say “Santhima, page 2,” and papers with whiteout over the previous author’s name.

- Unusual formatting, strange margins, skewed tables, lines broken in half, mixed subhead styles and other formatting anomalies.
- Whole or part of the document printed from the Internet with web site address visible.
- Check if the student left out or did not address a specific part of the assignment? Is the assignment or term paper topic is on something you did not assign?
- Are there odd sentences stuck into an otherwise well written paper? Is the verb tense correct? Are there changes in tense? For technical papers, check for the source of the data.
- Is the paper submitted by the student is far better than previous writing samples? Is the writing style above the expectations for that course level? Is the bibliography complete or poorly written and check if the age of references is older than three years?
- Check if the footnotes match the cited text? Are there any quotations that have no footnote or bibliographic references?
- If the student hands in the paper late or asks for an extension on the due date? Is the reason valid?
- Can the student summarize the research in an oral presentation?
- Check the library holdings: Does your university library own the item? Did the student check it out?
- Have the students do a writing assignment in class so that you can compare the quality of the submitted paper. Also keep copies of previous papers turned in to you so that they can be a source of detection.

- Cutting and pasting to create a term paper from several sources will most likely have wide variations in tone, diction, and citation style. Check if the paper went off the main topic. If parts of the paper do develop the theme but other parts seem a little off, the paper may be a cut-and-paste job.
- Are there archaic terms, or words no longer used in the way the paper uses them? In ICT courses check for the used terminology and acronyms.

Prevention Strategies

In the first orientation session of your eLearning class, discuss the ethical issue about plagiarism, cheating, copyright and privacy issues with students. Don't assume that your students fully understand the concept of intellectual property and documentation of material available on the internet. In addition, the following activities can help in preventing unethical behavior.

- Review policies related to academic integrity, plagiarism and cheating and incorporate that into your courseware syllabus. Explain that there are different levels of using someone else's work, but it's still cheating. Discuss the consequences of plagiarizing.
- Teach students how to cite and quote the material used. Teach them how to seek permission to quote and use copyright materials. Explain proper citation and "fair use" guidelines. Show the students examples of plagiarism and violation of copyright and privacy. Discuss legal issues around violation of copyright and privacy issues. Differentiate between collaborative work and academic dishonesty. Give students clear expectations for a collaborative project.
- Let students know that you know about the term paper mill web sites. Take the

students to one of those web sites. Get a paper and analyze it for them.

- Request photocopies of sources used to write the term paper. Have students attach their personal research notes. Do not allow last minute change of topic.
- Require an abstract of the paper. Set a series of due dates throughout the semester for various steps of the term paper submission process, such as the first rough draft, first revisions, and second revisions and then the final draft. Establish deadlines throughout the semester for submitting outlines, and rough drafts, revisions and working bibliographies.
- In ICT classes provide a bibliography for the students so that they know where to begin the research. Teach students how to use IEEE and other ICT related web sites to find appropriate articles, transcripts and white papers to supplement their research. Require an annotated bibliography early in the writing process. Compare final bibliography with earlier list.
- Clearly define what kind of research you require? Outline clearly the research steps and writing process. Specific and clear guidelines will help the student complete the work and prevent plagiarism.
- For ICT classes require specific components in the term paper. For example, "The paper must make use of two Internet sources, two printed book sources, two printed journal sources, one personal interview, and one personally conducted survey." Require the use of one or more specific articles or books you name or provide. Have the student incorporate information you provide.
- Require a personal interview with an expert or authority.

- Require references to be up-to-date. Require one or more references written within the last year.
- On the day you collect the papers, have the students write a brief essay about what they learned from their work. Do this activity in class. What did they have trouble with? Require oral reports of student papers. Ask students questions about their research and writing process after the paper is completed.

And lastly, follow the due process and student confidentiality rights if you need to make a plagiarism, cheating or violation of copyright charge. Carefully use the policies, provisions and procedures of your university or college to deal with ethical issues.

Conclusion

Digital content and Internet applications have transformed teaching and learning but they have also created new issues around ethics and accountability. The end results of the eLearning programs have created both advocates and detractors. Some experts say that the successful utilization of eLearning programs appears to hinge primarily on the trust and honesty of the targeted remote learners. But while creating an engaging courseware, program or content, the honesty and integrity of the students is not necessarily a major consideration. Therefore like in any university traditional programs, the accuracy, right components, controls, activities and evaluation techniques have also become critical issues for eLearning. The “e” in eLearning is mainly about exploration, experience, engagement, ease of use and empowerment, but in an academic environment it is also open to easy exploitation. Therefore besides focusing on the Course Managements Systems (CMS) or Learning Managements Systems (LMS) technology, close attention should be paid to

the design, quality of content, delivery practices and management of eLearning courseware.

References

- Anane, R.; Crowther, S.; Beadle, J.; Theodoropoulos, G. (2004); “*eLearning content provision*”, *Database and Expert Systems Applications*, 2004. Proceedings. 15th International Workshop on 30 Aug.-3 Sept. 2004 Page(s):420 - 425
- Brahmawong, Chiyong. (2005) *AU CIDE Plan: Assumption University’s Internet-based Distance Education System*.
- Franz, E.; Wahrig, H.; Boettcher, A.; Borcea-Pfutzmann, K, 2006. *Access Control in a Privacy-Aware eLearning Environment*, ARES 2006
- Singh, H. (2003), “Building Effective Blended Learning Programs”, *Educational Technology*, November - December 2003 Volume 43, Number 6, Pages 51-54
- Taran, C. (2005); “*Motivation techniques in eLearning*”, *Advanced Learning Technologies*, ICALT2005. Fifth IEEE International Conference on 5-8 July 2005 Page(s):617 - 619