A Quandary for Information Technology: Who Controls the Content of Distance Education?

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Abstract

Perhaps the most important of current educational product of Information Technology (IT) is Distance Education (DE), which has created many opportunities for universities, faculty, and students. While students receive the benefits of DE, universities and faculty are changing their traditional relationship to accommodate its academic, technical, and legal challenges. However, IT educators must deal with far more than the technical and the educational content issues in assisting their university colleagues with the issues of DE. One of the more difficult DE challenges is effectively dealing with legal ownership of course content. Unfortunately, scant thought is being given to who legally owns the content created for the unique and repeatable, electronic classroom. Both university administrators and faculty tend assume they have full control of DE and act accordingly. This paper suggests that both groups should fully understand and reach agreement on DE ownership issues before proceeding with a full-scale DE implementation. This paper explores the relative claims to ownership and control by university faculty and their employers. Particular emphasis is placed on copyright law.

I. INTRODUCTION

Information Technology has had many significant impacts on education and learning. Perhaps the most important of current educational product of IT is Distance Education (DE). DE has created many opportunities for universities, faculty, and students. While students receive the benefits of DE, universities and faculty are changing their traditional relationship to accommodate its academic, technical, and legal challenges. However, IT educators must deal with far more than the technical and the content issues in assisting their colleagues with the issues of DE. One of the more difficult DE challenges is effectively dealing with legal ownership of course content.

Assume you are a university professor who moves parts of your course onto the Web. You do nothing fancy, just post course syllabi and handouts, with a link to reach you by Email. You receive a scattering of student Email inquiries over the course of the semester, and you broadcast a reply to all students who provided an Email address. At the end of the year your Dean is pleased with your student evaluations—particularly with those of your non-traditional students. These non-traditional students are your college’s target market for expansion during tough times. Not only do you receive merit pay, but your Dean also directs the college’s technical support staff to fill your service and equipment requests first.

To test the Dean’s commitment, you order a color Web camera—with audio—for your office computer and a digital camera to photograph students and exhibits. Both are on your desk in less than a week. With these new additions, you diligently work on improving your courses and begin putting in 60-plus hours per week for several months. At your request, your university’s technology transfer office obtains hundreds of copyright licenses (for small or no fee) from the off-campus Web content owners for your in-classroom exhibits and your Web archive. You do this to ensure copyright compliance, even though you personally believe all of it is “fair use”.

Again, your efforts are noticed and your students are pleased. The non-traditional students are pleased with their ability to review a missed lecture through your Web archive. You even win your university’s teaching
award and earn a flattering press release from university relations.

Your teaching activities cause a flurry of interest. To meet the increased demand for your course, and still stay within budget, the Dean schedules two DE sections of your course. The Registrar and the rest of the administration have fully cooperated. Your first notification is the advertisements for your class on local television.

Of the two sections, the Dean directs you to teach the first section on the Web, drawing from the archive of your last semester's lectures. This Web section of the course will be offered to those who cannot physically meet on campus, either due to rural location, corporate time demands, or physical disability. In a change of university policy, Web students are allowed to enroll in your Web course and start class every Monday, rather than just at the beginning of every semester. Similar to a correspondence course, you won't have any contact with these students except to answer Email and to grade papers. Your newly-assigned graduate student will help you with that. Still, you will receive full workload credit for this section.

As for the second DE section, you will teach it from the campus TV studio. It will be taped for delayed delivery on the state's public television network. Except for the technicians, no one else will be in the studio when you teach. Again, the graduate student will help you answer Email and grade papers. You will receive full workload credit for this section, as well.

This distance education scenario described previously isn't traditional. Many of its issues are unfamiliar territory within the university system.

2. PROBLEM STATEMENT

Universities are moving toward commercialization in much the same way our capitalistic economy is commercialized. Within U.S. universities, commercialization partially occurred years ago in research when certain universities and selected businesses partnered to solve proprietary problems. Now it is taking place in teaching on a much larger scale (Blumenstyk, 1999a&b ). To accommodate it, university administrators are redefining the university employment relationship-most with limited input from their faculty (Demac, 1999). These administrators indicate they are being forced to respond to opportunities offered by new technologies and to counteract limited growth and shrinking budgets (Blumenstyk, 1999a&b). Under this new paradigm of commercialization, faculty would cease to be semi-independent professionals, and would become mere employees who deliver marketable instruction for the employer. Soon, perhaps, the university would own all course content and could legally deliver recorded content using distance education (DE)-even in the absence of the faculty member-without further compensation to the faculty author.

Many universities that now embrace DE are riding the waves of a new technology without having done the proprietary groundwork (Demac, 1999; U.S. Copyright Office, 1999). To make things worse, the law is far behind where it needs to be on DE-a common condition with the law and new technology (U.S. Copyright Office, 1999; AAUP, 1999). Without that necessary legal foundation, universities are improvising commercialization policy and attempting negotiate the unpredictable currents of change.

The purpose of this paper is to provide insight into a set of critical problems facing academe in its uneasy relationship with Distance Education (DE): who owns the content of DE products? How is DE ownership affected by commercialization? Even if faculty unfailingly embrace DE, what is their role in DE? Do faculty or does the university own and control their output, including stored content? Who really controls the content of Distance Education? How these questions are answered will affect all university faculty in the near future.

3. DEFINITION OF DISTANCE EDUCATION

Distance Education is both a system and a process for providing instruction at a distance. It occurs when teacher and student are physically separated, an educational DE institution is involved in planning and supporting curriculum delivery, and media technology (e.g., video, sound or audio, text, graphics, animation, interactivity) unite the teacher and student by carrying content across the gap. DE includes distance teaching, the teacher's role in the process, and distance learning, the student's role in the process, as well as the desired outcome of distance education. DE overcomes time differences; it can occur in a same-time or different-time scenario where media technology provides the bridge. DE also overcomes personal differences; it can contain transcend cultural gaps, as well as time and physical ones (Lane, 1992; Verduin & Clark, 1991; Hillman & Daniel, 1994; University of Delaware, 1997).

DE ranges along a continuum, from the age-old correspondence course, to the videotaped correspondence course, to the two-way live video and audio, to evolving combinations of these and other technologies on the Internet. For clarity, this paper will focus DE content issues delivered by two-way live video and audio by the Internet, both of which require significant up-front investment. The university will apply part of that investment to computer storage for DE content.
Storing Distance Education Content Quality

DE media require almost limitless computer storage capacity. Where pre-computer educational systems once stored information on paper-based and analog media (combined with the ability to index, mentally memorize, and recall information), post-computer educational systems have many digital media alternatives. Today, storage capacity continues to increase while costs decline; for a moderate investment DE providers can purchase many gigabytes of storage. As a result, DE content can now be digitally stored and retrieved nearly indefinitely.

With DE content stored for any time, any place, any person delivery and with electronic distribution channels readily available and improving, the DE revolution will fundamentally affect how universities operate in the future. The Kellogg Commission recently stated, "Our learning communities should be student centered, committed to excellence in teaching and to meeting the legitimate needs of learners, wherever they are, whatever they need, whenever they need it. Unless public colleges and universities become the architects of change, they will be its victims ...In the next century anew ki—d of university will be in place. In this new university, the emphasis will be on delivering instruction anywhere, anytime, and to practically anyone who seeks it." (Kellogg Commission, 1997)

Having discussed DE and its future importance, this paper will address ownership issues. The two ownership issues of greatest importance to DE content are title and copyright.

4. OWNERSHIP OF DISTANCE EDUCATION PRODUCTS-TITLE

Title is the sum total of legally recognized rights to the possession and ownership of property. A title can be good title, marketable title, doubtful ("under a cloud") title, or bad title.

A good title is that which entitles a person, by right, to a property or estate, and to the lawful possession of it. A marketable title is one that a court of equity considers to be so clear that it will enforce its acceptance by a purchaser. The ordinary expectation of the term marketable title can convey only a very imperfect notion of its legal and technical import. A doubtful title is one which the court does not consider to be so clear that it will enforce its acceptance by a purchaser, nor so defective as to declare it a bad title, but only subject to so much doubt that a purchaser ought not to be compelled to accept it. A bad title is one, which conveys no property to a purchaser of an estate. (Lectric Law Library, 1999).

Universities and Title Ownership in Distance Education

To satisfy the proprietary needs of commerce, universities must acquire good title to the instruction "product" (U.S. Copyright Office, 1999; AAUP, 1999; Blumenstyk, 1999a&b). It is easy to clearly establish good title with a written contract prior to creation of the DE content, but this is rarely done. The university can award clear title to the author of the DE product, or it simply can claim doubtful title by giving short shrift to the claims of others—most notably, the ownership claims of the faculty, but also the claims of students. One justification for such treatment is the contractual nature of the university's relationships.

Traditionally, universities assert they may alter these relationships at will (Eisenberg, 1988; Chew, 1992). However, just because faculty and student output reside on university computers or on university property is not sufficient cause for the university to be awarded ownership. Copyright law provides protection by specifying ownership of DE content. Also, tenured faculty have both contract and property rights which their employers are not able to unilaterally change.

5. OWNERSHIP OF DISTANCE EDUCATION PRODUCTS-COPYRIGHT

Copyright is body of legal rights that protect creative works from unauthorized reproduction, performance, or dissemination. The owner of copyright has the exclusive right to reproduce the works, to prepare derivative works, to sell or lend copies of the works, to perform the works in public for profit, and to display the works in public. These basic exclusive rights of copyright owners are subject to exceptions depending on the type of work and the type of use made by others.

The term work used in copyright law refers to any original creation of authorship produced in a tangible medium. Thus, works that can be copyrighted include literary pieces, musical compositions, dramatic selections, dances, photographs, drawings, paintings, sculpture, diagrams, advertisements, maps, motion pictures, radio and television programs, sound recordings, and software programs.

Copyright does not protect the idea or concept; it only protects the way in which an author has expressed an idea or concept. If, for example, a scientist publishes an article explaining a new process for making a medicine, the copyright prevents others from substantially copying the article, but it does not prevent anyone from using the process described to prepare the medicine. In order to protect the process, the scientist must obtain a patent (McCarthy, 1996). Copyright protection is automatic, although registration is necessary to exert all rights of copyright.
At the moment of creation, DE content is copyrighted. Because DE and its materials may include any or all of the breadth of copyrightable work—including DE in its stored form—copyright law protects DE materials and its owners.

Employers, Employees, and Copyright Ownership in Distance Education
An employee who creates a copyrightable work and is acting within the scope of employment is not the author—the employer is the author. To be the author and owner of the copyright, an employee must be acting outside the scope of employment. Therefore, software firms that use technical writers who are employees to produce technical manuals own the copyright. An independent contractor is not an employee, so a different rule is used. If independent contractor creates a copyrightable work, then he/she is the author—unless prior to creation a written, signed agreement is executed transferring authorship to the principal. Book publishers frequently contract with writers in this way.

Although these rules are easy enough to state, they can be difficult to apply to faculty members who create traditional course content while in the employ of a university. The difficulty centers on the definition of the phrase “acting within the scope of employment” and on whether faculty are best categorized as either “employees” or as “independent contractors” when authoring DE content.

The terms employee and within the scope of employment acquire their meanings from each State's general common law of agency. If the work was created at the employer's insistence and expense, if the employer had the right to direct and supervised the manner in which the work was created, and if the employee was specifically compensated for the effort, then the employer is the author of the work. In other words, the employee was creating for the employer. However, if the employee is motivated beyond the employer's needs, uses non-employer resources, and works on his own time, then the employer who lays blanket claim to all of an employee's efforts will fail to bring the work within the scope of employment. In other words, motivated faculty with home offices who labor late into the night tend to operate outside the scope of university employment.

Interpreting copyright law in this way leads to the conclusion that faculty, by law, own part, most, or possibly all of the copyrights for DE content. Copyright ownership applies to all courses, whether delivered directly to a class, through stored DE techniques, and everything in between. Course content is usually created independently of the delivery medium, DE content is no different from other created content—nly the method of delivery and the timing is different.

Universities, Faculty, and the Traditional Copyright Ownership Relationship
The traditional relationship between faculty and university is unique. The division of authority both parties share in deciding course delivery and content is one important factor that makes the relationship unique. Clearly, faculty are employees for some purposes. But, faculty may be independent contractors when creating DE content. Unlike a corporation, traditions and by-laws prevent the university from simply dictating what, where, when, how, and to whom courses are taught. That limitation restricts the university's claim to faculty course content. As stated earlier, the employer can only lay blanket claim to an employee's work if the employer: 1) insisted and fully paid for resources consumed creating the work, 2) had the right to direct the work's creation, 3) supervised its creation, and 4) compensated the employee who created it.

Acting according to its role in the traditional faculty-university relationship, the university decides what courses will be offered and which faculty will staff them. However, the faculty role gives the faculty member substantial, if not total, control over what is the course content. Most importantly, the faculty member controls how the content is delivered. According to the concept of academic freedom, the university has only limited control over content and how the faculty member delivers it (Eisenberg, 1988; Demac, 1999; AAUP, 1999).

Faculty spend few hours actually teaching students. This piece of information would seem to indicate that faculty do not work overtime. In fact, most studies of faculty behavior indicate that they routinely labor more than fifty hours per week (Plater, 1995; Guskin, 1996). Time consumed in teaching also includes research, study, materials preparation, technology training, teaching circles, conferences, grading, student advising and counseling, and professional development. The excess hours consumed beyond a normal workweek demonstrate substantial independent faculty initiative. Furthermore, since faculty are exempt, employees' universities seldom compensate faculty for overtime, which only clouds the legal landscape in a deeper shade of gray.

Unless the university explicitly changes its contractual relationship with faculty, agency law prevents the university from making a blanket claim of good title to faculty course materials or content. DE products fall under this umbrella, although faculty who consistently exhibit "out of scope" dedication to teaching may have much stronger cases than those who demonstrate little initiative. The strength of a case, of course, becomes Most important when the possibility of commercialization and/or litigation arises.
Universities May Relinquish all Rights to Copyright Ownership

Some universities may relinquish all rights to faculty works as a matter of policy. Both by tradition and/or express policy provisions, the vast majority of universities surrender all claims to copyrights for inventions and other works created by their faculty. However, there are exceptions. Stanford University, a leader in commercialization of software created in a university environment, has expressly altered its policy statement to reclaim copyrights on software (Rosenberg, 1994; Chow, 1998; Eisenberg, 1988; Chew, 1992).

Universities May Claim Total Copyright Control

It is possible for the university to transform its unique, traditional relationship with faculty and claim copyright control of all course content. To claim that control, the two primary approaches for the university are: 1) treating its faculty like genuine employees, or 2) treating faculty like independent contractors. As mentioned earlier, an employee would be a faculty member who works within the university's scope of employment. If a faculty member works outside the scope of employment, he/she owns the course content, but if the faculty member works within the scope of employment, the university owns it. In the first approach, the employee approach, the university must extinguish faculty independence and take control of what happens inside the classroom, and/or not allow faculty to work on the content at home, and/or tie compensation to specific content creation. None of which is likely. Taking the second approach, the independent contractor approach, the legal outcome is certain with a prior written and signed agreement that grants the university good title to the DE content. This is both feasible and likely. Faculty can then look like either employees or independent contractors. Some universities, which are moving aggressively into DE, have created faculty contracts that clearly give the university claim to good title ownership of course content in this way (University of California, 1996).

An Example of the University Taking Control

Consider the following university scenario, describing the use of a tool to coerce behavior (a stick) and a tool to influence behavior (a carrot). First, the stick. Most college deans have the right to appoint instructors. If a faculty member is deemed qualified to teach a given course, then the Dean may compel him/her to teach that course at a given time and place. Usually, the need to resort to this raw legal power is unnecessary. But, that power is there and can be used.

A different question with an answer that is far less clear, is whether a Dean can compel the use of a particular technology for a given course. Moving even further into terra incognita, is the question of whether a Dean has the legal power to compel a faculty member to surrender copyrights as a condition of employment. Without a stick, created works may not be within the scope of employment. However, regardless of whether the Dean possesses a stick, if the Dean has a carrot, then the work can be moved clearly towards good title in the university.

Now, consider the carrot. If, prior to the creation of DE content, the Dean enters into a written and signed agreement with the faculty member whereby the faculty member is specifically compensated for the design and teaching (i.e., performance of the copyrightable work), then all questions are neatly resolved. "Compensation" need not be interpreted narrowly. Mere preferential treatment for a faculty member's equipment or travel requests, if identified in a written agreement, is sufficient. The carrot entices the independent contractor faculty member to grant the university good title to the DE content.

The carrot approach does present a number of major problems. First, the Dean must be straightforward and forthright with faculty about signing away copyright ownership. This is a difficult problem for any manager. Second, obtaining an agreement from individual faculty members, let alone from the collective faculty, never is a sure thing. Their independence and proclivity for endless analysis may scuttle a commercial deal. Third, and perhaps most distressing, this carrot requires the Dean to encroach the sacred ground of academic freedom, while acting as an agent of commercial DE interests. Taken separately or together, these problems do not allow the Dean to negotiate from an academically-secure position of power.

6. CONCLUSION

If a university is to implement pervasive distance education, then it will need to directly confront the critical issues—especially those raised by new technologies and the commercialization of DE content. These issues, as applied to the university mission, create opportunities that challenge its very foundations. To survive this technological change, the university must restructure itself. As advisors in this process, IT educators need to understand the ownership issues of DE course content.

DE forces universities to move from one contractual paradigm into a radically different one. The older paradigm is cooperative, open, and focused on the common good. The new paradigm is competitive, closed, and intensely focused on the bottom line. It is part of the inhospitable, competitive world where businesses struggle to survive. Most universities do not thrive on this type of competition, but now they must confront it head-on. This competition could originate from within the university. (Guernsey, 1999) It is only a matter of time before an individual faculty member asserts "good title" to the DE content and offers to sell that content in competition with the university at a reduced price.
The university community must make its new assumptions and expectations explicit, and then change its policies to reflect them. However, change, though necessary, will be difficult. The excellence of the American university, the very product that our economy desires, is a direct consequence of its traditions and practices. The challenge is to implement DE without killing the goose that lays the golden egg.

Universities should be advised to introduce DE only after appropriate preparation. It should be implemented only after deliberate consideration has been given and consensus secured for the multitude of conflicting interests.

Effective use of either carrots or sticks requires managerial courage and wisdom. Within academe, the most likely outcome is a clouded title. Since most DE content will not be commercially worth fighting over, typical this clouded title will not be a major problem. However, when the DE content is profitable, then there clouded title will generate a hay day for lawyers.

i "Fair use" is the use of a portion of copyrighted material in a way that does not infringe the owner's rights. The use of a portion of material for educational purposes, literary criticism or news reporting is often considered a fair use. Lectric Law Library, http://www.lectlaw.com/def/foll.htm. Fair use is measured by the purpose of the use, nature of the works, substantivity of the copying of the work, and effect on potential market for the works. 17 U.S.C. Section 107 also available at http://www.access.gpo.gov/congress/congO13.htm. Users see far more "fair use" than owners.

ii A "derivative work" is a work based upon one or more preexisting works. ...in which a work may be recast, transformed, or adapted. A work consisting of editorial revisions, annotations, elaborations, or other modifications which as a whole, represent an original work of authorship is a "derivative work." 17 U.S. Code Section 101 also available at http://www.access.gpo.gov/congress/congO13.htm.

iii Tradition becomes an implied portion of the contract and helps define the scope of employment. The tradition of academic freedom is strongest when in the classroom. There, it is a tradition of the university to make no claim on a faculty member's creation in exchange for the faculty member expressly distinguishing personal views from those of the academic institution.

iv Most often, "qualified" is a decision reserved to the faculty as a whole. Here, we assume the decision "qualified" already has been made by the faculty (plural).
7. REFERENCES

_.(1999), Definition of Title. 'Lectric Law Library. http://www .lect1aw .com/1ef2tO30.htm


Lane, c. ( 1992). Distance education. In P. S. Portway & C. Lane (Eds.), Guide to teleconferencing &


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