

Whose Property Is It Anyway? Using Electronic Media in the Academic World

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Background and Importance

This article describes a study that examined the intellectual property policies at four-year higher education institutions in the Southern Regional Education Board (SREB) states to determine how these institutions assign ownership of distance learning and online courses and how they disperse income of intellectual property. Intellectual property has long been an issue of debate among colleges and universities (Heathington, Heathington, & Roberson, 1986). It is not surprising considering the controversial nature of determining ownership and income dispersion of creative works. To make matters worse, many institutions do not have adequate policies to govern the determination of rights to copyrightable materials (National Association of College and University Business Officers [NACUBO], 1980). As a result, intellectual property policies have been formed ad hoc and modified as problems arise (Nelsen, 1998).

Policies regarding patents have raised fewer questions in higher education institutions than those regarding copyright, perhaps because patents have been lucrative for a longer period of time or the law is clearer for patents than for copyrights (Gorman, 1998). Although President Clinton signed the Digital Millennium Copyright Act in October of 1998, this legislation did not update the current copyright law to facilitate the development and implementation of distance learning and other forms of technology. Hence, the inadequacy of copyright law has become increasingly evident with the growth of the Internet (Berg, 1999).

In academe, books and articles written by faculty members have traditionally been considered the intellectual property of the faculty members (Nelsen, 1998). Perhaps this explains why most higher education institutions do not address the issue of ownership of courses and curriculum materials in faculty contracts or policies (Harney, 1996). However, the potential economic value of multimedia and online course materials has raised the stakes for colleges and universities and prompted them to reexamine their intellectual property policies (McIsaac & Rowe,

1997). In some ways, online courses and course materials are like inventions, and in other ways they are like textbooks. The law is still unclear as to who owns traditional scholarly materials at the university, and making the distinction for online materials would mean the difference between the institution retaining ownership of instructional materials or ownership residing with faculty (Guernsey & Young, 1998).

The distribution of funds resulting from the creation of intellectual property is of equal or greater concern. Higher education institutions retaining ownership must decide how much of any proceeds will be given to the individual creator. Universities must then decide how the university will invest its share of the revenue. For instance, will the revenue go to a general operating budget; to the inventor's college, department, or laboratory; or be used solely for the support of future research (Cate, Gumpert, Hauser, & Richardson, 1998)? Undoubtedly, some faculty not receiving what they feel is their fair share of the revenue will protest and possibly seek compensation through the court system (Guernsey & Young, 1998).

According to the U.S. Office of Education, "Universities particularly should establish written policies setting forth the respective rights of the university and its staff members in anticipated copyright royalties" (NACUBO, 1980, p. 12). Salomon (1994) recommended that intellectual property agreements provide for any situations that may arise in the future, such as the medium of distribution. Additionally, institutions must be prepared to answer questions such as, "What model of ownership should be followed with respect to electronic course material development?" They must determine if a traditional textbook model will be applied or if a patent model will be developed ("Current Issues for Higher Education," 1997-1998). Most important, issues regarding intellectual property make it vitally important that university professors, educational technologists, legal support staff, and university administrators stay in close communication with each other to develop policies that are acceptable to everyone

involved (Lan & Dagley, 1999).

The increasing use of technology in education has significantly changed the face of intellectual property. While most institutional policies are stable in dealing with patent issues, many are not as reliable when determining ownership of copyrightable works. The law is unclear as to who owns traditional scholarly materials, which historically have been considered the property of their creators. However, the potential economic value of distance learning and online course materials has gained the attention of university administrators who realize that treating such works as traditional scholarly material may mean great loss in potential institutional revenue. Beyond ownership of intellectual property, institutions must determine how income will be dispersed to the creator(s) and among the institutional divisions. Colleges and universities are challenged to define guidelines that adequately compensate institutional colleges, offices, departments, and individuals so as to encourage the continued creation of intellectual property while covering expenses.

The Importance of Ownership

The current inadequacy of copyright law to address ownership of materials created for distance and online education has forced colleges and universities to make their own interpretations and determinations of intellectual property ownership. The stakes are high, and all sides want their fair share of the pie. Colleges and universities make substantial investments in intellectual property through faculty incentives and institutional resources. Likewise, faculty put a substantial amount of time and effort into the creation of course materials with the expectation that they will retain ownership should they pursue opportunities at other institutions. Furthermore, income from intellectual property that is retained by the institution must be dispersed within the institution to support future research and encourage continued creation of intellectual property.

This examination of intellectual property policies at four-year institutions in the SREB states will provide administrators with valuable information as to how prepared these institutions are to deal with issues regarding ownership and income disposition of intellectual property and how well these policies address intellectual property issues in

an electronic environment. Furthermore, it will allow administrators to compare their institution's intellectual property policy with that of comparable institutions and provide a framework upon which they can base revisions to their own policies.

Review of Related Literature

In 1980, a NACUBO report suggested that institutional copyright policies and procedures should include a (a) statement of institutional copyright policy, (b) definition of copyrightable materials, (c) determination of rights, (d) determination of equities, and (e) copyright administration. The institution's statement should recognize the rights of faculty, staff, and students to write or generate copyrightable materials on their own individual initiative and retain sole rights of ownership and disposition. The statement should also outline the disposition of rights to materials created as a result of assigned institutional duties. Finally, it should define royalty sharing and describe the administrative body that will be responsible for interpreting and administering the copyright policy (NACUBO, 1980).

In determining rights to copyrightable materials, NACUBO (1980) recommended that materials be assessed within a framework that accounts for the following categories: (a) individual effort, (b) institution-assisted individual effort, (c) institution-supported efforts, and (d) sponsor-supported efforts. It suggested that rights to works created as a result of individual initiative with only incidental use of institutional facilities and resources reside with the author. Furthermore, joint rights to ownership and disposition should be given when partial institutional support is provided through the contribution of considerable faculty time, facilities, or institutional resources. Additionally, rights of copyrightable material that result from work assigned by the college or university should reside with the institution, while sharing of royalty income with the author may be deemed appropriate in certain circumstances. Finally, ownership of copyrightable materials created under a grant or contract should be negotiated and specified at the time of the agreement and prior to signing the agreement and beginning work.

When determining disposition of income resulting from royalties or assignment of copyrighted materials for individual efforts,

income should accrue to the author alone (Nelsen, 1998). However, some degree of income sharing should be determined for institution-assisted individual efforts. Although institutional policy may specify that derived income go exclusively to the college or university in institution-supported efforts, many institutions have a royalty-sharing policy on patents and may choose to adopt a similar policy for copyrightable materials that credits all or part of the royalty to authors and academic departments. As with assigned ownership of copyrightable materials created from a sponsor-supported effort, royalty income distribution should be examined thoroughly at the outset of the project. The terms should be written, understood, and mutually satisfactory to the author, institution, and sponsor (NACUBO, 1980).

Intellectual property policies are remarkably varied at institutions of higher learning (Piali & Banks, 1996). For instance, at the University of Toronto, faculty are given the choice of claiming ownership of intellectual property or assigning it to the university. In either case, according to who paid patenting and development costs, the author and school share proportionately in the potential revenue. At the University of British Columbia, all intellectual property rights and responsibility for intellectual property lie with the institution. At the University of Waterloo, however, ownership of all intellectual property falls to the author. John Reid, president of the Canadian Advanced Technology Association, argued that intellectual property policies like those at the University of Toronto and the University of Waterloo provide the greatest potential reward, thereby creating an incentive to bring creative works to the market (Piali & Banks, 1996). After all, copyright law was written not only to protect the holders of copyright, but to encourage or stimulate “creative genius” that can be shared with the public after termination of the creator’s exclusive control (Lan & Dagley, 1999). By maintaining ownership of intellectual property, institutions will discourage the development of creative works and stifle the amount of commercialization that occurs. On the other hand, Lorne Whitehead, associate professor of physics at the University of British Columbia, preferred the “institution-first” policy because it allows faculty, who typically would not patent their inventions themselves, to worry

about obtaining patent protection while the university pays for it (Piali & Banks, 1996).

Many institutions employ the “works for hire” doctrine. A “works for hire” is any material prepared by an employee within the scope of his or her employment and is solely owned by the organization for which it was created. Naturally, it is in the best interest of the organization to enter into “works for hire” agreements or agreements that assign copyright to the organization or university (Salomon, 1994). However, some would argue that the principle of academic freedom which allows faculty members to freely produce work that represents their own views and not the views of the university makes “works-for-hire” a poorly suited doctrine to higher education (Alger, 1998).

About the Study

In the SREB states, 210 four-year higher education institutions were asked to participate in this study. All of the SREB states were represented in the study and included Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia (see Table 1). Surveys were completed by one administrator at each institution. Although the academic vice presidents were initially asked to respond to the survey, surveys were, in some cases, completed by another institutional administrator more familiar with the institution’s intellectual property policy.

The Instrument

The survey instrument used in this study was a modified version of a survey used in 1978 by NACUBO to investigate patent and copyright policies at selected universities. The instrument consisted of 30 multiple-choice and open-ended questions regarding intellectual property policy at institutions of higher learning. A general definition of intellectual property was provided at the top of the first page of the survey, and detailed definitions of the intellectual property components were provided on the last page of the survey. A World Wide Web (WWW) version of the survey was also created to offer respondents an electronic option for submitting responses. The Uniform Resource Locator (URL) of the Web survey was provided at the top of the printed survey, and surveys submitted

Table 1. Intellectual Property Ownership Questions

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1. Does your institution currently offer distance learning and online courses?
 - a. Yes
 - b. No

If yes, are the materials created for use in these courses covered by the institution's intellectual property policy?

 - a. Yes
 - b. No

If yes, who retains control of the intellectual property created?

 - a. The institution
 - b. The creator
 - c. Joint ownership
 - d. Negotiated
 - e. Other: _____
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electronically were e-mailed to the researcher when respondents clicked a "Submit" button provided at the bottom of the Web survey.

How It Was Done

Surveys were mailed out to the academic vice presidents at each of the four-year institutions within the SREB states and were accompanied by a cover letter and self-addressed stamped envelope. The cover letter explained the purpose of the study and requested that the vice president either respond voluntarily to the survey or direct the survey to an administrator within the institution who could more accurately address the issues of intellectual property. The letter also discussed the electronic version of the survey as an alternative means for submitting responses and referenced the Web version's URL for anyone preferring that method of reply.

What We Learned

The study had a 39.5% response rate with 83 of the 210 institutions responding. Interestingly, only 14.5% of the surveys were returned electronically, indicating a preference for the paper version of the survey despite the generally widespread use of technology in higher education. At least one institution from each of the 15 states surveyed responded. Of those institutions, eight reported being unable to answer the survey questions because either their institution did not have an intellectual property policy in place or they were in the process of revising the current intellectual property policy and expected drastic changes to result.

On Ownership

When respondents were asked if the materials created for use in distance learning and online courses were covered by the institution's intellectual property policy, 82.1% responded yes, 16.4% responded no, and 1.5% did not know. When asked who retained ownership of such materials, 54.7% of the institutions reported that the institution or university system retained control; 17.0% reported that ownership was negotiated between the university and the creator of the intellectual property; 13.2% responded that ownership of intellectual property was joint between the university and the creator; 9.4% reported that the creator of the intellectual property retained ownership; and 5.7% were not sure who retained ownership and were currently researching that question.

On Sharing

Respondents were also asked what share of intellectual property royalties is paid to creators when the institution retains intellectual property rights (see Table 2). At 57.4% of the institutions, a share ranging from 25% to 100% of the net royalties is paid to creators; 30.9% of the institutions distribute royalties to creators by using some type of sliding scale; and 11.8% of the institutions pay creators a share ranging from 15% to 50% of the gross royalties.

Respondents were then asked what disposition is made of the institution's share of the royalties (see Table 2). At 41.9% of the institutions, royalties are divided among the

Table 2. Intellectual Property Income Disposition Questions

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1. If the institution retains intellectual property rights for distance learning and online course materials, what share of income (if any) is paid to the creator(s)?
 - a. 0% - 25% of net
 - b. 26% - 50% of net
 - c. 51% - 75% of net
 - d. 76% - 100% of net
 - e. Sliding scale on net
 - f. 0% - 25% of gross
 - g. 26% - 50% of gross
 - h. 51% - 75% of gross
 - i. 76% - 100% of gross
 - j. Sliding scale on gross
 - k. Negotiated
 - l. Other: _____

 2. How is the institution's share of the income generated for distance learning and online course materials dispersed? (Circle all that apply)
 - a. To the creator's department
 - b. To the creator's college
 - c. To the research office/department
 - d. To an institutional office/fund
 - e. To cover expenses
 - f. To promote research and instructional development
 - g. To the system/chancellor's office
 - h. Other: _____
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creator's department and/or college, the research office or department, and another institutional office or fund; 30.6% of the institutions use intellectual property royalties to cover expenses and promote research and instructional development; and 27.4% distribute intellectual property royalties to the institutional system office, the chancellor's office, and the inventor's department.

What It All Means

Distance learning is still relatively new to higher education, and although a large majority of the institutions reported that their intellectual property policy covers materials created for use in distance learning and online courses, it is doubtful that their current policy has been challenged by copyright issues related to such materials. For instance, the majority of those responding stated that the institution retained ownership of online and distance-learning course material. However, many faculty produce such materials with the intention of taking them when they leave the institution for other employment

opportunities. Faculty are becoming more and more concerned that they will not be allowed to keep online course materials and, for that reason, are electing not to teach distance-education courses. Faculty are also insecure about the fact that distance-learning courses can be videotaped and reused, thereby eliminating the need for the future services of professors. Concerns raised by faculty regarding intellectual property are justified and advocate the need for institutions to consider ownership policies that provide for joint or negotiated ownership agreements.

Institutional policies regarding disposition of income to creators were extremely diverse among the institutions. Not only did responses differ in how institutions chose to determine income disposition (i.e., percent of the net, percent of the gross, sliding scale), but they differed in the selected percentages and types of sliding scales used. Lack of consistency among institutions regarding income disbursement indicates little or no communication between colleges and universities when establishing intellectual

property policies. By sharing intellectual property policies, institutions will become exposed to a variety of issues regarding intellectual property and will gain access to a broader range of ideas for dealing with those issues. Institutional consistency in intellectual property policies may make the policies more stable and better able to deal with challenges should they arise.

Institutional disbursement of intellectual property income was more consistent among institutions with funds being distributed to the creator's department or college, the institution's research office or department, and the institution's system office. While some institutions used the funds to "reward" the department or college with which the creator belonged, others used the money exclusively to promote future research and instructional development. Regardless of how intellectual property income is distributed, institutions must look for ways to encourage its development. Faculty may be less likely to generate intellectual property if they are not able to enjoy the benefits, directly or indirectly, of their labor. Furthermore, departments and colleges may be less likely to encourage their faculty to create intellectual property if intellectual property income is transferred to a research or institutional system office that others can benefit from. When the income generated from intellectual property is used expressly for the support of future research endeavors, faculty must be assured that their own research will not suffer at the expense of other ventures being pursued on campus. Likewise, institutional system offices receiving intellectual property income should recognize institutions responsible for the generation of such income during budget allocations.

Ownership and income are two very important factors when it comes to creating intellectual property. Many faculty create intellectual property that has no real market value, but does represent many hours of hard work. However, time is money for the institution as well, and in most cases, institutional resources and other faculty incentives (release time, decreased course load) are provided for faculty creating intellectual property. Policies must be developed that adequately address intellectual property issues for faculty and institutions. Variations in institutional

policies indicate that colleges and universities are taking very different positions on the issue with some favoring faculty and others favoring the institution. Institutions should work with faculty, staff, and students to find a middle ground that encourages all groups to create and support the development of intellectual property.

Based on what we learned from the study, we observe that:

1. Higher education institutions must develop policy governing intellectual property.
2. Intellectual property will be increasingly defined by legal precedent due to the influx of financial considerations.
3. Financial considerations will become increasingly important as more institutions become active players in the "for-profit" virtual university explosion.
4. As higher education institutions are increasingly finance driven (attempting to locate scarce resources from a wide variety of sources), potential revenues from sale of intellectual property will become increasingly important.
5. Intellectual property is a relatively untapped market for higher education institutions. Since the creators of intellectual property are largely unaware of its potential value, creative higher education administrators will attempt to acquire intellectual property rights for sale and distribution.
6. Because creators of intellectual property are largely unaware of its worth, many will lose their creative work by signing away their rights.
7. The increasing pressure of higher education institutions in the "for-profit" world of the virtual university will create an inflated demand for intellectual property materials.
8. Just as many early "rock" musicians never realized monetary compensation for their creative work, many in the higher education environment will lose their creative works until the courts decide on the technicalities of intellectual property financial considerations.
9. The availability of technology has created an artificial marketplace for intellectual property. Unlike the companies that have sold "hard copies"

of term papers for years, the new marketers have an instant market and instant system of distribution which quickly enhances the financial incentives and potential rewards.

10. Creators of intellectual property should become more financially sophisticated and learn their rights.

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