across state lines and even across regions. To date, the commissions determining accreditation criteria have not reached consensus on how to handle those challenges.

Much progress has been made in the last five years with respect to assuring quality programs through distance learning. Biases against distance programs are still very much in evidence, and skeptics abound. Nonetheless, distance learning technologies are growing at a rate that outpaces our ability to develop sufficient guidelines. The challenges are enormous, and very real—so, too, are the opportunities.

References

As the communication technologies of today challenge the traditional concept of ownership, community colleges must address copyright and intellectual property issues.

Ownership and Access: Copyright and Intellectual Property in the On-Line Environment

Marina Stock McIsaac, Jeremy Rowe

The new semester has begun at City Community College. You have been preparing materials for a new course, Introduction to Multimedia, to be offered on the World Wide Web. After hours of searching for high-quality materials to support your course, you have finally located just what you need. You tell a colleague, "I'm really excited about what I've found for the students. We've got video clips from Disney, and I'm going to use Macromedia Director. There are some great journal articles I've found on the Web and I'm putting those in my on-line bibliography. I even found a good-looking Web site out there that I can use by copying the html. This is really going to be fun!"

You assemble your class resources and prepare handouts so your students can download the program and video clips directly to their desktops. By the end of the first few weeks of classes, students have found National Geographic and PBS clips to add to the course resources and the class seems to be a great success. As you return to your office at City Community College, your secretary hands you a registered letter. A law firm representing Disney productions is citing you for violation of copyright. What do you do?

This scenario may become a more frequent occurrence as teachers across the country are encouraged to put their class materials on the Internet or World Wide Web. As teachers begin to enhance their courses with visuals, video clips, and sound bites, the issue of what material can be used becomes a vital concern.

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Why Worry About Copyright?

The rapid expansion of communication technologies has been accompanied by a growing interest in the issues of copyright and intellectual property rights. Electronic storage and transfer of text and images has made cutting and pasting a way of life. With words and pictures so easily available, concerns about the protection of the intellectual property of the creators of written and graphic materials are increasing.

The recent growth of the Internet has exacerbated these concerns. Viewers can easily capture and modify articles, photographs, video clips, and graphics. Indeed, in many cases Internet users believe that if an article or picture is on the Net, it is free for the taking. The "access equals permission to use" philosophy has been deeply disturbing to those concerned with copyright and enforcement of intellectual property rights and has complicated negotiations for guidelines to allow educational fair use without obtaining permission. These issues have widespread implications for distance educators.

Educators must demand that effective policies be developed in the areas of copyright, fair use, duplication, and revenue generation for print and non-print educational materials. These policies must address the needs of both the copyright holder and the end user. As educators begin to develop and market their own programs and assume the role of copyright owner, they often begin to view the issues of control and access differently. Copyright and intellectual property issues will be key to the success of all technology-based educational efforts. All groups have a stake in how these important policy issues are addressed.

Legal and Licensing Issues

From a copyright or intellectual property perspective, faculty-produced materials for distance learning differ significantly from materials used in the classroom. Copyright guidelines established for educational fair use specify face-to-face instruction and interpretations vary with regard to their application to materials distributed to students at remote sites over video or computer networks. Much of the focus of this debate relates to whether or not remote instructional sites qualify as face-to-face instruction. Typically educators favor the inclusion of such sites, while producers, distributors, and publishers do not. For example, the recently negotiated "Fair Use Guidelines for Educational Multi-Media" limit the use of multimedia materials to:

- Remote real-time instruction to students enrolled in curriculum-based courses (that is, no recorded or rebroadcast courses)
- Transmissions over a network in a manner that prevents making copies of copyrighted materials

The limitations of real-time instruction and security requirements serve as formidable barriers to many distance education applications. (For more information on the guidelines, see the following World Wide Web site: http://www.lib.berkeley.edu/MRC/kastenmeter.html.)

Legislation, case law, and institutional policies—already difficult to apply to copyright issues in contained classrooms—fail to address the power of the video and computer networks used in distance education today. Furthermore, policies that inadequately address infringement and permission as applied to slides copied from reference books and use of off-air or recorded videotape completely fail to deal with issues of licensing, permissions for broadcast, or computer distribution. Faculty and students can copy, modify, and distribute materials without understanding the implications or potential institutional ramifications of copyright and intellectual property rights. From an administrative perspective, concerns can be categorized into issues related to:

- Faculty-produced material that incorporates elements whose copyright is controlled by others, or faculty use of commercial products
- Student-produced material and the releases or permissions that should be obtained to use student materials in distance education contexts
- Team-produced material and the issues of ownership surrounding crediting and assignment of ownership and the implications associated with future use of materials produced by production teams involving faculty, students, instructional designers, and production staff

Course Materials on the Internet. The Internet raises a number of issues that further complicate the educational use of copyrighted materials. From its origins in the ARPANET and BITNET, the Internet developed in an atmosphere of cooperation and collaboration. In the early days, commercial products were few and information being transmitted was primarily text. The "culture of sharing" that evolved from these early days has clashed with the concept of ownership as defined by the protections and rights outlined in copyright and intellectual property law. The economic potential of electronic versions of traditional media such as books, photographs, graphics, and video has renewed commercial interests relative to licensing and commercialization.

During this same period, distance education evolved from broadcast to satellite, microwave, and cable distribution for video materials. Now computers and network capabilities make it possible for educators to reach vast new student populations. Production capabilities available to the average user permit scanning and video capture, and the Internet provides convenient access to millions of text, graphic, and video resources. The ability of faculty, staff, and students to acquire, modify, and create materials using technology-based resources reflects technological advances unimaginable to the Congress drafting the 1978 copyright law.

Electronic Publication Rights. Electronic publication rights provide another area that has increased in complexity due to the increasing commercialization of the Internet. Few community college faculty members are aware of the considerations associated with the assignment or licensing of
their intellectual property when negotiating publishing contracts. Some of these considerations include rights to derivative works, display, performance, and distribution in electronic as well as print media.

Many contracts assign copyright to the publisher and include broad print and electronic rights. Unless specified in the contract, faculty who sign away the copyright for their work may be required to obtain permission and pay copyright fees to the publisher to duplicate and use their own work. Electronic distribution may also address any revenue derived from licensed duplication through services such as Uncover, which provides access to materials by charging service and copyright fees. The copyright fees range from a few dollars to almost $100 with a significant portion of the copyright fee going to the copyright holder.

The process of obtaining print or electronic rights to use copyrighted materials is time consuming, and provides no guarantees that the copyright holder will permit use of the material. In addition, if permission is granted, cost and guidelines for use vary dramatically. Important considerations in requesting permission for print material include the number of copies, proportion of the work to be duplicated, and the amount competitive the reproduction is with sales of the text or reprint. Electronic rights are even more difficult to assess when deciding whether to grant permission and what fees to charge. Some copyright holders may be flexible and permit electronic use, but may limit access by requiring passwords. Others may charge exorbitant fees. Many will not permit any electronic use at all.

Transmission over video or computer networks—common for distance education courses—involves electronic rights when printed material is captured by the video camera and scanned into a document or used as a graphic. These conversions of media are derivative works and even relatively liberal interpretations of the guidelines indicate that permission of the copyright holder is needed if such materials are distributed over networks.

A great fear among producers is losing control of material that is available electronically. Duplication is extremely easy and the result of a single open posting can significantly affect the market for the material in print. Potential loss of revenue coupled with the complexity and current unreliability of billing for individual use considerably complicates the process of obtaining permissions for electronic use of copyrighted material. Faculty wishing to post their articles on the Internet should check the contract and publication agreements to determine if they have retained the right to do so. For future publications, authors should consider potential use of their materials, retaining the rights necessary to use their work.

Faculty members typically acquire materials to support their teaching from a variety of sources, often using broadcast materials, videotape, films, slides, CD-ROM software, and Internet materials. The penalties associated with violation of copyright can be severe. Fair use guidelines represent an attempt to accommodate the needs of traditional classroom applications.

Fair Use

Initial efforts to provide flexibility and permit justification for the educational use of copyrighted materials in a limited context without the need to obtain permission resulted in the Agreement on Guidelines for Classroom Copying in Not-For-Profit Educational Institutions (1976). The guidelines (in section 107 of H.R. 2223) state the minimum standards allowable for educational uses of copyrighted material. These include "criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research" (p. 65). The guidelines then stipulate four factors that are considered when determining fair use.

- The purpose and character of the use
- The nature of the copyrighted work
- The amount and substantiality of the portion used in relation to the whole work
- The effect on the potential market for or value of the copyrighted work

Although the use of copyrighted material without permission is an infringement, the fair use guidelines provide a framework for the justification to waive liability if all four of the criteria have been met.

The perspective of what is acceptable and what is infringement forms a continuum, from the viewpoint of the user (who is interested in economical access) to the publisher, producer, or copyright holder (who are all interested in protecting rights to a work). Even an author who intends to freely distribute a work is usually interested in receiving due credit if the work is distributed or reproduced. Interestingly, the guidelines readily acknowledge that technological developments may affect the interpretation of fair use in the future.

Because the fair use guidelines are broad and open to varying interpretation by faculty, librarians, media professionals, and administrators, the courts and various agencies have provided additional direction in refining the concept of fair use. The National Commission on New Technological Uses of Copyrighted Works addressed fair use in the CONTU report (Committee on the Judiciary, 1978). In addition, the Conference on Fair Use also issued some draft guidelines, available on-line at http://www.usystem.edu/ogc/intellectualproperty/confu.htm. Although these guidelines have finally evolved to a point of effectively addressing print duplication, they are still working on issues such as library reserve and interlibrary loan. Unfortunately, the evolution of policy falls far behind the needs of distance educators, computer networks, Internet developers, or the myriad of other people using technology in education today. The laws and policies cannot develop quickly enough to guide the application of technology, which today changes exponentially.

The Kenteneier Guidelines represented an initial attempt to address off-air recording of broadcast video materials by nonprofit educational institutions (Congressional Record, 1984). The guidelines are vague in their application to
The tremendous growth of the Internet and WWW together with the changing role of higher education from a contained classroom model to a distributed media model has profound implications for fair use. Technologies such as video (via satellite and cable) and the WWW drastically change the ground rules for using educational materials that are not self-produced.

In 1993, the Consortium of College and University Media Centers (CCUMC) began to assemble interested parties to establish guidelines for multimedia. The CCUMC Fair Access Working Committee brought together representatives from the education, software, publishing, broadcast music, motion picture, and video industries to begin discussions designed to establish guidelines for the educational use of copyrighted materials in distance education (Consortium of College and University Media Centers, 1995).

From the educator’s perspective, the intent was to broaden access to materials without the need to spend time locating and obtaining permission from the copyright holders. Because the interests of copyright holders lie in protecting the market for their materials, they have acknowledged that their interests might be served by slightly broader interpretations of nonprofit educational use rather than narrow restrictions that could be costly and difficult to enforce.

After significant negotiations but well before closure, a series of draft guidelines were drawn up and used as the basis for discussion at a teleconference, primarily for educators (Consortium of College and University Media Centers, 1995). The action of the CCUMC workgroup was slowed by the concerns of network distribution of copyrighted materials by educational users (Jacobson, 1995).

Thought not universally endorsed, the guidelines have been supported by organizations such as the Instructional Telecommunications Council and the American Association of Community Colleges. These guidelines are initial attempts to address a number of critical issues including what materials can be used, time limits, acceptable portions, copies, and use over distance learning systems (Dalziel, 1997). However, many issues remain unresolved for use in distance education, including student limits at remote sites and the requirement that delivery technology prevent copying.

Even the more liberal distance learning fair use guidelines proposed in the CONTU discussions limit fair use to nonprofit educational activities “transmitted over a secure system with limited access” for single, one-time use. Other factors that limit potential distance education use include references to “classrooms or other places normally devoted to instruction” that are “directly related and of material assistance to the teaching content.” In addition, any copies retained for student use may not be reproduced and must be erased not more than fifteen days after transmission. For computer-based material, the guidelines remove the restriction of a classroom or instructional space, but do not allow copying by individual students. These guidelines are available online at http://www.usystem.edu/og/intellectualproperty/disguid.htm.

Two key factors influence the importance of the Internet and its impact on educational administrators. The first is the change from paper copies handed out in the traditional, self-contained educational classroom that is assumed in copyright guidelines to increasingly distributed, “published” documents available via network to students and the community. Like other extended educational applications, the potential size of the audience and the noneducational nature of the transmission media shift Internet applications toward the commercial end of the continuum in the eye of the public and policymakers.

The second factor is the growing awareness of materials available on the Internet. The public perceives the Internet as a tool of commerce. The economic potential of using the network is driving policy discussions relative to licensing, and has greatly restricted more liberal copyright use permits. Prime evidence is the current trend to tighten restrictions for educational use and the strong movement to empower the copyright holder as evident in the current National Information Infrastructure white paper (Lehman, 1995).

Recent efforts to revise copyright law have involved recommendations that significantly shift the balance of fair use by strengthening the rights of the copyright holder and limiting the ability to use materials without obtaining permission. As the Internet increasingly reaches a broad and affluent marketplace, information providers such as publishers and distributors will likely increase efforts to reach much broader markets than they previously targeted. Thus efforts to market more broadly appear to significantly affect the impact of the specific use on potential marketability, a key fair use criterion.

**Duplication Infringements**

The rapid expansion of communication technologies like the World Wide Web has challenged the concept of fair use, and teachers are venturing into uncharted waters. Materials that they once would have duplicated for single-classroom use are now being distributed across networks and are suddenly available to a much larger audience.

Policies to regulate duplication are not able to keep up with the development of reproduction technologies. Browsers and scanners have changed the way in which documents and images are used and exchanged. What once took hours now can be done in minutes. Images and text can be used, transformed, and reused in a variety of formats. Files can be easily captured, stored, and reused—often without an acknowledgment for their creator. Images can be manipulated and revised at will. All these duplication infringements occur in the absence of firm policies to deter the person doing the duplicating. Indeed,
many people are unaware that they are violating the intellectual property rights of others when they borrow an image from the Web or scan an article to send to their class.

Perhaps the most visible example of duplication infringement can be found on the thousands of home pages springing up on the Web. The broad range of technologies that are suddenly available, and the ease of placing text, video, and graphics on a home page, exacerbates the problem. Without a clear policy outlining what is and what is not acceptable in terms of duplicating, teachers will continue to use what is available to them. As technologies allow duplication to become easier and faster, problems for educators, publishers, and producers of original material will continue to grow.

Revenue Generation and Faculty Ownership

Another issue that must be addressed is ownership of materials. Although in business materials produced by employees are considered to be the property of the employer as works-for-hire, academia has not had a similar tradition. Books and articles written by faculty members at community colleges and universities have been considered the intellectual property of the faculty member. Recently, as teams of teachers and production staff have developed software or courseware together, the issue of ownership has become increasingly complex. Educational institutions, seeing that the development of multimedia materials has become lucrative, are becoming interested in their fair share of the revenue.

The development of Internet courses raises questions concerning who owns the course, the faculty or the institution. Issues surrounding production incentives such as overload pay, release time, and institutional rewards are convincing administrators that materials developed using college resources rightfully belong to the college. When faculty work results in money being returned to the college, where should those funds go? Should they be returned to the local account, to the faculty member, or to general institutional overhead? Policies that clearly outline ownership are common in regard to patents in many research universities. However, few community colleges address the issues of ownership of courses and curriculum materials in their faculty contracts or policies. Therefore, when questions of control or revenue distribution arise, faculty and administrators must react with little guidance or direction, usually only after the issue has become a concern to one or both parties.

Student-produced materials pose an additional problem. If a student produces a product for class, who owns the product? If the student is hired to produce a product (on a grant, for example), who owns the product? What is the difference between work for hire and contracting services in terms of intellectual property rights? Unlike the private sector, academia has traditionally allowed creators to retain ownership. Colleges must address troubling issues such as ownership and control of instructional materials, and policies must protect both the individual and the institution.

Conclusion

The issues surrounding copyright and intellectual property are very complex, and operate in an ever-changing environment. To avoid finding themselves in the position of responding to a cease-and-desist letter from a publisher as described in the opening of this chapter, teachers and administrators need to be aware of copyright and ownership concerns and work to develop and implement appropriate policies. Critical decisions must be made based on interpretations of general policies rather than on firm guidelines. One way to begin to understand and address the issues of copyright and intellectual property in education is as a continuum from low to high levels of risk. Policy and guidelines can be used to define the continuum in general terms. Informed administrators and counsel must then determine a point or range that represents an appropriate risk level. Finally, institutional policies and procedures must be developed to support that position. Some of the key elements appropriate to address in institutional policies include:

- Efforts to educate and increase awareness about copyright and intellectual property issues and relevant institutional policies
- Ways to access information and assistance in obtaining licensing, clearances, and answers to copyright and intellectual property questions
- Resources available to provide access to licensed originally produced materials
- Criteria for establishing ownership and procedures for using materials produced by faculty and students at the institution (print, multimedia, and intellectual property in addition to patents)
- Consequences for violation of institutional policies, and procedures for appeal from those consequences

Comprehensive institutional policies will provide some protection to the institution while lending credibility to educators and librarians in their efforts to shape national and international policies and laws that support educational use and increase access to our communities.

Publishers, producers, and other creators of materials have been the driving force behind recent efforts to address these issues. Studies such as the National Information Infrastructure green and white papers on copyright have had little initial input from libraries and educators. As a result, they generally recommend strengthening the position of the copyright holder while restricting public access and educational use without proper licensing. An intense effort by educational and library organizations slowed this process down and returned educational use and public access to the national debate.

This new role of advocacy will grow in importance as the use of technology in education and libraries provides increasing access by remote users. Critical to this process are the continuation of cooperative discussions between the various interests such as the Consortium of College and University Media Centers and their work with publishers and media producers. Discussions
such as these should be encouraged to ensure the development of effective licensing models and procedures designed to address the needs of both users and copyright holders.

Swifter procedures for obtaining copyright permission must be devised. In this period of change when institutions of higher education are resisting, reengineering, and reinventing themselves, the technological revolution offers a variety of solutions to problems of classroom space, course delivery, and differentiated staffing.

Telecommunications licensing and copyright issues are two areas in which federal legislation must move ahead to keep pace with technology, if educators are to truly benefit from the technological revolution. Higher education must be aggressive in helping to formulate telecommunication and copyright policy at the national level. Without the input of educators, the telecommunication industry will formulate policies that may not serve the interests of education. It is essential that the higher education community learn how to compete in this new electronic marketplace and extend the reach of campuses into the home and workplace.

References


Distance Education and the Community College: From Convention to Vision

Connie L. Dillon, Rosa Cintron

As distance education plays an increasingly dominant role in community college education, it stands to alter the function of the community college at a time when the community college is poised to challenge traditional conceptions of higher education. Brey (1991) documents significant increases in the number of community colleges that are using and planning to use distance education. These figures surpass both the actual and anticipated use of distance education in other sectors of higher education. Two-year colleges make up the largest sector of higher education, in both numbers of institutions and enrollments. The forces predicted to serve as catalysts for change in higher education—increased diversity in student population, new partnerships with business, and competition from commercial providers—have a strong influence on the community college (Rossman, 1992). Community colleges are often the first to venture beyond predictable and comfortable borders in higher education, seeking to fulfill their open-door mission and tradition of community service.

This volume has made clear that until now, the response to the innovation of distance education has been dominated by questions of effectiveness. Considerable further research is needed to help us better understand how to use telecommunications effectively in education. But technological change may force us to rethink the very meaning of effectiveness in education—so some new questions are in order.

Our exploration of the current literature was organized into three thematic areas identified as important by community college leaders (Morrison, 1995):