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Hearings on Distance Education Through Digital Technologies

U.S. COPYRIGHT OFFICE, LIBRARY OF CONGRESS

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Summary

I am James G. Neal, Dean, University Libraries, Johns Hopkins University. I am here today as a representative of five of the Nation's leading library associations, the Association of Research Libraries, the American Association of Law Libraries, the American Library Association and its division, the Association of College and Research Libraries, the Medical Library Association, and the Special Libraries Association. I appreciate the opportunity to testify on distance education - this is an issue that is increasingly redefining how our institutions provide educational services, both today and in the years ahead.

There are four key points that I would like to emphasize this afternoon:

- We recommend that the current distance education exemption be updated to facilitate use of the latest technologies and pedagogical practices.
- As in earlier legislative debates, it is important to balance the interests of users and owners of copyrighted works so that education institutions, including libraries, may fully realize the benefits of information technologies and the networked environment.
- In designing changes to the copyright laws, it will be important to ensure that the statute is sufficiently flexible to incorporate new technologies not yet developed or now thought of as "cutting edge." In a rapidly changing technological environment, permitting institutions to utilize the most effective and efficient technologies is critical to meeting the educational mission.
- Licensing is not a replacement for a statutory balance of rights. Statutory language provides

important policy guidance that permits reasonable parties to engage in licensing discussions which, ultimately should complement the law. Unless federal copyright policy explicitly provides for a modern distance learning limitation in keeping with educational needs and technological opportunities, users negotiating licenses will find that the current law leaves them more subject to terms and pricing on a "take it or leave it" basis.

Distance Education and Libraries

There are many definitions of distance education which in part are illustrative of the rapid change that the field is experiencing. Two popular definitions by the U.S. Distance Learning Association and the University of Wisconsin are:

- 1. The acquisition of knowledge and skills through mediated information and instruction, encompassing all technologies and other forms of learning at a distance; and
- 2. A planned teaching and/or learning experience that uses a wide spectrum of technologies to reach learners at a distance and is designed to encourage learner interaction and certification of learning.

The key feature of distance learning, as described in these definitions, is its ability to be delivered anytime, anywhere, to anyone utilizing a growing array of information technologies. This exciting potential K-99 for both the public and private sectors - holds important promise for the United States to maintain its leading edge in the global economy.

A variety of approaches can facilitate distance learning. With the advent of new technologies a number of new delivery models have emerged; the remote classroom, networked learning, and self-paced independent learning. These approaches include both asynchronous and synchronous communication, Internet and web-based training, interactive television, audioconferencing, videoconferencing, and more.

The remote classroom approach to distance learning is modeled after the traditional classroom method of teaching. It is enhanced, however, by the use of audio and video technologies. This approach is often used in an effort to deal more efficiently with large groups of students in different locations. It allows instruction to be delivered beyond the confines of the originating site, and provides significant opportunities for real-time interaction between instructors and learners. Modes of delivery which support this approach to learning include technologies such as interactive television and one-and two-way satellite videoconferencing.

Interactive television and videoconferencing allow two or more people at different locations to see and hear each other at the same time. These technologies establish a visual connection among participants and can facilitate a high degree of collaboration between delivery sites. Videoconferencing varies in its level of synchronous interactivity. It can be one-or two-way video with one-or two-way audio. Although interactive television and videoconferencing bridge distance by linking disparate locations, they do require participants to travel to a downlink site at a pre-defined time.

The networked learning approach is characterized by its predominant use of asynchronous communication between learners and teachers. It is time-and place-independent, unlike the remote classroom approach, and involves many-to-many interactive communication. This approach is unique in its goal of fostering collaboration and interaction between and among instructors, learners and their educational resources. Networked learning is very flexible in that it allows the learners to determine the pace of study and control their activity. The predominant mode of delivery for networked learning is the web-based course.

Web-based learning presents dynamic content in an environment allowing self-directed and self-paced

instruction. Web-based learning has several key characteristics. It has the ability to deliver diverse media components and is platform independent. Learning resources can extend beyond the basic course content to include Internet resources, commercial databases, and public domain resources. Communication between learners and facilitators can be seamlessly integrated into the web-based course environment via online discussion software tools. Content can be easily updated to reflect the changing interests of the facilitators and learners. Finally, elements of asynchronous communication can be built into the course design in order to provide learners with a real-time educational experience.

Library Activities

With the rapid growth in distance education initiatives, there is an expanding role for libraries in distance education support services. Experience to date demonstrates a variety of programs supported by different academic departments with the library providing a number of services. These distance education programs range from instruction at remote sites by traveling faculty, to satellite transmission, to distance learning via the network with students and faculty working from a variety of settings. The challenge to the library is to support all of these disparate activities which, in part, calls for experimentation to address evolving programs. Such support can include maintenance of off-site collections at regional centers and campuses, interlibrary loan units, other delivery services including electronic delivery of information resources, reference assistance, and access to needed materials locally and off-site via consortium and other arrangements.

Providing access to reserve readings in the electronic environment is one of the most innovative services being offered. Students enrolled in a distance education course may access readings online. Librarians use passwords to protect e-reserve files and make them accessible only to students enrolled in a specific course and only for the duration of the course.

In addition, librarians in many instances coordinate and manage the permissions process for distance learning courses and provide additional training and technical support to distance education students. Another key role for the library in a distance education program is to establish how these students will be authenticated to have access to licensed resources in addition to taking advantage of other library services. Ensuring effective access, both technologically and with regards to meeting information needs, is a crucially important element of a successful distance learning enterprise.

The following examples illustrate how selected libraries are using digital technologies to serve the needs of distance learners.

- At the Johns Hopkins University, the Libraries are providing an expanding array of content and information services to a growing body of distance learners regionally, nationally and internationally. These services include: electronic reference materials, online reference services, access to citation and full-text databases, electronic and fax delivery of materials, interlibrary loan services, electronic course reserves, discipline home pages, and electronic instruction. An excellent example is the library support provided to students in the Business of Medicine Program, approximately 350 physicians and other health professionals taking Hopkins courses at 25 sites around the country through the Calibre/Sylvan Learning Network.
- The University of Maryland University College (UMUC) Library serves a large number of undergraduate and graduate students via the Internet in three primary areas of service: reference, document delivery, and instruction. Students have access to reference librarians through asynchronous computer conferencing, live chat sessions and email. Document delivery is facilitated by providing distance learners with secure access to a select number of the library\(\tilde{\text{ls}}\) 56 licensed databases on the Web. Students can also access resource material electronically via UMUC's e-reserve system. In the area of instruction, librarians participate as guest lecturers in distance

education courses offered via UMUC's web-conferencing system, Tycho. They are also developing a virtual library classroom which will include online tutorials and a required course for graduate student researchers.

- The University of Maine System Network (UNET) offers more than 96 courses per semester at over 100 locations with instruction via interactive television, compressed video, two-way web-based courses, and video-in-a-box, in which lectures are provided on tape and interaction is conducted via e-mail and class listservs. Library services are coordinated through Off-Campus Library Services (OCLS) which manages all intellectual property issues, including course reserves for faculty engaged in distance education activities. The University's digital library, Mariner, is available at all remote locations, with the students' library cards giving them access to the system. OCLS also provides access to resources via web-based fulltext databases and electronic reserves. In addition, a toll free number for either reference or technical assistance is available to distance learning students. Finally, OCLS expands on its traditional training role by conducting bibliographic instruction sessions regularly via interactive television.
- The National Laboratory for the Study of Rural Telemedicine at the University of Iowa College of Medicine is conducting a series of five telemedicine research projects in the areas of diabetes, vacular ischemia, children with disabilities, pediatric echocardiograms, and psychiatric services in rural areas. Major funding for these projects is being provided through a contract with the National Library of Medicine. The Laboratory is also supporting the following Information Support Projects in collaboration with the Hardin Library of the Health Sciences at the University of Iowa.

Library services have been shown to be highly utilized and capable of influencing medical decision-making. The first of two information support projects, based at the Hardin Library, will provide electronic medical library services, including document delivery, to rural hospitals. Patterns of use and incorporation into practice will be tracked. The second project, the Virtual Hospital, is a digital multimedia database supporting "just-in-time" access to information for practice and continuing information, as well as patient instructional materials. Information in the Virtual Hospital is taken from medical textbooks, faculty lectures and presentations, patient case studies, and other health information sources. The multimedia aspect allows the user to view textual, graphical, audio, and even full-motion video information within the same interface. A major strength of this database, which is already in limited use on the Internet, is its adherence to industry standard protocols.

• Distance education has not only affected the services libraries provide to faculty and students, but has also revitalized library education. Many institutions have incorporated distance learning into their traditional library and information science education programs. The Graduate School of Library and Information Science (GSLIS) at the University of Illinois Urbana-Champaign, for example, offers one of the top five Master of Library Science (MLS) degrees in the nation. For many years, GSLIS has offered a Friday's-only master's program for working adults who live within reasonable driving distance from the Urbana campus. The growing popularity of this unique program led GSLIS to explore the possibilities of Internet- based delivery. Their LEEP3 program, now in its second year, makes it possible for students at the far corners of the state to complete almost all of their master's coursework over the Internet. They use advanced technologies that provide asynchronous, web-based instruction. Audio, video and real time chat sessions are all a part of the LEEP3 experience.

Copyright and Licensing Issues - Updating the Copyright Statute

As the Copyright Office undertakes to review and consider possible changes to the copyright law to accommodate digital technologies in distance education activities, it is important to consider the context

for educational exemptions included in the 1976 Act and why these are equally applicable, indeed, require updating today. Educational institutions, including libraries, are the primary means by which our society permits the free and open exchange of information and ideas. The Copyright Act and subsequent revisions such as the Digital Millennium Copyright Act encourage such exchange in recognition of the clear public policy benefits, which accrue to members of the public and private sectors and to the advancement of knowledge.

In crafting an exemption for educational institutions in 1976, Congress explicitly recognized that not-for-profit educational institutions are instrumental in "promot[ing] the progress of science and the useful arts." Thus, among some of the exemptions included was a limitation on proprietary rights of Sec. 106 in support of educational activities. This and other exemptions are the means by which the drafters balanced the rights of owners and users of copyrighted information while advancing societal interests. Such balancing is again needed today to permit educational institutions, including libraries, to fully capitalize and realize the benefits of information technologies and the networked environment.

In a nutshell, the law should be updated to make it unequivocal that, just as face to face teaching is an essential educational activity, so to is distance learning. As a matter of copyright policy, members of the educational community should be expressly authorized to engage in distance learning activities, using digital technologies, as is permitted today in the classroom. There should not be a distinction between what is permitted in a "traditional" classroom and access to educational resources in a remotely controlled environment. Technologies are no longer limited to non-interactive modes of delivery and include videoconferencing, computer- based training, web-based training, and more.

Policies should encourage experimentation and exploration to take advantage of the opportunities afforded by the networked environment. In addition, in designing changes to the copyright laws, it will be important to ensure that the statute is sufficiently flexible to incorporate new technologies not yet developed or now thought of as "cutting edge." In a rapidly changing technological environment, permitting institutions to utilize the most effective and efficient technologies is critical to meeting the educational mission. These policies will, in part, depend upon a legal framework that allows for educational programs to evolve over time and not be restricted to outmoded delivery mechanisms.

Licensing Activities

Libraries and educational institutions negotiate hundreds, indeed thousands of licenses each year in support of educational activities. In the library community, we purchase or license approximately \$2 billion of information resources each year. Licensing has become a fact of life in our institutions, and is one of several outgrowths of law to further define terms and conditions of access. But licensing is by no means a replacement for a statutory balance of rights. In fact, statutory language provides important policy guidance that permits reasonable parties to engage in licensing discussions which, ultimately should complement the law. The mere availability of license agreements by no means negates the need for a reaffirmation of congressional policy with regards to access to educational materials, locally and at a distance. Absent reform, current law leaves those in distance education at a disadvantage negotiating licenses.

Congress has acknowledged the crucially important societal function of educational institutions, including libraries in the distance education arena. This has not changed today with the availability of licenses. In fact, it has been demonstrated that licenses can undermine privileges available to libraries and educational institutions. Licenses can restrict, indeed deny fair access to needed information resources, price users and institutions out of the market depending upon terms, and importantly, deny access to resources based solely on cost.

It is critically important to comment at this juncture on a few of the letters received by the Copyright

Office regarding the availability of license agreements. Some libraries have noted that site specific license agreements make serving remote users almost impossible. In some cases, access to remote users is expressly prohibited.

Finally, statutory recognition of educational and library limitations or exemptions has permitted a fair and more balanced process to occur in license negotiations. Such leverage is crucial to maintaining a level playing field in a license discussion. The notion that there would be appropriate exemptions in support of educational purposes should not be undercut nor negated by license agreements. Unless federal copyright policy explicitly provides for a modern distance learning limitation in keeping with educational needs and technological opportunities, users negotiating licenses will find that the current law leaves them more subject to terms and pricing on a "take it or leave it" basis.

Other Approaches

The Copyright Office has also raised the issue of the value of voluntary guidelines such as those discussed over the past few years under the auspices of the Conference on Fair Use. Despite extensive discussion, none of the draft guidelines were ever adopted by the higher education and library community. The proprietary community endorsed the CCUMC guidelines, but only after negotiations broke down. In fact, the CCUMC Guidelines were extremely controversial in part because of the suggestion that the guidelines could be converted from a 'reasonable safe harbor' to the outer perimeter of fair use. The leading higher education and library groups (fourteen associations) opposed them. Thus experience in this arena demonstrates that development of guidelines upon which all sectors can concur has not been productive, indeed, became a highly controversial exercise with little to show for extensive effort. The library community does not support revisiting the process of guideline development in the distance education arena.

Conclusion

The library community welcomes the opportunity to work with the Copyright Office to explore the current and evolving parameters of distance education and to ensure that the benefits of the networked environment can be realized by education institutions of all types in designing distance education programs both now and in the future.

AMERICAN ASSOCIATION OF LAW LIBRARIES (AALL)

The American Association of Law Libraries is a nonprofit educational organization with over 5,000 members nationwide. Our members respond to the legal and governmental information needs of legislators, judges, and other public officials at all levels of government, corporations and small businesses, law professors and students, attorneys, and members of the general public.

AMERICAN LIBRARY ASSOCIATION (ALA)

The American Library Association is a nonprofit educational organization of 58,000 librarians, library educators, information specialists, library trustees, and friends of libraries representing public, school, academic libraries dedicated to the improvement of library and information services. One division of ALA, the Association of College and Research Libraries, has a membership section dedicated specifically to distance education with an interest in how to provide resources and services to distance learners.

ASSOCIATION OF RESEARCH LIBRARIES (ARL)

The Association of Research Libraries is a not-for-profit organization representing 122 research libraries in the United States and Canada. Its mission is to identify and influence forces affecting the future of research libraries in the process of scholarly communication. ARL programs and services promote equitable access to, and effective use of, recorded knowledge in support of teaching, research, scholarship, and community service.

MEDICAL LIBRARY ASSOCIATION (MLA)

The Medical Library Association is a professional organization of more than 5,000 individuals and institutions in the health sciences information field. MLA members serve society by developing new programs for health sciences information professionals and health information delivery systems, fostering educational and research programs for health sciences information professionals. and encouraging an enhanced public awareness of health care issues. Through its programs and publications, MLA encourages professional development in research, education, and patient care.

SPECIAL LIBRARIES ASSOCIATION (SLA)

The Special Libraries Association is an international professional association serving more than 14,000 members of the information profession, including special librarians, information managers, brokers, and consultants. The Association has 56 regional/state chapters in the U.S., Canada, Europe, and the Arabian Gulf States and 28 divisions representing subject interests or specializations. Special libraries/information centers can be found in organizations with specialized or focused information needs, such as corporations, law firms, news organizations, government agencies, associations, colleges, museums, and hospitals.