

The University of North Carolina at Chapel Hill

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1. Nature of Distance Education

(a) How may distance education be defined? In what sense does it differ from traditional face-to-face education? To what extent does it utilize digital technologies? In what sense does it differ from the general use of electronic communications in educational settings?

Distance education is defined in terms of its *purpose* (degree-based, enrichment, or continuing education); *delivery methods* (using a specific technology or not; remote or face to face; individualized self-study or group); and *audience location* (off campus in one location or many). At UNC-CH all of these factors are represented in programs that we generally call "distance education." The common factor is that all or the majority of the program is delivered to students at a location other than the geographic campus. Increasingly, our definition has come to include the use of digital technologies in delivering instruction off campus.

One definition of distance education which seems to fit the UNC-CH practice is offered by W. Dees Stallings, in *Distance Education* (2d ed., Prentice Hall, 1997), p1-2:

"The Institute for Distance Education has a broad yet useful definition. 'The term *distance education* represents a variety of educational models that have in common the physical separation of the faculty member and some or all of the students.' If we simplify, we can say there are two basic models. First, there is the *distributed classroom*, examples of which include interactive TV and audioconferencing; in this model, interactive telecommunications technologies extend a classroom-based course to other locations. Second, there is the rapidly growing *independent learning* model, in which students are freed from having to be at a particular place at a particular time. Students and instructors communicate via any one or a combination of technologies, at their individual convenience. Examples include computer conferencing, E-mail, voice mail and regular mail. "

Some UNC-CH programs are delivered face-to-face but in other off campus locations. In some cases, the instructor travels to the students' location. In other cases, videoconferencing links the instructor and the students in designated classrooms. This distributed model has been more common in the past than the independent learning model. Increasingly the trend is to deliver distance

education using online technologies, and to create more independent learning environments. Some existing off campus programs are converting their curricula to using online technologies at the same time that on campus programs are making this conversion also. The attraction of online technologies is the ability to expand access to education beyond specific geographic locations, to reach learners wherever they are. Even for on-campus students, online courses offer the flexibility of access at times and locations convenient to the student. Digital technologies also offer advanced capabilities of student-faculty interaction; and the ability to customize instruction to the specific needs of the individual learner.

The use of digital technologies per se does not define distance education, however. The other element is that students are physically located off campus. One essential difference between the use of electronic communications on campus versus off campus is the reliability and security of access over a campus network that is under the control of campus personnel. There are many more variables to consider when students access instruction using various digital media from many locations over many different networks and Internet service providers.

(b) What is the nature of the distance education programs using digital technologies that are currently available, or in development? Do they involve students using the Internet as a resource, communicating with teachers by e-mail, communicating with class members in chat rooms, or participating in classes conducted by teleconferencing? To what extent are they interactive? To what extent are they asynchronous? To what extent are copies made or kept, and by whom?

There exist at least three complete distance education degree programs that are under development or in place using digital technologies: master's degree in Public Health Leadership; external (non-traditional) Doctor of Pharmacy; a planned online master's degree in Nursing; and individual courses in areas such as City and Regional Planning. In addition, the School of Public Health will offer its curriculum's five core courses in a web-based format for both on-campus and distance education students in the Fall of 1999; and UNC is part of the statewide (multi-institutional) Distance Education Consortium in Speech-Language Pathology. This is not a complete list of all UNC distance education programs.

As an example, the Public Health Leadership distance education program uses all of the technologies mentioned in the question. Students convene at designated locations for interactive videoconference sessions. Apart from class, they interact with the instructors and with each other via electronic mail and chat rooms; and they utilize both Internet resources and electronic resources from the main Health Sciences Library. The Speech-Language Consortium uses original content transmitted over the Internet, via satellite, or ISDN, and wishes to protect

this content from unlawful use by others. At the same time, this program uses segments of purchased videotapes and tapes of professional conferences, broadcast with permission in class teleconferences.

UNC differentiates between electronic components of face to face teaching, such as use of a class listserv, web site or threaded discussion list used as an adjunct to the classroom; and courses in which the instruction is delivered entirely electronically. This type of distance learning course can have live-time components but no face to face (simultaneous presence of instructor and students in the same physical classroom). Interactivity varies depending on the course. Copies of course content tend to be maintained by the course instructor.

(c) Are course materials made available in electronic form? To whom are they made available? What restrictions are imposed on their access, use, modification or retention?

Some course materials are made available electronically via individual course web sites, and restricted to enrolled students by means of passwords. When copyrighted materials are scanned (copied) into PDF format, and made available electronically by the libraries for use in a specific course, they are available only for that course semester. Subsequent use requires obtaining publishers' permission and paying royalties for access to these materials. When copyrighted materials are distributed as part of a coursepack, permission is sought and royalties are paid just as for print materials.

Once these conditions are met, there are no restrictions imposed on the access, use, modification or retention of course materials.

(d) How are such programs funded? What proportion of the entities who develop or offer them are nonprofit? What types of fees are charged to students? Are the programs intended to, and do they, generate a profit?

UNC-CH programs are supported by tuition and state appropriation. Students pay the same tuition for on campus or distance education courses, by state law. They do not , and are not intended to, make a profit.

(e) What proportion of such programs are accredited? By whom are they accredited?

The courses are accredited by appropriate agencies. All degree granting programs offered by UNC are accredited by the Commission on Colleges of the Southern Association of Colleges and Schools. The School of Public Health is also accredited by the Council on Education for Public Health (CEPH) and all

two-year master's programs are accredited by the Accrediting Commission on Education for Health Services Administration (ACEHSA). In addition, the Doctor of Pharmacy Curriculum is accredited by the American Council on Pharmaceutical Education.

(f) Who are the recipients of such programs? What communities are served? Are students primarily located in any particular geographic communities (e.g., urban or rural)? Are there particular criteria for enrolling in or otherwise gaining access to the programs? How many students participate in a program at a time? Are the programs made available to students in other countries?

Sample data from two distance education programs are available. The School of Public Health's Public Health Leadership program enrolled 54 students in 1998-99. In gender and race, there was no difference between these students and their on-campus counterparts. All 54 students in the distance education program are from North Carolina, while the on-campus cohort is much more geographically diverse. The average age is higher for the distance education students: they average 40 years of age, with 13 years of work experience, and are "seasoned professionals who want to supplement their perspective on public health and develop their capacity as leaders." (source: *UNC Public Health Leadership MPH by Distance Learning: a Preliminary Description and Report, July 25, 1998*)

Another program, the Doctor of Pharmacy Curriculum, is designed to "provide an accessible means for practicing pharmacists to earn the Doctor of Pharmacy degree while minimizing extended absences from their practice. The program builds on the education, training, and practice experience of pharmacists, enhancing their ability to provide pharmaceutical care with their practice setting. The professional curriculum provides outcomes equivalent to the on-campus entry-level Doctor of Pharmacy program, and flexible schedules and nontraditional learning formats are used to meet the needs of practicing pharmacists." (source: *UNC External PharmD Program* <http://www.pharmacy.unc.edu/xpharmd/index.html>) Approximately 250 students have been admitted to this program since 1995, and 44 students have graduated in three years.

(g) At what level are such programs offered? Are they offered at the level of elementary school, high school, college, graduate school, or adult education? Are courses offered for credit, and as part of degree programs?

UNC-CH distance education programs are offered at the undergraduate, graduate, and continuing education levels. They all offer either credit towards a degree or continuing education or certification credit.

(h) To what extent is new content created for such programs, and by whom? To what extent is pre-existing content used, and of what type (e.g., motion pictures, music, sound recordings, computer programs, books)? How is it used, and in what amounts?

Both new and pre-existing contents are used. It is rarely possible to simply put existing content into digital form without some modification; and this is desirable in order to take full advantage of technological capabilities and to provide better instruction. All media are, and should be able to be incorporated into online and teleconference courses, to the same extent that they are used in classroom-based instruction.

(i) Are there institutional policies in place with regard to the creation and use of such programs? Is any instruction provided to students or teachers in connection with such programs regarding copyright law, or regarding the giving of attribution or credit?

There is a draft institutional policy for the use of copyrighted materials for scholarly pursuits. The policy acknowledges that there is no clear foundation yet for its application to distance education. The University has endorsed the creation of an Office of Scholarly Communication that would oversee education regarding awareness of rights and responsibilities with respect to the copyright law for both faculty and students.

The University of North Carolina System (sixteen campuses) is beginning to discuss creating a framework for campuses in the system to use in developing their own policies. Their efforts will also encompass education about rights and responsibilities for faculty and students.

2. Role of Licensing

(a) Where pre-existing content is used in distance education programs using digital technologies, to what extent do the persons or entities involved obtain permission for the use of that content? Is this accomplished by direct contact with the copyright owner, or in some other way? To what extent do the parties enter into negotiated licenses, or use form contracts?

In current practice, the libraries consider fair use (no permission sought) to apply the first time materials are used, whether content is in print or digital format.

Thereafter, faculty are encouraged to seek permission and libraries will do this for materials made available through them, via direct contact with the copyright owner. Campus units and external vendors who produce coursepacks for university courses routinely seek permission and pay royalties via CCC.

Access to much of the digital content in the campus libraries is governed by terms of licenses for that content. The libraries negotiate license terms under the guidance of university legal counsel. They promote terms such as those in the "Principles for Licensing Electronic Resources" adopted by all of the major library associations (<http://www.arl.org/scomm/licensing/principles.html>). This is not a clearcut area, such as when access to print content and digital content for the same journal are bundled together by the publisher, yet the publisher seeks different terms of access for each format.

(b) To what extent do the persons or entities providing such programs rely on defenses available under the copyright law in choosing not to obtain a license (e.g., fair use, section 110(2), or the doctrine of implied license)? To what extent do they use public domain material, and if so, of what type?

Libraries encourage faculty to use the fair use option the first time materials are used, and to seek permission for any and all subsequent use. Vendors generally seek permission even for the first use. Section 110(2) is relied upon heavily as well as section 107 (fair use) when copyrighted materials are used. Much of the material used is public domain or created by the faculty member in charge of the course.

(c) Have there been difficulties in obtaining licenses? If so, for what reason(s)? Are the difficulties different in nature or degree than for other types of uses, including traditional education and including multimedia uses generally?

There have been difficulties in obtaining licenses and permissions from publishers. Some publishers are unwilling to provide electronic access under any circumstances, or limit access to use in a building; while others charge prohibitively high access fees. Since most licenses begin with the need to identify the user population, this sets them apart from the traditional scholarly uses of print or multimedia resources. Users are rarely adequately defined by geographic location, or by IP domain, especially for distance education. It has been difficult to define the user population for a course when it may include nontraditional students not enrolled in degree programs, or students enrolled at various home base institutions but taking the same online curriculum.

(d) To what extent can technology be used now or in the future to ameliorate any difficulties in licensing? Can it serve to facilitate

the identification of rights holders, the clearance of rights and the process of obtaining licenses, including price differentiation based on such attributes as the user's purpose, need, institutional affiliation, or ability to pay?

Issues being defined as "access management" require technological solutions either through proxy servers or credentialing processes, in order to identify eligible users. However, there are also policy issues that are equally significant in the management of authorized access to materials.

(e) What other options exist for making the permissions process easier? How likely is the development of collective or blanket licensing, or "one-stop shops," and within what time frame?

There is discussion of a campuswide "blanket license" to a university that would cover coursepacks, interlibrary loan in excess of the suggestion of five, electronic reserves, and performances and displays in distance education. Such a license could be administered via the Copyright Clearance Center.

3. Use of Technology

(a) What technologies are used to prepare and disseminate digital distance education programs? Are these technologies specifically developed or produced for the distance education programs, or are they generally commercially available?

Information used in distance education programs is prepared in a variety of ways that incorporate interactive video, passive video, audio, and other media into online delivery. Software programs such as Web-CT, Macromedia's Director and Authorware, Adobe Acrobat, web design programs, real time applications, whiteboards, and html coding are used to produce, prepare, and present programs for distance education. Email, listservs and discussion groups are some of the methods used for student/faculty. The information is distributed by a variety of teleconference technology and the World Wide Web. The libraries have adopted special electronic reserves systems to manage restricted access to digital content for courses.

(b) What technologies are available to protect the security of digital distance education programs? In particular, are there technologies in use or under development that can prevent the unauthorized reception, use, or retention of copyrighted materials incorporated into such programs, or that can authenticate materials or protect their integrity? What is the time frame for the availability of such technologies? What parties or entities are developing them, and

what type of costs are involved in implementing them?

There are programs that will prevent the downloading or printing of a web page. There are authentication technologies now being applied that enable access to content only to preauthorized users (via IP address or password protection). Digital watermarks ensure integrity of content. These are just some examples of what is now available. Some of these technologies have applicability for distance education, but they also can work against the purposes and goals of distance education, which are to extend access to education and the scholarly knowledge base upon which it depends.

4. Application of Copyright Law to Distance Education

(a) Is existing law adequate in addressing current and anticipated forms of distance education using digital technology? If not, in what ways is it inadequate? Are there reasons why digital transmissions should be treated differently from education through broadcasting or closed circuit technologies, or in a traditional classroom?

Section 110(2)'s restrictions on the types of works that may be performed and where reception may occur are totally inadequate to address distance education circumstances. Copyright law needs to reflect that students may not be assembled in one place; that instruction is not an event but a process; and that transmission of programs or works in their entirety may be necessary in the course of an instructional program. Some restrictions might be appropriate where the institution cannot offer reasonable assurance of using technological means to prohibit downstream copying.

(b) Is it preferable to deal with the copyright issues raised by digital distance education through specific exemptions like section 110(2) or through a flexible balancing approach like fair use? What role should be played by voluntary guidelines such as the Fair Use Guidelines for Educational Multimedia (sometimes referred to as the Consortium of College and University Media Centers (CCUMC) guidelines)?

Fair use provisions may apply when only a small portion of a work is needed, and not the entire work. However, the 110(2) exemption should allow the performance of an entire work under certain reasonable conditions. These conditions are: the work is made available as part of real instruction; access to the work is limited to students enrolled in the course; and reasonable means are taken to prevent downstream copying. Section 110(2) should be amended to permit all types of works to be performed and reception to occur wherever students are located.

(c) If a new or amended exemption or exemptions for distance education were to be adopted:

Which section 106 rights should or should not be covered?

All rights under 106 should be exempted.

What categories of works should or should not be covered?

All works should be covered.

To what extent should there be quantitative limitations on the portions of a work that can be used?

There should be no quantitative limitations generally. Perhaps there might be a limitation on showing full length motion pictures within five years after their first release.

Who should be entitled to the benefits of such an exemption? Accredited or nonprofit institutions only?

Accredited nonprofit distance learning programs should be entitled to exemption.

How should the class of eligible recipients be defined?

All enrolled students should be eligible.

Should such an exemption be limited to nonprofit distance education activities?

See above.

Should the use of technological measures to protect against unauthorized access to, and use or retention of, copyrighted materials be required? If so, what types of measures?

No

To what extent should the availability of licenses for the use of copyrighted works be considered in assessing eligibility?

It should not be considered at all. The ability to license for use in education is the ability to restrict access. On the other hand, there could be a limitation on the number of times certain works can be used without a license.

Should there be limitations on student copying or retention of the copyrighted materials?

There is no restriction now on printed works, etc., when the student does his or her own copying. However, digital technology facilitates such copying, and produces higher quality copies, so perhaps there should be some restriction, especially on audiovisual works, computer programs, and the like.

Should the provision of electronic reserves be included?

It should be covered along with electronic reserves in general, and not treated separately for distance education.

Should the provision of any information about copyright law be required as a condition for eligibility?

Yes. Institutions taking advantage of the exemption should be required to develop and promulgate information to students about copyright, their responsibilities, etc.

Are there other factors that should be taken into account?

None

(d) What would be the economic impact of such an exemption, including the impact on the actual or potential markets of copyright owners of different types of works?

Unknown

(e) What would be the international implications of such an exemption? Would it be consistent with U.S. treaty obligations?

The exemption could be limited to works produced in the US, but this is not a good idea. Treaties now state that exemptions like fair use, the first sale doctrine, etc., are still applicable in the jurisdictions in which they exist.

Conclusion

The University of North Carolina considers distance education to be a vital and growing part of its future as an institution of higher learning. Success in distance education requires that new and emerging technologies be fully utilized along with new distributed methods of instruction which promote independent learning. Further, appropriate content must be available to support instruction off campus just as it is on campus. For this to occur, the current distance education exemption must be updated. In so doing, the interests of users and owners of copyrighted works must be balanced, just as in other areas of copyright law and policy. The exemption must allow for the appropriate use of technologies in a networked environment and must support the use of copyrighted and licensed works for educational purposes. Without this support, libraries and institutions will either have to accept whatever terms are offered, if any, by producers and publishers; or do without access to valuable scholarly content. Neither of these options is in the best interests of society.