

## TESTIMONY

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My name is Tom Henderson and I'm serving as Interim Associate Vice Provost for MU Extension at the University of Missouri-Columbia. I'm honored to share some perspectives with the U.S. Copyright Office on behalf of **our Institution**.

In preparation for this presentations, I received ideas and written input from my professional colleagues within our Continuing Education units and in particular from Dr. Dale Huffington, Director of our Distance Learning Design Center and a nationally recognized figure in this area. I share this information with you in light of the University of Missouri-Columbia's 75 years of experience in delivery of continuing and distance education efforts.

I will share with you a portion of my previously submitted written comments as time allows.

### 1. Nature of Distance Education

(a) Distance education is a planned program of instruction provided by an instructor to a student or students separated from the instructor by time and/or space.

This activity differs from traditional face-to-face education in that it need not happen "in real time" or in the same physical space. This makes it possible for people to engage in a formal program of education when they would otherwise not be able to do so because they are fully employed (or have other time constraints), are distant from locations where classes are offered, or have physical limitations making access difficult to a campus and its classrooms.

Distance education is facilitated by digital technology but can occur without it. Conventional correspondence courses use postal services; telephone conferencing and analog video transmissions via satellite, cable, or tape permit use of instructional materials and communications between instructor and students. With the growth of Internet access, the technical possibilities of networked web sites, e-mail, discussion groups, real-time conferencing and shared applications make it possible to significantly increase opportunities for students to work with other students and with their instructor. Interaction can be faster, easier, and more frequent in well designed instructional programs. However, interaction has been a part of correspondence, telephone, and video-delivered course materials long before the digital capabilities of the Internet opened up more possibilities for instructional communications among students and their teachers.

Instructional use of these digital technologies differs from general use of electronic communications in educational setting because it is driven by learning objectives. General communications may be driven by administrative, marketing, production, or social purposes. The structure and nature of the communications in a course should be governed by what students are expected to learn and how they are asked to demonstrate competency. The students who are given those communications are normally limited: only the students who have been accepted for the course and have paid their fees. Their communications, within the framework of the course activities, are considered to be private. Frequently the sequence as well as the content of instructional communications is dictated by the learning objectives of the course.

Many similarities exist between distance education and face-to-face courses. Important among those similarities is the need for access to course information that may be located in library resources (books, journals, and non-paper media). Just as students in a traditional classroom have been given "fair use" access to those resources, the student at a distance also needs "fair use" access. The privacy of the classroom for presenting reports,

demonstration projects, performances, recitals and other manifestations of learning or competency for students at a distance is important because without it, publishers are reluctant to grant permission to use materials, which have traditionally been available to students in the traditional classroom.

Without this "fair use" access, the potential of this avenue for education will be greatly limited. Individuals will lose opportunities to stay abreast of developments in their field or acquire competencies in new areas and industries will lose productive time to the necessity for transporting instructors or employees to physical classrooms.

(b) Distance education programs currently using digital technologies use the Internet as a resource. Several types of communication or learning activities are carried out with the use of e-mail, electronic discussion lists and real-time conferencing. Web sites provide an effective medium to communicate information in text, in static and animated visual forms, and can be structured to provide learning activities similar to those provided in laboratories on campus. Web sites can provide two-way interactive opportunities to acquire concepts, learn relevant information, and apply both to a new context with responses from the instructor (either live, or provided by the computer program) and from other students.

The communications medium is not inherently interactive. Even the telephone can be used as an instrument for passive reception of information. To the extent that a teleconference teacher sets up activities that require students respond and interact with other students, with the instructor, or even with the instructional material, the course involves two-way communication. When learning activities require students to absorb background information, learn and apply concepts to new information working with other students or a real-world environment and the instructor ensures that students receive guidance on how well they are doing, then the course provides opportunities for interactive higher order learning.

The interaction can be effective whether it is synchronous or asynchronous. Some students appear to do better in an asynchronous learning environment because there is time to reflect and organize their thoughts. However, some learning activities must be carried out in real time and good instructional design will reflect that in the choice of medium and evaluation methods.

Copies of the instructional materials and recording of instructional activities may be necessary for some types of instructional design; for others, it will only be necessary to have a record of satisfactory completion. Copies of a video class, for example, might be retained for use by students who were absent, and then erased after a pre-determined interval. Other instructional programs may choose to tape a full set of video classes and then permit the instructor to be in contact with students only for discussion, conferencing, and grading activities. The copies are typically made by the media production/distribution unit of the school; if not, then the instructor normally has chosen to make the copies and controls their use and distribution. In most cases, an instructional program delivered by video can benefit from preparation and distribution of course materials ahead of time; Effective interactive use of the video time requires planning and preparation even though the instructor appears to be inventing the course as it happens. Video production resources and time on video networks can be more effectively used when the class is planned, high quality materials are recorded for re-use in the course setting, and the stimulus for live, spontaneous interaction among students and their instructor is dependable.

The growth of distance education has led to creation of many more courses that exist as videotape or computer files. In the face to face classroom, course materials exist primarily as syllabi, handout materials, and lecture notes; they are considered to be the property of the instructor. Now, the existence of those materials in re-usable forms, in physical forms usually created and stored by other university employees has made it more important to have a formal agreement between the instructor as course developer and as teacher and the university. That agreement, as it is being developed on campuses across the country, typically defines who determines whether or not the course may be offered, who may teach it, and who will benefit if the course materials are to be licensed to others.

The fact that these courses may be offered to people in many locations makes it important for the university to define to what extent they will consent to a faculty member teaching a course which was developed with university resources at some other institution, especially when the other institution may be in competition with the university which developed the course. If the faculty member resigns or retires, will the course materials still be usable by other faculty members at the university? Academic culture has yet to arrive at a generally accepted set of conventions for dealing with these questions.

(c) Course materials may be made available in electronic form, depending upon the instructional design, the communications medium used for the course, and agreements between the institution and the instructor(s). Some media are difficult to use without having a pre-existing copy that can be accessed: a web site is often a series of computer files. However, it can also be dynamically created from a data base that makes up a unique presentation of materials for each user. In that case, the learning experience is as transitory as a spontaneous discussion in a face-to-face classroom.

Access to course materials (whether dynamically created or provided as a fixed set of files) is normally strictly limited to enrolled students. As in the face-to-face classroom, use of books, periodicals, and multi-media resources is controlled. Normal educational use is either licensed through purchase of texts or other materials for repeated use, or is drawn into the class on a one-time basis because it presents a contemporary application of concepts relevant to the course. Application of these principles has been more strictly applied in the distance education environment than in the face-to-face classroom because there is essentially little evidence of use in the face-to-face classroom, whereas the distance education course normally provides some physical record of use, even if transitory. Licensing of materials for distance is typically tightly controlled: the period of use, the name of the course, and the maximum number of students who may use the materials are usually specified in the licensing agreement. The time required to process a request, and the small number of positive responses obtained from publishers has limited the number of requests made by experienced teachers and course developers. If a better mechanism for licensing such uses could be developed, and the owners were more certain they were not setting a potentially damaging precedent, potential income from these licenses could rise - especially if fees were to come down to a level that would permit schools to license multiple items for a single unit or module of a course.

(d) Distance education programs, when developed by universities, are normally funded through institutional support of up-front development and production expenses. For many high quality video and internet courses, the up-front capital has been obtained through external funding. Some university programs are sufficiently large and "prosperous" to permit the school to provide the needed risk capital out of internal operating surpluses. For the average undergraduate class (15 - 25) which may be offered for three to five years before requiring extensive revision (e.g. change of text, instructor, or curricular revision), only those courses which are very lightly produced and rely on faculty to create most course materials can recoup development expenses totally out of tuition income. Graduate level classes have smaller class sizes, on average, and require longer to recoup development costs. Frequently they are subsidized by larger enrollment undergraduate courses. For many video programs, the university subsidizes production and network/transmission costs to permit its colleges to serve the professional-level continuing education needs of their service areas. In contrast, Internet courses are frequently expected to generate sufficient tuition income to cover costs of production and a portion of computing infrastructure costs.

At the present time, there are both commercial and non-commercial producers of video courses, but non-commercial producers are predominant. Non-commercial entities are frequently associated with governmental or educational institutions, so they are not expected to make a profit for "shareholders," as citizen constituents. However, they are typically expected to generate a surplus of income over expenses sufficient to fund future productions and provide financial reserves. Fees charged to students may reflect licensing costs as a separate fee; alternatively, the license costs may be covered as part of the tuition or general support provided by the institution. Distance education courses, when offered by a non-profit university, frequently are expected to cover their costs, but the full cost of the

university infrastructure is seldom reflected in the tuition costs. For-profit universities, on the other hand, must cover all costs, both direct and infrastructure costs. They can do so by reducing infrastructure costs through such means as hiring part-time faculty, concentrating course delivery into shorter time periods, using other institutions' library facilities and limiting their physical plant expenses.

Anecdotal evidence suggests the majority of such producers are non-profit. The most visible for-profit producers serve commercial markets for business, industry and government clients.

Universities such as the University of Phoenix typically charge higher rates than their non-profit competitors. Most of the non-profit universities charge their standard tuition rates but add a special fee for "delivery costs". For example, the University of Missouri Schools of Nursing are permitted to charge an additional \$50 per credit hour for distance education course delivery.

Many employers will subsidize and/or assume the cost of job-related continuing education, particularly in highly competitive fields where competitive advantage may depend upon knowing the latest technology or best business practice. However, many students have no outside assistance, and must work full or part time to support themselves and their families, as well as paying the cost of their education. For those people, particularly, distance education allows them to reduce educational expenses for transportation, food, and lodging that would be required on a residential campus.

The successful for-profit schools have demonstrated growth in enrollments that permits them to continue expansion. They typically have minimum enrollment requirements that ensure they do not offer courses at a loss. Non-profit schools, whether private or public, often offer individual courses at a loss in order to provide a full degree program to students. Sometimes, the total program is dependent upon endowments and/or state and federal supports to meet operating costs. Frequently, however, distance education courses are operated by a unit of the university or college which is required to generate a surplus sufficient to contribute to the total university budget as well as meeting all costs and providing risk and reserve capital funds. These units, usually identified as "extension" or "continuing education" or "outreach" units provide a major source of risk capital for institutions whose budgets are predominantly tied to fixed expenses such as salaries (e.g. tenured faculty) and building operation and maintenance. One of the few areas of discretionary spending is in departmental supply and expense budgets. In this type of institution, the pressure to offer distance education courses that can meet their expenses is great; funds available to pay licensing fees are limited.

(e) Most of the courses offered for college credit in the U.S. are accredited by the regional accrediting agencies. There are colleges in the U.S. which advertise that they are accredited by other agencies; books on distance education generally identify those as requiring caution and checking with potential employers or graduate schools as to the acceptability of credits or a degree from school not regionally accredited.

(f) The recipients of distance education courses are primarily adult education students. However, universities are finding that their resident 18 to 22 year-old students also willingly sign up for distance education courses in order to solve a scheduling conflict, avoid an early morning or late evening class, or similar reasons of convenience. The average age of university students is being skewed upward by the new enrollments of adult education students. They are returning to school after dropping out to work, or are coming back for graduate education to stay abreast of new developments in their field. Some are seeking new credentials for promotion or to solve the problems caused by corporate mergers and workforce reductions. Most of them are mature; goal oriented people who would do well in traditional face-to-face classes if they were able to afford full time residential degree programs. Consequently, they do well in distance education programs.

Most of the students are in urban areas, because that is where most of the people and jobs are located. Students in rural areas, however, have a greater need for distance education because of the scarcity and greater distances to educational institutions in their regions.

Admission to a particular distance education degree program involves requirements (prerequisite courses or training) very similar, if not identical, to residential programs on the campus offering the degree. Regional accreditation agencies review distance education programs to ensure they offer the same access to library resources, advising, bookstores and other student services as resident students have in accredited programs. Student-faculty ratios and faculty credentials are reviewed to ensure that students have access to qualified faculty. The number of students who can enroll in a program is determined by the program's ability to serve them at levels of quality required by accreditation standards. Students in other countries are not always allowed to enroll in distance education courses; sometimes admission is dependent upon criteria such as proficiency in English, access to libraries, and other resources which might be essential to successful completion of a course of study.

(g) Distance education courses are most frequently found at the collegiate level, but there are many outstanding high school distance education programs offered in the U.S. by institutions of higher education. There are few distance education programs providing elementary school courses. Because of the growing home school movement, more resources are being offered to parents who wish to teach their own children. However, these materials are not courses that are taught by a teacher at a distance; they are course packs that provide the parent with instructional aids for working with their own children. Courses at all levels are being offered for credit. High School diplomas, bachelors', Masters' and doctoral degrees are being offered by accredited institutions. There are several surveys published which list U.S. institutions, their course offerings, fees and requirements for distance education programs. A survey by the National Institute for Educational Statistics showed that in the fall of 1995, 62% of all public four-year universities in the U.S. offered distance education courses and 23% planned to offer them in the next three years.

(h) I am not aware of any survey which catalogs all distance education course offerings by the extent to which new content is created for them or the extent to which they use pre-existing sound recordings, motion pictures or video materials, computer programs or books. Because of the cost of licensing music, commercial motion pictures and video, there is very little of those media used in university level distance education courses. With the advent of retail videotape sales and rental, independent study programs were able to use video and audio tapes in their courses by simply buying one tape for each student. However, permission to use excerpts of commercial film and video seldom can be obtained for Internet or video distance education courses. Producers value access at rates impractical for most educational institutions, and the multiple ownership of many film or video titles would make the process financially impractical. The use of books, on the other hand, is almost universal in university and high school courses. Faculty frequently make up course packs of readings from several books, with permission obtained from each publisher. Less frequently, permission can be obtained to digitize excerpts of text, diagrams, or other graphic materials for use in a video or Internet course. It is frequently faster and less expensive to create original graphic materials for the faculty member's text than to obtain permission for published materials.

(i) Institutional policies at most universities govern the creation and use of video and Internet programs. Most such policies were developed when a decade or more ago, and need to be revised to reflect changing conditions. The policies generally are designed to recognize faculty members' intellectual property rights in the courses that they develop and teach. Less attention is generally given to the investment which universities have made in those courses. Due to some instances where faculty have appropriated large investments in Internet course development and offered the course through other universities, greater effort is being made to negotiate a standard agreement with faculty when courses are being developed. These agreements define when the faculty members' work is considered a "work for hire" and when it is his/her intellectual property. Frequently there is a definition of the proportion of ownership vested in the faculty, and ownership vested in the university on behalf of the departments which have provided the financial and production resources used in designing and producing the course. General terms of these agreements typically specify whether or not the university may continue to offer the course if the faculty member who wrote it no longer wishes to teach it, retires, or resigns; the agreement specifies how net

income resulting from sale or license of the course materials will be divided among the owners.

In cases where students' work may be used in subsequent semesters or in faculty members' presentations about the course, students are being advised of their rights and asked to formally grant permission for future use of their class work. Both students and faculty are becoming more aware of their rights and the rights of the writers and publishers they may use in their own writing and web publishing. Undergraduate writing courses and graduate research courses deal with definitions of plagiarism. They are taught accepted practices regarding requirements for attribution and giving of credit in footnotes and bibliographic materials.

