Technological Requirements of the TEACH Act

Introduction

The President signed the Technology, Education and Copyright Harmonization Act (TEACH) on November 2, 2002. TEACH amends the copyright law by expanding teaching exemptions to the digital distance education classroom.[1] These revisions clarify that materials protected by copyright can be used in digital formats and distributed through digital networks without infringing the copyright law subject to various conditions, requirements, and limitations. TEACH recognizes that distance learning may occur anywhere in today's highly digital environment and that many activities that are lawful in the physical classroom are legal in the digital classroom.

Only accredited, non-profit educational institutions may take advantage of these new privileges, and to do so, they must take several actions to prevent copyrighted works from being used in ways that may infringe their copyrights. In particular, TEACH imposes a set of general technological requirements.

This paper[2] is intended to provide initial guidance on the technological requirements of TEACH.[3] It outlines the various considerations regarding technology that must be taken into account by institutions intending to rely on TEACH in their distance education activities. It does not offer definitive legal advice, however. As with all copyright law, each institution must assess its own needs, values, and determine its own legal interpretations in order to develop its own policies. This paper is intended only to provide guidance and background information for that deliberation.

The paper is a starting point. The technological requirements of TEACH are broad and stated generally. They are clearly expected to change as technology evolves, and their meaning will flesh out over time by the actual experiences of educational institutions and,

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[1] The statute does not define 'distance education.' However, Senate legislative history provides some guidance: "digital distance education…whether in the traditional sense, when instructor and student are separated in place and perhaps time, or in new hybrids of traditional classroom education combined with online components…"

[2] This paper is a joint effort of EDUCAUSE, the Association of Computing Machinery (ACM) and the American Library Association's Office for Information Technology Policy (OITP) and is based on TEACH legislation including House and Senate Reports, surveys of the literature, discussions with legal and technical experts and a workshop held on December 13, 2002.

[3] Other institutional requirements include the existence of a copyright policy and copyright educational materials. Various sources address these issues including the American Library Association web site on TEACH http://www.ala.org/alawash/teach.html, *The Technology, Education and Copyright Harmonization Act*, **NACUANotes**, January 6, 2003, at http://www.nacua.org/nacualert/TEACH_Note_121702f.pdf, and North Carolina State University's Teach Toolkit at http://www.lib.ncsu.edu/scc/legislative/teachkit/.

perhaps, by future court decisions. Institutions that rely on TEACH in their distance education programs must periodically assess their policies and technologies for compliance.

Technological Requirements of TEACH

In summary, TEACH requires the use of technology to reasonably:

- limit access to copyrighted works to students currently enrolled in the class;
- limit access only for the time period necessary to complete the class session;[4]
- prevent further copying of copyrighted works; and
- prevent further distribution of copyrighted works.

Table 1 lists the legislative language used to describe these technological requirements. A key point to note is the use of the terms "reasonably" and "technologically feasible." Institutions are not required to use measures that guarantee such restrictions. There is no expectation that the technological measures employed will be foolproof; no technology will be 100% effective. Nor are institutions necessarily liable if the measures they use fail. On the other hand, they are required to make a good faith effort to employ technological measures that are available and suitable in order to take advantage of the TEACH exemptions.

Section 110(c)	Section 110(d)(ii)

The transmission of material is made solely for (and, to the extent **technologically feasible**, the reception of such transmission is limited to):
• students officially enrolled in the course for which the transmission is made; or
• officers or employees of governmental bodies as a part of their official duties or employment
	The transmitting body or institution, in the case of digital transmissions,
	• applies **technological measures that reasonably prevent**:
	  • retention of the work in accessible form by recipients of the transmission from the transmitting body or institution for longer than the class session <u>and</u>
	  • unauthorized further dissemination of the work in accessible form by such recipients to others, <u>and</u>
	  • does not engage in conduct that could reasonably be expected to interfere with technological measures used by copyright owners to prevent such retention or unauthorized further dissemination

Table 1

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[4] The statute does not define "class session." This might allow for a variety of interpretations.

Who needs to think about TEACH

While TEACH may not be useful in all circumstances, all accredited, non-profit educational institutions and members of their teaching community that engage in distance education need to examine the advantages TEACH offers to their educational efforts, weighing these advantages against the policy and technological requirement imposed by the Act.

After conducting this assessment, some institutions may choose to rely on other copyright exemptions rather than TEACH. They may decide that the requirements imposed by the Act are too burdensome—perhaps the technologies are too costly or they may be incompatible with their institutional information technology strategies. Requirements may be too complex to administer or impose an unreasonable burden on instructors and students.

TEACH is not necessarily appropriate for all distance learning uses. Many other educational exemptions, such as fair use, are still important exemptions in copyright law and may be more appropriate in many instances for distance education. Nonetheless, TEACH should be assessed by all educational institutions as an important new instrument in the copyright toolkit, one tailored to the needs of distance education in the new digital environment.

Broader considerations

Educational institutions should apply only those controls that reasonably protect copyright and should not overreact by applying technology that goes beyond the law's requirements. Technology that is overly restrictive negatively impacts other fundamental values and interests of the educational community such as privacy, access to information, and intellectual freedom. Educational institutions should use good judgment as they implement TEACH while acting within the spirit of the law.

Moreover, TEACH does not cover all uses of copyrighted materials for educational purposes. Institutions can and should rely on fair use to make decisions on the use of class materials when TEACH exemptions do not apply. Library reserve services and interlibrary loan activities may also meet pedagogical needs not addressed by TEACH. The law does not attempt to define how copyrighted works may or may not be used in specific terms. It is, instead, intentionally ambiguous to allow for changing circumstances, new opportunities, and advances in technology and education.

Recommendations for TEACH Implementation

Eligible institutions may want to consider establishing a planning committee with member stakeholders to survey the institution's current distance education services and to consider the technological means of implementation of TEACH. Some questions to consider are:

- Who is using digital distance learning activities in the classroom?
- What technological tools are being used now to protect copyrighted content?
- Are content management systems in place?
- Will current information technology plans impact the roll out of TEACH ?
- Does the library provide services that supplement digital teaching?
- What educational workshops might be necessary to inform teachers, relevant staff and faculty?

Ultimately the institution, through the planning committee or some other body must determine what actions the institution will take to implement TEACH, what technology will be used, and who needs to be involved in implementation. A significant investment of time and resources should be used to develop widely accepted methods to rollout TEACH.

Several activities already in use at educational institutions may be sufficient to meet the "reasonable" requirements of TEACH. These include:

- Passwords are low-level, easy-to-implement technology for limiting access to course content. It is important, however, to consider the way in which password protection is implemented. For example, poor techniques include using the same password or a different but predictable one (e.g. "drama101; spring2003) for access to copyrighted material. However, TEACH does **not** require that each student have a unique password for access.

- Institutions will have many reasons aside from TEACH to ensure that online registration for distance learning is done securely, and only those students whose credentials have been authenticated will be able to register. Identification or smart cards that interoperate with the institution's computer system are one such method. Institutions will need mechanisms for denying access to copyrighted course materials to those students who leave a course.

- Personal identification numbers (PINs) are another option for authorizing registered students. Some institutions require that students have authenticated PINs before they can register for classes. These tools are attribute-based access controls that do not reveal identity or personal information; they merely recognize characteristics that certify the student as eligible to register. Identity-based access tools pose serious privacy concerns; such tight control is not required by the TEACH Act.

— Making copyrighted materials accessible only through the class session will limit the ability to access works beyond the time they are needed to meet teaching objectives.

- Currently, streaming media (music and video) prevents unauthorized storing and copying of content.

Institutional Considerations

Institutions should consider three issues as they select and implement copyright protection methods.

First, the technological measures taken by the institution should have a high likelihood of working. That is, they should work *most of the time* and they should *reasonably* protect copyrighted works. As stated above, there is no expectation that these measures will be 100% effective all of the time. At this time, we believe that the actions listed above will meet the requirements of TEACH. As technology advances, new tools will be available for institutions to consider and institutions will have a continuing obligation to review their technological systems in light of these developments.

Second, a "one-size fits all" solution does not exist. Some institutions will not have the necessary resources to implement technological tools because of limited funds. Others may have an advanced computing network structure available to them. In addition, some course materials may require more protection than others. For example, a first-run feature motion picture may be considered "more valuable" or "more likely" to be pirated than other works used in the digital classroom leading an institution to develop more stringent controls. Primary and secondary schools might not have the technology necessary to create and maintain a student identification database, but these schools have student enrollment that is generally stable each year and therefore more predictable and easier to monitor without the use of technology. Institutions must determine for themselves the level of technological control they require. Institutions that cannot meet this burden cannot take advantage of the TEACH exemptions, but they can continue to rely on other copyright exemptions such as fair use.

Finally, we urge educational institutions to employ only those measures necessary to meet the reasonableness requirement. Additional controls on copyrighted works (i.e., trusted systems) are not necessary and will negatively impact necessary information flows, privacy and intellectual freedom as well as the ability of teachers to develop effective digital courses.

Future considerations

As the use of collaborative technologies increase for distance education, institutions must reexamine policies and practices to take full advantage of the TEACH exemptions. It is critical that educational institutions, their libraries, faculty, and professional staff take the lead in shaping how TEACH and other aspects of copyright are understood and implemented within the context of educational goals.