S. HRG. 106–539

THE COPYRIGHT OFFICE REPORT ON COPYRIGHT AND DIGITAL DISTANCE EDUCATION

HEARING

BEFORE THE

COMMITTEE ON THE JUDICIARY
UNITED STATES SENATE

ONE HUNDRED SIXTH CONGRESS

FIRST SESSION

ON

THE LIBRARY OF CONGRESS COPYRIGHT OFFICE REPORT ON COPYRIGHT AND DIGITAL DISTANCE EDUCATION

MAY 25, 1999

Serial No. J–106–29

Printed for the use of the Committee on the Judiciary

U.S. GOVERNMENT PRINTING OFFICE

65–338 CC WASHINGTON : 2000

COMMITTEE ON THE JUDICIARY

ORRIN G. HATCH, Utah, *Chairman*

STROM THURMOND, South Carolina
CHARLES E. GRASSLEY, Iowa
ARLEN SPECTER, Pennsylvania
JON KYL, Arizona
MIKE DEWINE, Ohio
JOHN ASHCROFT, Missouri
SPENCER ABRAHAM, Michigan
JEFF SESSIONS, Alabama
BOB SMITH, New Hampshire

PATRICK J. LEAHY, Vermont
EDWARD M. KENNEDY, Massachusetts
JOSEPH R. BIDEN, JR., Delaware
HERBERT KOHL, Wisconsin
DIANNE FEINSTEIN, California
RUSSELL D. FEINGOLD, Wisconsin
ROBERT G. TORRICELLI, New Jersey
CHARLES E. SCHUMER, New York

MANUS COONEY, *Chief Counsel and Staff Director*
BRUCE A. COHEN, *Minority Chief Counsel*

CONTENTS

STATEMENTS OF COMMITTEE MEMBERS

	Page
Hatch, Hon. Orrin G., U.S. Senator from the State of Utah	1
Grassley, Hon. Charles E., U.S. Senator from the State of Iowa	2
Leahy, Hon. Patrick J., U.S. Senator from the State of Vermont	3
Ashcroft, Hon. John, U.S. Senator from the State of Missouri	11

CHRONOLOGICAL LIST OF WITNESSES

Statement of Hon. Marybeth Peters, Register of Copyrights and Associate Librarian for Copyright Service, U.S. Copyright Office, Library of Congress, Washington, DC 5

ALPHABETICAL LIST AND MATERIALS SUBMITTED

Peters, Hon. Marybeth:
- Testimony 5
- Prepared statement 14

THE COPYRIGHT OFFICE REPORT ON COPYRIGHT AND DIGITAL DISTANCE EDUCATION

TUESDAY, MAY 25, 1999

U.S. SENATE,
COMMITTEE ON THE JUDICIARY,
Washington, DC.

The committee met, pursuant to notice, at 10:07 a.m., in room SD–226, Dirksen Senate Office Building, Hon. Orrin G. Hatch (chairman of the committee) presiding.

Also present: Senators Grassley, Ashcroft, and Leahy.

OPENING STATEMENT OF HON. ORRIN G. HATCH, A U.S. SENATOR FROM THE STATE OF UTAH

The CHAIRMAN. Well, good morning, and welcome to our hearing on The Copyright Office Report on Copyright and Digital Distance Education. Appropriately, we are streaming our proceedings here live on the Internet, so I extend a particular welcome to those in the virtual hearing room on the Net.

The growth of distance education is very exciting. With the increasing sophistication of the Internet and other communication technologies, classrooms are no longer tied to a specific point in either space or time. Virtual classrooms are popping up all over the country, and indeed the world, where all kinds of people are interacting and learning through these new forms of media.

True to its heritage, Utah is a pioneer among States in blazing the trail to the next century, making tomorrow's virtual classrooms a reality today. Fittingly, since it is home to one of the original six universities that pioneered the Internet, the State of Utah and the Utah System of Higher Education were recently ranked number one in their respective categories in PC Magazine's Fast–Track 100 List of Government and Educational Innovators.

My own alma mater, Brigham Young University, was also named one of "America's 100 Most Wired Colleges" by Yahoo!, with Utah State University not far behind. Such national recognition reflects, in part, Utah's high-tech industrial base and the fact that Utah is the only State with a centrally coordinated statewide system for distance learning.

I was pleased to host the Register of Copyrights at a distance education exposition and copyright roundtable that took place at the nerve center of that system, the Utah Education Network, where we saw many of the exciting technologies being developed and implemented in Utah by Utahns to make distance education a reality.

Distance education holds great promise for students in States like Utah. Students in remote areas of my State are now able to link up to resources previously only available to those in cities or at prestigious educational institutions. For many Utahns, this means having access to courses or being able to see virtual demonstration of principles that, until now, they have only read about.

At the event in Salt Lake City, Ms. Peters and I dropped in on a live online art history class hosted in Orem that included high school and college students scattered from Alpine in the north to Lake Powell in the south, nearly the full length of the State. And the promise of distance education extends far beyond the traditional student, making expanded opportunities available for working parents, senior citizens, and anyone else with a desire to learn.

As exciting as distance education is, the copyright issues it raises are numerous and complex. Distance education will work only if teachers and students have affordable and convenient access to the highest quality educational materials. But without adequate incentives and protections, those who create these materials will be disinclined to make their works available for use in online distance education.

The interests of educators, students and copyright owners need not be divergent. Indeed, I believe they coincide in making the most of this medium. That is why the Commerce Department's direction to the Copyright Office was that it conduct an in-depth study of how to promote distance education through digital technologies, while maintaining the appropriate incentives for authors and accommodating the needs of students, teachers and other academic users of copyrighted works.

Today, the Copyright Office formally presents the results of its 6-month study of distance learning and the copyright law, as required by the landmark Digital Millennium Copyright Act, the DMCA. That Act implemented the WIPO treaties regarding copyright rules in the online environment and laid the basic copyright structure to foster the growth of electronic commerce. The report presented today reflects this committee's desire to understand more thoroughly the promise of distance education and technologies involved, the breadth and complexity of the issues, and how legislation may foster or impede the progress of technology in education. At this time I would like to submit the prepared statement of Senator Grassley.

[The prepared statement of Senator Grassley follows:]

PREPARED STATEMENT OF SENATOR CHARLES E. GRASSLEY

Mr. Chairman, thank you for holding this hearing on the Copyright Office's Report on digital distance education. It's important that universities and other educational institutions can provide their students with distance learning options. Educational institutions in rural areas, like in my state of Iowa, should have increased opportunities to reach out to students that can't get to the classroom. Iowa, through the state-wide Iowa Communications Network, ("ICN"), has been a leader in using advances in technology to facilitate the sharing of educational resources among Iowa's communities and school districts. This network connects virtually every school district and higher education institution in Iowa, as well as Iowa Public Television, state agencies, federal agencies, Iowa National Guard sites, and our public libraries and hospitals. The ICN truly provides all Iowans, even those living in the most remote or rural areas, access to Iowa's outstanding educational opportunities and resources.

With technological developments advancing at such a rapid rate, we need to take a close look at the copyright laws and make sure that they do not hamper online delivery of instruction. While it's important that we balance the interests of copyright owners and the users of their works, it's also important that distance learning continue to play a critical role in expanding educational opportunities for all individuals. So, I look forward to hearing about the Copyright Office's findings and recommendations, and I will be sure to review the Report carefully.

The CHAIRMAN.I look forward to the testimony of the Register today and to hearing her findings and recommendations. We want to do the right thing with respect to the promotion of distance education. What we don't want to do is stand in the way of the development of new and exciting technologies or burgeoning markets by acting prematurely or without adequate information. I have great respect for the Register and tremendous confidence in her ability to advise this committee in this regard, and I look forward to learning more from her today and working with her in the future to see that we resolve these problems.

We have placed a lot of burdens on you, Marybeth, but I think you are capable of taking care of it.

So we will turn to the ranking member.

STATEMENT OF HON. PATRICK J. LEAHY, A U.S. SENATOR FROM THE STATE OF VERMONT

Senator LEAHY. Mr. Chairman, I might say I don't think there is anything Ms. Peters couldn't handle, so I am delighted to have her here.

I think the enactment of the Digital Millennium Copyright Act, the DMCA, was actually one of the outstanding accomplishments of the last Congress. I was pleased, Mr. Chairman, to work with you and others on the committee on that new law that updated and made necessary adjustments to our copyright law to comply with two new copyright treaties which had been consented to by the Senate and ratified by the President.

As part of that new law, we asked the Copyright Office to conduct a study of the complex copyright issues involved in distance education and to make recommendations to us for new legislative matters. The DMCA last year started the process of updating the Copyright Act. The Copyright Office report released today on distance learning will help us complete that process.

I noted in the May 1998 committee report for the DMCA that on receiving the Copyright Office's recommendations on digital distance education, it was my hope for this committee to hold hearings on the issue and move expeditiously to enact further legislation on the matter. I think Chairman Hatch deserves credit and praise for holding this hearing promptly on such an important issue.

The Copyright Office, as is its custom, did a tremendous job. It conducted detailed public hearings and solicited public input. It worked closely with all of the stakeholders. I commend you, Ms. Peters, and I commend your terrific staff, particularly Shira Perlmutter, for their extraordinary work on this report.

I had mentioned to you earlier before the hearing started, I wanted to thank you for meeting informally with a number of interested Vermonters at Champlain College, in Burlington, VT, in

March. This is not always our best season, but you listened to their concerns on the issue.

Champlain College is kind of a unique place, in that it has succeeded greatly in a number of areas. It has been offering online distance learning programs since 1993, with a number of online programs, including offering degrees in accounting, business, and hotel and restaurant management. This is something you and I discussed earlier this morning.

The growth of distance learning is exploding. The report notes that, " * * * by 2002, the number of students taking distance courses will represent 15 percent of all higher education students * * *" That is an extraordinary number. The typical average distance learning student is 34 years old, employed full-time, has previous college, and more than half are women. This is something that is changing the whole face of education.

These are people with busy schedules who need the flexibility that online programs offer—virtual classrooms accessible when the student is ready and free to log on. And then we have interactive distance learning, not the traditional passive approach of watching a lecture over the air.

Vermont, you know, is just like Utah where you have many small towns and rural areas. The Vermont Telecommunications Plan which was just published identifies distance learning as critical to Vermont's development. That is why I worked to have included in the 1990 farm bill a significant amendment that authorized funding to provide distance education for rural Americans. It has helped schools throughout the Nation. For example, under the Leahy law, $300,000 went to the Grand Isle school system of Vermont for its distance learning program.

You have pointed out that the computer is the most versatile of distance education instruments, both in the material that can be offered and the flexibility in access. When we enacted the present copyright law, we recognized the potential of broadcast and cable technology to supplement classroom teaching, and to bring the classroom to those who, because of their disabilities or other special circumstances, are unable to attend classes.

We recognized the potential for unauthorized transmission of works harm the markets for educational uses of copyrighted materials. I think the present Copyright Act strikes a careful balance and has a very narrowly crafted exemption for distance learning. You have made recommendations that deserve our close attention for updating those provisions.

So, Mr. Chairman, again I applaud you for doing this. I applaud you for making sure that the hearing is on the Net. I hope we can continue this practice on a more regular basis. Anybody who just goes to judiciary.senate.gov—you click on this week and, assuming it works, there you are.

The CHAIRMAN. Well, we assume it works.

Senator LEAHY. The good-looking guy, for those who are watching, is Senator Hatch, and the bald guy is Pat Leahy.

The CHAIRMAN. Well, that is the first time anybody has called me good-looking.

Let's turn now to our distinguished witness, who really needs no introduction. Ms. Marybeth Peters is the Register of Copyrights

and Associate Librarian for Copyright Services at the U.S. Copyright Office in the Library of Congress. This committee has long relied on Ms. Peters and her office for copyright expertise. Her knowledge, experience and insight have proven invaluable as we have sought to address the complexities of copyright legislation, and particularly the challenges of new technologies and the challenges of the digital revolution.

Not surprisingly, the mandate she has been given by Congress with respect to the issue of copyright and digital distance education is not an easy one. I appreciate her efforts and those of her staff in conducting this study in the relatively short time frame provided under the statute, and I really look forward to hearing from you today.

So let's turn to you, Ms. Peters, for your presentation, and we will then have some questions for you.

STATEMENT OF HON. MARYBETH PETERS, REGISTER OF COPYRIGHTS AND ASSOCIATE LIBRARIAN FOR COPYRIGHT SERVICES, U.S. COPYRIGHT OFFICE, LIBRARY OF CONGRESS, WASHINGTON, DC

Ms. PETERS. Thank you. Before I begin, I would like to introduce my colleagues. Senator Leahy acknowledged Shira Perlmutter, our Associate Register for Policy and International Affairs, who, at the end of the week, will go to Geneva to work for the World Intellectual Property Organization for a year; and two members of her staff, Sayuri Rajapakse and Rachel Goslins, who, without their efforts, we would not have a report.

The CHAIRMAN. Are you all going to Geneva?

Ms. PETERS. No, just Shira. And we also have David Carson, our general counsel, who provided wise advise to this report.

Mr. Chairman, members of the committee, I am pleased to present the recommendations of the Copyright Office with respect to digital distance education. As you mentioned, in the Digital Millennium Copyright Act Congress charged us with the responsibility to study how to promote distance education through digital technologies, while maintaining an appropriate balance between the rights of copyright owners and the needs of users.

The Office's report which we formally submit to the Congress today is the outcome of an intensive process of identifying stakeholders, holding public hearings and meetings around the country, soliciting comments, conducting research, and consulting with experts in various fields. This morning, I will give a brief overview of our conclusions and recommendations.

As you know from the meetings in Utah, distance education in the United States is a vibrant and burgeoning field. While the concept dates back to the correspondence courses of the 19th century, the capabilities of digital technologies to deliver instruction to students, removed from the instructor in time and space, has vastly increased its appeal and potential.

Today's digital distance education involves copyrighted works being used in new ways, providing new benefits to students and teachers, but also posing new risks for copyright owners. Educational institutions and copyright owners see digital distance education as a potentially lucrative market. Licensing of copyrighted

works in this market will be important. However, exceptions and fair use play a role.

Our focus was on two specific exemptions in section 110 of the copyright law. These provisions were written more than 20 years ago, before the advent of computer networks and personal computers. The question is whether they still strike the appropriate balance of interest.

The analysis is complicated by the context, a time of rapid development in both technologies and markets. Many of the concerns on all sides stem from the inability to depend on effective functioning of technological protection and licensing mechanisms. The tools for both exist today. It will be clearer within the next few years how successfully they can be integrated into the real world of distance education.

As a fundamental premise, the Copyright Office believes that emerging markets should be permitted to develop with minimal Government regulation. However, that does not mean that the law must remain fixed. When a statutory provision that is intended to balance the interests becomes obsolete due to changes in technology, it may require updating if the policy behind it is to continue. In our view, if that basic policy balance struck in 1976 is to continue, section 110(2) must be updated.

We recommend several changes and additions to the law and legislative history. First, update the exemption to accommodate the technical requirements of digital transmissions over computer networks by making it clear that the term "transmission" in section 110(2) covers such transmissions, and by expanding the rights covered by the exemption to include those needed to accomplish computer network transmissions to the extent technologically required.

Second, eliminate the physical classroom requirement in section 110(2). Because digital distance education allows instruction to take place anywhere, this limitation has become obsolete. We recommend permitting transmissions to students officially enrolled in the course, regardless of their physical location.

Third, add language that focuses more clearly on the concept of mediated instruction. This would ensure that the performance or display is analogous to the type of performance or display that would have taken place in a live classroom.

Fourth, because digital transmissions pose greater risks to uncontrolled copying and dissemination, add a number of safeguards as conditions on the applicability of an expanded exemption. These include permitting the retention of transient copies only to the extent that they are necessary to accomplish the transmission, requiring the adoption of copyright policies and the provision of information materials that accurately describe and promote compliance with copyright law, and requiring the use of technological measures to reasonably protect against both unauthorized access and unauthorized dissemination of copyrighted works.

Fifth, retain the current non-profit requirement for eligibility. Many called into question the advisability of keeping this requirement and suggested the need to require accreditation. However, we are not yet convinced that a change is desirable. Nevertheless, this is an important issue that deserves further consideration.

Sixth, add a new provision to section 112, the ephemeral recordings exemption, in order to allow digital distance education to take place asynchronously. This would permit an educator to upload a copyrighted work onto a server, to be subsequently transmitted to a student under the conditions set out in section 110(2).

Seventh, consider expanding the categories of works exempted from the performance rights beyond the current coverage of nondramatic literary and musical works. This is one of the most difficult issues to resolve. On the one hand, pedagogical considerations militate against continuing to limit the types of works covered. On the other hand, the existing distinctions have been embodied in our law for more than 20 years and they are based on the potentially greater market harm to dramatic works and audiovisual works. On balance, we suggest a compromise. Add audio-visual works, dramatic works, and sound recordings. However, allow performances of only reasonable and limited portions, not the entire work.

In addition to these statutory recommendations, we recommend clarification of the fair use doctrine in legislative history. Because there is considerable confusion and misunderstanding about the doctrine, we believe it is important for Congress to confirm that fair use is technology-neutral and applies to activities in the digital environment, and to explain the function of fair use guidelines.

Finally, concerns were raised about the problems in the functioning of licensing for digital distance education. We have not seen any evidence of a need to abandon or need to regulate licensing systems. Given the state of flux of online licensing and technology, and the decreasing influence of elements of fear and unfamiliarity, problems of delay and cost may subside to an acceptable level. We therefore recommend giving the market leeway to evolve and mature, and revisiting the issue in a relatively short period of time.

Thank you. We really have enjoyed our experience, and we would be delighted to answer your questions and we look forward to working with you and members of the committee and the staff in any way that would be useful to you as this process moves forward.

The CHAIRMAN. Well, thank you for your excellent comments. I was pleased to have you and the Associate Register join me in Utah last month for a day of technology demonstrations and a copyright roundtable discussion on the issue with Utah's education, library, copyright and high-tech communities.

Can you tell us what impact your visit to Utah had in informing the Copyright Office's process and how the discussions generated by Utahns may have been helpful in coming to the conclusions that you outlined in your report here today?

Ms. PETERS. First, I would like to commend you for your staff in the excellent work that they did in putting together an extremely useful day. The demonstrations that were set up were extremely helpful to us. They showed where the technology was going, the various aspects that people were going into, and the evolution of partnerships among companies and educators. The programs that we saw were highly sophisticated and extremely innovative, so they gave us a better handle on where technology was going and where education was going.

The roundtable discussion that you led off was, in particular, extremely constructive. We heard from a very wide range of perspectives, and the participants really interacted and generated new insights into the process by listening to each other. I think having an author, having a photographer, having a composer, having a publisher there made a huge difference. And it made a difference not only to us, but to the educators and librarians who were part of the process. We came back so high on the experience that Sayuri and Rachel, who were not able to join us, felt that they really had missed out on something extremely worthwhile.

The CHAIRMAN. Well, thank you. At the roundtable discussion in Utah, we heard, as I viewed it, two disparate themes even from within the educational community. On the one hand were those who reported widespread problems in securing licenses for digital distance education and who urged a prompt congressional response to minimize those transaction costs. On the other hand, there were those who were encouraged by the progress of technology and emerging licensing mechanisms to facilitate education in the online environment, and urged Congress not to interfere with the progress.

Now, can you tell us what you found regarding the marketplace evolution of new and emerging licensing mechanisms in this area, and the development of technological measures to protect copyright works?

Ms. PETERS. We think that our recommendations address both communities. Certainly, with regard to new licensing mechanisms, that are emerging. The collective societies do have new online systems that are in place. Publishers who do business in the educational markets are putting in place some very, very sophisticated licensing mechanisms. Many people are looking at attaching rights and licensing terms and conditions to the work itself. So there really are exciting things taking place with regard to licensing activities.

With regard to technology, we learned from demonstrations and people who participated in our hearings that there is considerable growth, and, in fact, on the market today technologies that certainly control access and that control downstream copying. They are not in widespread use, but we are very optimistic that within the next few years that they will be widely deployed.

I think a question remains on whether or not certain encryption technologies or controls are accepted from the American public. Since you come from a computer State, when encryption was introduced with regard to computer programs, the marketplace rejected that attempt. So we will have to see how that plays itself out. We think that with our recommendations, there would be an expanded exemption and that many of the concerns with regard to licensing would be addressed; that licensing is improving and technological protections are improving.

The CHAIRMAN. Your recommendations are based on applying policies adopted in the 1976 Copyright Act——

Ms. PETERS. That is right.

The CHAIRMAN [continuing]. Which presumed traditional classroom instruction mediated by a teacher to the new medium of the wired environment. To some, however, one of the reasons that dis-

tance education is so exciting is that it opens up methods for learning unlike anything available heretofore.

Now, the technology is certainly revolutionary. We saw a lot of that that day. Classes do not necessarily exist in the same point of space or in time, and traditional notions of classrooms and textbooks, and even of teachers and libraries, are certainly stretched and possibly obliterated. Given that, could you explain why the assumptions and tradeoffs of 1976 should apply with the same force in the new digital interactive environment?

Ms. PETERS. Actually, our recommendations don't totally preserve that. If you look at the legislative history in 1976, what the Congress was saying is that the methods of delivery to classrooms should cover the types of performances that were specified as being exempted. We looked at what is going on today and recognized that you had to expand that, and therefore we do include with regard to rights additional rights of reproduction and distribution to the extent that they are necessary to have the transmissions brought to the place where the student is.

We do think that there is a place for exemption and a place for licenses. Many of the materials that are being used today are licensed and we believe should continue to be licensed. So we do think that the balance that the Congress achieved in 1976, which is for instruction in a classroom, was a valid type of exemption, and we are trying to roll that forward to what is as close as possible to what took place in a classroom.

So I would be on my computer at home and getting the lesson. It may not be a lecture. It may be an exercise with a poem, because I am studying literature and they may want to have me examine what that poem is. So we have, in fact, moved it forward, but we do want to place appropriate limits, those closer to the type of activity that you would have in the equivalent of a classroom.

The CHAIRMAN. Thank you.

Senator Leahy, we will turn to you.

Senator LEAHY. Thank you. Ms. Peters, you said in the report that the Copyright Office has a fundamental belief in the premise that emerging markets should be permitted to develop with minimal Government regulation.

When we are dealing with the Internet, I agree with that because even when I sit down with some of the leaders in that industry, the people who have been the most innovative—Steve Case, Jerry Yang from Yahoo, Jim Barksdale, and others—and you say, well, what would you predict 5 years from now, you get a chuckle; we are trying to predict 5 months from now. We don't want Government to stifle this.

With new broadband technologies, it will be fairly soon when on a rainy evening you decide you would like to watch a movie, you don't go to the video rental store. In 5 minutes, you can download a movie that you can order. All these things are so amazing and might be here shortly.

The marketplace in many ways will set the right price for copyrighted works. I know that some educators noted problems with using copyright works in distance education programs, but I am wondering if we clarified when and how educators may use copyrighted works online in virtual classrooms or to supplement work

in regular classrooms—if we clarified when and how they can do it, would that be helpful? Can we do that?

Ms. PETERS. Hopefully, you can draw the appropriate balance, and I think it would be extremely helpful. I think in our report, you find that many people complained about the inability to license. I have to say one of the interesting things that we learned in our hearings—we asked educators what they were having the most trouble in licensing and they said electronic rights. When we asked publishers what was the problem that they were having in putting together digital distance education packages, they said acquiring electronic rights.

So authors are being very careful with regard to electronic rights, and I think that makes it difficult for both publishers and for educators. But I do think that if you make it clear that the computer and Internet networks can, in fact, deliver under appropriate safeguards material to students who are enrolled, wherever they may be, and if you add the additional categories but limit them, I think you will be doing a great service to community colleges and to many institutions, colleges, high schools, throughout the world.

Senator LEAHY. Haven't others tried to figure these things out, such as the Consortium of College and University Media Centers and CONFU, Conference on Fair Use? They have gotten together on some of these issues.

Ms. PETERS. That is right.

Senator LEAHY. Is it just wishful thinking that the educators, the publishers, the copyright users and others could get together on their own and agree on fair use guidelines rather than having legislation? And the reason I ask that question, just so you understand, I am perfectly willing to work for legislation, but I get very worried about legislating for a year or two something that is going to change substantially during the year or two that we are legislating.

Ms. PETERS. I actually am a firm believer of guidelines. What I do believe, though, is for guidelines to succeed, there has to be a congressional mandate. There has to be the Congress behind it saying, work on this, this is a good thing, you should be achieving this. As I said, it would help if the Congress could clarify the role of guidelines.

I also think that a particular agency has to be charged with that, and the mandate has to be narrow, not everything in the world, and that the people who participate should be through the process throughout. It can't be a process where people keep coming and going. There has to be continuity and you have to work toward the end result that the Congress can then publish in a legislative report, but I happen to think that it is a good process.

Senator LEAHY. Well, the chairman and I are very interested in this whole area and we want to make it work. Again, I just say we have been very happy with the response from your office on this and the guidance from your office. It has been helpful. We are going into the century plotting new ground, but using 200-year-old principles, many of which are very tried and true. So it is going to be fascinating.

The CHAIRMAN. Thank you.

Senator Ashcroft.

Senator ASHCROFT. Mr. Chairman, first of all, let me thank you for holding this hearing and for allowing me to participate in the request for this study which I think is valuable and productive.

I would ask that I be able to submit for the record remarks which I had prepared, and I would like to use the balance of my time in questioning, if it is all right.

The CHAIRMAN. Fine.

[The prepared statement of Senator Ashcroft follows:]

PREPARED STATEMENT OF SENATOR JOHN ASHCROFT

Mr. Chairman, I want to thank you for holding this hearing, and I want to thank Ms. Peters for her report and for her testimony here this morning. Distance learning holds tremendous potential for making quality education available to all students, especially students in rural areas in States like Missouri, Vermont and Utah. Just as the Internet has made it possible for businesses like Amazon.com to become tremendous successes without extensive brick and mortar facilities, the Internet has also removed the size of brick and mortar schoolhouses (and the distance between students and those schoolhouses) as constraints on providing quality education. Technology has unlocked the full potential of distance learning. Unfortunately, however, federal copyright law has limited distance learning from reaching its full potential.

The copyright law's provisions on distance learning demonstrate the dangers of legislating in technology-specific terms. These provisions were included in the copyright law in 1976. Unfortunately, they reflect the state of distance learning in 1976. As a result, the provisions allow for display and performance of a copyrighted work but do not permit copying. By their very nature, digital technologies involve the creation of temporary copies. Accordingly, the law does not protect digital distance learning. The law also limits the exemption for distance learning in ways that may have made sense in 1976, but make absolutely no sense today. In 1976, most distance learning took place in classrooms, and the law limited the exemption to classroom settings. Today, the whole promise of digital distance learning is that it offers education opportunities outside the four walls of a classroom. In short, because the distance learning provisions were written in technology-specific terms, provisions designed to facilitate distance learning, now stand as an obstacle to effective digital distance learning.

In an effort to unlock the full potential of distance learning, I introduced the Digital Copyright and Technology Education Act, S. 1146, in the last Congress. The provisions on distance learning in that bill would have vastly expanded the ability of educators to use the Internet for distance learning. Unfortunately, however, efforts to work out a compromise between the interested parties based on this language were not successful. With the help of Senators Hatch and Leahy, I was able to include an amendment in the Digital Millennium Copyright Act calling on the Copyright Office to conduct a study of distance learning and issue a report. Today's report is the product of that amendment.

Based on my preliminary review, the report correctly recognizes that changes in the law are necessary for distance learning to reach its full potential. Specifically, the report recognizes that we must update the law to reflect the nature of digital technology. I am confident that this can be done without adopting technology-specific language that may not account for future technological advances. The report also recognizes that the limitation to classroom settings prevents distance learning from providing educational opportunities where they are most needed. In sum, I believe that the report provides the basis for legislation that will update the copyright law so it once again facilitates distance learning, rather than standing in the way. My one concern with commissioning a report, rather than resolving the distance learning issue in the last Congress, was that some parties would be tempted to obstruct stand-alone legislation. I look forward to working with my colleagues to ensure passage of common sense legislation to facilitate digital distance learning.

Senator ASHCROFT. Let me express to you my appreciation, Ms. Peters, for your work. I think there are major challenges which need to be confronted to try and make it possible for us to take advantage of technology, which now provides a broader range of opportunities for learning than we have had before.

Some interested parties apparently have suggested that, "fair use" is sufficient to take care of the problem of digital distance learning. However, this strikes me as inconsistent with the existing copyright law. If fair use were sufficient to take care of the problem of distance learning, why would we even have the existing provisions, for example, in section 110 recognizing an exemption for distance learning? Would you care to comment on that?

Ms. PETERS. Fair use is a wonderful doctrine. The problem is it doesn't always create predictability, and what we heard in our various meetings and hearings was tremendous confusion. And perhaps some people used works and went beyond fair use, but just as often people didn't use works because they felt it didn't meet the criteria of fair use.

So I think what the goal is is to try to come up with what we believe are permitted uses that are acceptable and have an understanding of what that is. Normally, when you agree that certain things should be permitted, an exemption can be the way to go because you don't have to worry about predictability. And fair use has always been a backdrop where you weigh all of the evidence.

So I think it is up to the committee to decide where it wants to go. Does it want to update an exemption or does it want to work in the area of fair use and maybe go in the area of guidelines or legislative history that clarifies better for the educational community what is and what is not fair use?

Senator ASHCROFT. I was pleased to see that you recommended eliminating the requirement that distance learning take place only in a classroom setting. This only makes sense because of the real promise that digital distance learning is providing education beyond the classroom. I understand that eliminating this limitation on the exemption would create potential for abuse.

What other limitations on the exemption can help prevent such abuse?

Ms. PETERS. There are a number of things that are in our report; certainly, the use of technological protection measures, both with respect to gaining access to a work, which we did find that almost all educational institutions have in place, whether it is the use of passwords or PIN's or whatever. The more troubling piece is that you need to control the downstream copying, especially when entire works have been used, for example, an entire musical composition. There, again, there are technological protection measures that could prohibit additional copying, but they are not in widespread use. Our report recommends including both, to the extent that it is reasonable to do so.

Senator ASHCROFT. I understand that the current exemption exists and inures to the benefit of non-profit educational institutions. But as I look at the educational community, I see it in very serious transition, and some of the best schools delivering the best education at the lowest cost can be profit-oriented institutions.

Would you recommend that the committee visit that with a sort of critical eye? What if it is cheaper for the students? What if it generates greater student performance? What if profit institutions actually consume fewer of the cultural resources in providing good education to students? Should we be discriminating against the school because it does a better job merely because it is for-profit?

Ms. PETERS. This was one of the issues that created the greatest debate. We found that there were non-profit educational institutions that had for-profit online courses. We found that there were for-profit institutions that had not-for-profit courses. We found that many institutions were forming partnerships with corporations and forming partnerships with each other.

And there was tremendous testimony to the effect that a more appropriate criteria might be accreditation, whether it is an accredited institution or an accredited course. There was concern that I could call myself the Peters University and put my material up on the Net and sign up some people and make it available. And, you know, I have no accreditation and I might not be limited by good pedagogical techniques and I might be putting up a lot of entire musical compositions. So there was a lot of concern about even abuse in the non-profit.

For us, first of all, in our mandate we were asked to consult with non-profit educational institutions.

Senator ASHCROFT. So that is our fault.

Ms. PETERS. Well, that is one piece, but we didn't limit ourselves to that, I will tell you.

Senator ASHCROFT. So in your good judgment, you——

Ms. PETERS. We decided we should hear from everybody. The second one is that the part of the law that we focused on, which is sections 110(1), face-to-face teaching activities, and 110(2), which is like instructional broadcasting, both are limited to non-profit educational institutions. And so it wasn't that easy to update 110(2) and change the criteria for eligibility. But what we do say is that that is something you may want to look at it.

Senator ASHCROFT. If I might, Mr. Chairman, I just think that the line between profit and non-profit continues to be blurred more and more in our culture.

Ms. PETERS. We saw that, and what we found that was interesting is, on licensing, the copyright owners who license—if the request is for educational use, they do not make a distinction between whether the institution is for-profit or non-profit.

Senator ASHCROFT. Of all the books that I have had the privilege of selling, my wife and I charge them the same. That is free, no extra charge for that evidence.

Thank you, Mr. Chairman.

The CHAIRMAN. Well, just one or two other questions, Ms. Peters. Educators have raised concerns that they may not be able to provide distance education students the same quality of instruction that they provide for face-to-face students. How do your recommendations address these concerns?

Ms. PETERS. Our intent with the recommendation was to certainly allow them to use materials on the Internet, and our recommendation with regard to portions of works with regard to audio-visual works and sound recordings and dramatic works, we think, could address some of that. Now, obviously, there is some need for licensing.

The CHAIRMAN. Sure. Now, copyright owners have raised the concern that expanding section 110(2) would harm their markets both by interfering with licensing opportunities and by increasing

the risks of unauthorized dissemination over the Internet. How do your recommendations address those concerns?

Ms. PETERS. Number one, with regard to the marketplace, they may have some legitimate concerns, and specifically the concern should be with those who are in the educational market. If you are an educational or an instructional publisher, then, in fact, that is your market and I would think that there are some additional concerns.

With respect to concerns about leakage and downstream copying, I think it is the technology; it is the technology that would prevent downstream copying and the technology that would prevent unauthorized access that must be the answer.

The CHAIRMAN. What are the international implications of your recommendations? Would they be consistent with the treaty obligations of the United States?

Ms. PETERS. We believe that our recommendations, if enacted, would meet the treaty obligations. There are two things that you look to. One is the Berne Convention, which has an article 10(2) that permits the utilization, to the extent justified by the purpose, of literary or artistic works by way of illustration in broadcast for teaching in a manner compatible with fair practice.

The TRIP's text has an article that basically says that you can have restrictions and conditions as long as they don't interfere with the legitimate exploitation of the work or unreasonably prejudice the interests of the author. We think that recommendations would be permitted under both the Berne Convention and the TRIP's text.

The CHAIRMAN. Well, thank you. What we are going to do is we will keep the record open for written statements that anybody wants to submit for the hearing record, and we will also keep the record open for questions from members of the committee. We will keep it open until the end of the week.

Ms. PETERS. Can I just mention to you that for people who are looking for the report, we will be distributing it today and we will have it on our Web site later today.

The CHAIRMAN. That will be great. Well, this has been helpful and I think it moves us along the way toward some resolution here. We appreciate all the efforts you have made, and your staff and others who have worked so closely with you.

Well, thanks so much.

Ms. PETERS. We appreciate it.

[The prepared statement of Ms. Peters follows:]

PREPARED STATEMENT OF MARYBETH PETERS

Over the past five years, the application of copyright law to distance education using digital technologies has become the subject of public debate and attention in the United States. In the Digital Millennium Copyright Act of 1998 (DMCA), Congress charged the Copyright Office with responsibility to study the issue and report back with recommendations within six months. After an intensive process of identifying stakeholders, holding public hearings, soliciting comments, conducting research, and consulting with experts in various fields, the Office has issued this Report.

Part I of the Report gives an overview of the nature of distance education today. Part II describes current licensing practices in digital distance education, including problems and future trends. Part III describes the status of technologies relating to the delivery and protection of distance education materials. Part IV analyzes the application of current copyright law to digital distance education activities. Part V discusses prior initiatives addressing copyright and digital distance education. Part VI

examines the question of whether the law should be changed, first summarizing the views of interested parties and then providing the Copyright Office's analysis and recommendations.

I. The Nature of Distance Education Today

Distance education in the United States today is a vibrant and burgeoning field. Although it is far from new, digital technologies have fostered a rapid expansion in recent years, as well as a change in profile. The technologies used in distance education, the populations served, the institutions offering such programs, and the partnerships that have emerged differ in nature and scale from earlier models.

The most fundamental definition of distance education is a form of education in which students are separated from their instructors by time and/or space. Distance education is utilized in some form at every level of the educational spectrum, with the most extensive use in higher education. An individual course may contain both classroom and distance education components. Digital technology is used extensively for varied purposes and in varied ways, depending on the intended audience for the course, and the availability and cost of the technology. The capabilities of the new technologies have made possible a more interactive experience that more closely parallels face-to-face teaching—in effect creating a virtual classroom. They have also made distance education courses more convenient and better suited to the needs of different students, including by providing the benefits of both synchronous and asynchronous methods.

Distance education is reaching wider audiences, covering all segments of the population. The college audience is increasing particularly rapidly, in part due to responsiveness to the needs of an older, non-traditional student population, as well as students in other countries. Students also include professionals engaging in professional development or training, and retirees. The expansion of the field has led to changes among providers, with courses offered by both nonprofit and for-profit entities, on both a nonprofit and for-profit basis, and through varieties of partnerships among educational institutions and corporations. The federal government has been active in promoting the benefits of distance education, with recent legislation providing funding and recognition in various forms.

Educational institutions offering distance education draw on library resources in several ways, including to provide support for online courses and to provide access to supplemental materials in digital form. Institutions are engaged in adopting copyright policies, training faculty and staff, and educating students about copyright law. They are increasingly seeking and obtaining formal accreditation.

II. Licensing of Copyrighted Works

Although substantial licensing activities are taking place today in connection with the provision of materials to distance education students, so far relatively few licenses are requested or granted for digital uses. Most licensing relates to supplemental materials in analog form, or, increasingly, in digital form; the least common type of licensing is for digital uses of copyrighted works incorporated into the class itself. Most of the works licensed for digital use are textual materials; licenses for other types of content are much less frequent. As an alternative to seeking a license, an educational institution may avoid the use of preexisting copyrighted works in distance education courses, or may rely on exemptions in the copyright law. There is wide diversity in licensing procedures among educational institutions and copyright owners. In general, the more resources devoted to licensing, and the more centralized the responsibility, the more efficient and successful the process.

Many educational institutions describe having experienced recurrent problems with licensing for digital distance education, primarily involving difficulty locating the copyright owner, inability to obtain a timely response, or unreasonable prices or other terms. The problems are reported to be most serious with respect to journal articles and audiovisual works. They appear to be exacerbated in the digital context, which may be explained in part by the perception of copyright owners that the risks of unauthorized dissemination are greater, and in part by the elements of novelty and unfamiliarity.

A number of trends may facilitate the development of more effective digital licensing in the near future, including advances in technology used to protect works, the use of electronic copyright management information, and online licensing systems. New collective initiatives should also ease the licensing process for many types of uses. As digital uses become more common and familiar, copyright owners are becoming more flexible. It is difficult to predict the extent to which licensing problems will subside or how long the improvement will take, but given the current state of

development of these trends, a more definitive evaluation will be possible in the next few years.

III. Technologies Involved In Digital Distance Education

Technology that facilitates licensing includes the ability to attach information to a work in digital format, and online rights and permissions services supporting a range of license and delivery functions. A number of different delivery technologies are used in distance education today, including traditional media used to carry digital information, such as digital television broadcasts or videoconferencing. These may be used in combination with digital network technology, such as computer connections between students and instructors.

The computer is the most versatile of distance education instruments, since it can perform the same function as a television or telephone, but also provide more interactivity, deliver more content, and support more comprehensive services. Computers can be used to transmit texts and graphics, connect users in a variety of real-time and asynchronous dialogues, deliver messages between users, and receive both audio and video transmissions.

There is no "typical" digital distance education course. Instructors sometimes build courses from scratch, and sometimes customize templates provided by commercial software. They may combine any or all of the technological tools available today, including e-mail, threaded discussions, chat rooms, whiteboard programs, shared applications, streaming video or audio, video or audio files, course management infrastructure, links to websites, and interactive CD–ROM's and DVD–ROM's. In addition, programs for self-paced independent learning may be obtained from commercial vendors or through an educational institution.

The need to provide technological security for copyrighted works in the digital environment has been recognized in all, sectors, not just for distance education. Technology companies and content providers are working to develop commercially viable protection technologies, and industries are collaborating to develop standards. Some technologies limit access to works; others prevent or detect uses of works after access. Each method varies in its cost and degree of security; although many are highly effective, none provides absolute certainty. The goal is to provide a high enough level of protection that the cost of circumvention outweighs the value of access to the material protected.

Educational organizations can, and commonly do, limit access to students enrolled in a particular class or institution through several different methods used separately or in combination: password protection, firewalls, screening for IP addresses or domain names, hardware connections, encryption, or using CD–ROM's as a delivery mechanism.

After access has been gained, however, material is available to students for further use, including downloading, or electronic distribution. Technologies that address such downstream uses do exist today, with several on the market, others expected to be released very soon, and others projected for release in the next year. Most, but not all, are designed to handle a single type of content. The most effective are secure container/proprietary viewer technologies, which allow copyright owners to set rules for the use of their works, which are then attached to all digital copies, and prevent anyone from making a use that is not in accordance with the rules. For example, students could be allowed to view the work or print a single copy, but not to save it to disk or distribute it to others electronically. Streaming formats, which do not facilitate the making of copies, and the use of low resolution digital copies, also offer some degree of protection against redistribution.

Technologies for embedding information in digital works to identify and track usage are also in development and use, with the practice of digital watermarking the most effective. Using commercially available software or services, these identifiers can be used as a search object to find unauthorized copies of some types of works on the World Wide Web.

Significant developments are occurring in all of these areas, and a few generalizations can be made. More efficient licensing mechanisms will become more widespread, and delivery systems will become more efficient, sophisticated and interoperable. Developments in protecting content are harder to predict. In the near future it will be technically possible to protect works against both unauthorized access and dissemination with a high degree of effectiveness. Because it remains to be seen whether technologies to prevent downstream uses will gain widespread market acceptance, the extent to which they will be available in practical form for use in digital distance education at any given point in time is unclear.

IV. Application of Copyright Law To Distance Education

Different copyright rights are implicated by different educational activities, depending in part on the technologies used. When a performance or display of a work is accomplished by means of a digital network transmission, temporary RAM copies are made in the computers through which the material passes, by virtue of the technological process. As a result, not only the rights of public performance or display are implicated, but also the rights of reproduction and/or distribution. This does not mean that the use is necessarily an infringement. Permission to use the work could be granted by the copyright owner, either through an express license or implied from the circumstances. If not, the use may fall within one of the various exemptions in the Copyright Act.

Three exemptions together largely define the scope of permitted uses for digital distance education: two specific instructional exemptions in section 110, and the fair use doctrine of section 107. Sections 110(1) and (2) together were intended to cover all of the methods by which performances or displays in the course of systematic instruction take place. Section 110(1) exempts the performance or display of any work in the course of face-to-face teaching activities. Section 110(2) covers the forms of distance education existing when the statute was enacted in 1976, exempting certain performances or displays in the course of instructional broadcasting. Both subsections contain a number of limitations and restrictions. In particular, the section 110(2) exemption from the performance right applies only to nondramatic literary and musical works (although the display right exemption applies to all categories of works). Section 110(2) also contains limitations on the nature and content of the transmission, and the identity and location of the recipients. The performance or display must be made as a regular part of systematic instructional activity by a nonprofit educational institution or governmental body; it must be directly related and of material assistance to the teaching content; and it must be made primarily for reception in classrooms or places of instruction, or to persons whose disabilities or other special circumstances prevent their attendance in classrooms, or to government employees.

As written, section 110(2) has only limited application to courses offered over a digital network. Because it exempts only acts of performance or display, it would not authorize the acts of reproduction or distribution involved in this type of digital transmission. In addition, students who choose to take a distance course without special circumstances that prevent their attendance in classrooms may not qualify as eligible recipients.

Fair use is the broadest and most general limitation on the exclusive rights of copyright owners, and can exempt distance education uses not covered by the specific instructional exemptions. It is flexible and technology-neutral, and continues to be a critical exemption for educational users in the digital world. It requires courts to examine all the facts and circumstances, weighing four nonexclusive statutory factors. While there are not yet any cases addressing the application of fair use to digital distance education, a court's analysis will depend on elements such as the subject matter of the course, the nature of the educational institution, the ways in which the instructor uses the material, and the kinds and amounts of materials used. Guidelines have in the past been negotiated among interested parties to provide greater certainty as to how fair use applies to education; such guidelines for certain analog uses were included in legislative history around the time of enactment of the Copyright Act.

Other exemptions in the Copyright Act may exempt some distance education uses in limited circumstances, but do not significantly expand the scope of permitted instructional uses in a digital environment. These include the ephemeral recordings exemption in section 112, the limitations on exclusive rights in sound recordings in section 114, and the exemption for certain secondary transmissions in section 111. Compulsory licenses could permit distance educators to use some works in limited ways, but are not likely to be much used.

Two titles of the DMCA are also relevant, one providing limitations on the liability of online service providers and the other establishing new technological adjuncts to copyright protection. While these provisions do not affect the scope of permitted digital distance education uses, they add a degree of security for both educational institutions and copyright owners disseminating and licensing material in the digital environment, and may relate to exemptions in various respects. New section 512 of the Copyright Act provides greater certainty that educational institutions providing network access for faculty, staff, and students will not, merely by doing so, become liable for infringing material transmitted over the network. New Chapter 12 contains a prohibition against various forms of circumvention of technological meas-

ures used by copyright owners to protect their works, and a provision protecting the integrity of copyright management information.

The international context raises two separate issues: treaty obligations and the impact of any amendments abroad. The major treaties that impose obligations on the United States with respect to copyright are the Berne Convention and the TRIP's Agreement. Both contain rules governing the permissibility of exceptions to copyright owners' rights. Any new or amended exemption for distance education should be drafted to be compatible with these standards. In addition, the enactment of any new exemption will have an impact abroad, primarily due to doctrines of choice of law. When an educational institution in the United States transmits courses to students in other countries, it is unclear whether U.S. law will apply to such transmissions, or the law of the country where the transmission is received, making it difficult for educators to determine what uses of works are permissible. Other countries are also making or considering amendments to their copyright laws to address digital distance education.

V. Prior Initiatives Addressing Copyright and Digital Distance Education

Two different initiatives begun in 1994 sought to develop guidelines interpreting the application of fair use to educational uses through digital technology. One group, initiated by the Consortium of College and University Media Centers (CCUMC) and the Agency for Instructional Technology, issued a set of guidelines in 1996 addressing the use of portions of copyrighted works in educational multimedia projects created by educators or students as part of systematic learning activity at nonprofit educational institutions. The other group, established by the Conference on Fair Use (CONFU) convened by the Administration's Information Infrastructure Task Force, prepared draft guidelines relating to the performance and display of copyrighted works in distance learning classes of nonprofit educational institutions, not including asynchronous delivery over computer networks. CONFU considered both sets of guidelines as proposals, but did not formally adopt them. A number of organizations and companies, however, have endorsed one or both sets of guidelines, or use them as a reference.

In 1997, the issue of copyright and digital distance education was raised in Congress by the introduction of bills in the House and Senate proposing an amendment to section 110(2). The amendment would have clarified that the exemption covered digital transmissions, and would have broadened its scope, removing the limitation on categories of works covered, adding the right of distribution, and removing the requirement that the transmission be made primarily for reception in classrooms and by people unable to attend classrooms. No floor action was taken on these bills, but they became the subject of discussion in the Senate during consideration of the WIPO Copyright and Performances and Phonograms Treaty Implementation Act. After intensive discussions among interested parties, it became clear that many complex and interrelated issues were involved that could not be given adequate consideration in the time available. Congress therefore provided for a longer-term study in section 403 of the DMCA.

VI. Should Current Law Be Changed?

A. THE VIEWS OF THE PARTIES

The educational community (including both educators and academic libraries) believes that a change in the law is required to optimize the quality and availability of forms of distance education that take full advantage of today's technological capabilities. Members of this community argue that fair use is uncertain in its application to the digital environment, and that the exemptions in section 110 are outmoded and do not extend to the full range of activities involved in digital distance education. They report that licensing for such uses is not working well, and therefore does not offer a satisfactory alternative. Some educators also note that distance education is already an expensive proposition, involving substantial start-up and maintenance costs, and warn that adding the cost of licensing fees for copyrighted materials could make it prohibitive.

Copyright owners, on the other hand, do not believe statutory amendment is necessary or advisable, pointing out that digital distance education is flourishing under current law. They see the fair use doctrine as strong and healthy, and are concerned that expanding the section 110 exemptions would harm both their primary and secondary markets. They assert that more efficient licensing systems are developing, and that the reported difficulties in obtaining permissions will ease with time and experience. Finally, they argue that educators who wish to use preexisting copyrighted content in their courses should regard licensing fees as one of the costs of

distance education, comparable to the purchase of the necessary hardware and software.

There is virtual unanimity that the doctrine of fair use is fully applicable to uses of copyrighted works in the digital environment, including in distance education. (This does not mean that all agree as to which digital distance education activities would qualify as fair.) As to the role of guidelines, the messages were mixed. Many copyright owners recommend pursuing the development of guidelines regarding the fair use of copyrighted materials in digital distance education, and suggest that further discussion could be productive in achieving greater mutual understanding and certainty. Educational and library groups were less positive, expressing varying views. Some educators see guidelines as valuable guides to decisionmaking; other participants are critical of the concept or doubtful about the efficacy of any results.

As to the specific instructional exemptions, copyright owners argue that section 110(2) should not be changed. They are concerned that a broadening of the exemption would result in the loss of opportunities to license works for use in digital distance education—a new, growing, and potentially lucrative market. They urge that Congress not foreclose the potential market by legislating prematurely or overbroadly.

The other major concern of copyright owners is the increased risk of unauthorized downstream uses of their works posed by digital technology. When works are distributed in digital form, once a student obtains access, it is easy to further distribute multiple copies to acquaintances around the world. Depending on the type of work involved and the amount used, the result could be a significant impact on the market for sales of copies.

Most educational and library groups, in contrast, support a broadening of section 110(2). They view fair use alone as either not clear enough or not extensive enough in its application. Their primary goals are to avoid discrimination against remote site students in their educational experience vis-a-vis on-site students; to avoid discrimination against new technologies vis-a-vis old ones; and to avoid the difficulties in licensing that many describe having experienced. In general, the educational community seeks the following changes: (1) elimination of the concept of the physical classroom as a limitation on the availability of the exemption; (2) coverage of rights in addition to performance and display, at least to the extent necessary to permit digital transmissions; and (3) expansion of the categories of works covered, by broadening the performance right exemption to apply to works other than nondramatic literary and musical works. Some would go further, advocating an exemption that allows educators to do anything by means of digital transmission that they can do in the classroom under section 110(1). Libraries in particular also seek exemptions for additional activities, stressing the importance of being able to give access to electronic reserves and other resource materials in order to provide a high-quality educational experience for students at remote sites.

As to the risks involved, educational institutions are willing to take steps to safeguard the security of the materials they disseminate. In fact, they point out that they already make such efforts; the use of password protection and other access controls is widespread. Many also require compliance with copyright policies and inform students, faculty and staff about the law. Finally, educators believe that licensing should continue to play some role in distance education.

B. ANALYSIS AND RECOMMENDATIONS

The analysis of whether the law should be changed is complicated by the context: a time of rapid development in both technologies and markets. While such rapid development is a hallmark of the digital age, in the area of distance education we are at a particularly crucial point in time. Sophisticated technologies capable of protecting content against unauthorized post-access use are just now in development or coming to market, although it is not clear when they will be widely available in a convenient and affordable form that can protect all varieties of works. Meanwhile, licensing systems for digital distance education are evolving, including online and collective licensing mechanisms, and initial fears are beginning to ebb.

Many of the concerns on all sides stem from the inability to depend on the effective functioning of technological protections and licensing mechanisms. If technology were further along, broadened exemptions could be less dangerous to copyright owners; if licensing were further evolved, broadened exemptions could be less important for educators. The technical tools for both exist today; it will be clearer within the next few years how successfully they can be integrated into the real world of distance education. Given the timetable of the legislative process, the question is what steps Congress can and should take in the interim.

Over the course of this study, numerous issues have been raised and discussed. Given the limited time allotted, the specific mandate for the Register to consider primarily "the need for an exemption from exclusive rights of copyright owners for distance education through digital networks," and the origin of that mandate in proposed amendments to section 110(2), our analysis focuses on the appropriate treatment under copyright law of materials delivered to students through digital technology in the course of mediated instruction. We do not address other uses of copyrighted works in the course of digital distance education, including student use of supplemental or research materials in digital form; the creation of multimedia works by teachers or students; and the downloading and retention of materials by students. Such activities, although an important part of digital distance education, do not involve uses analogous to the performances and displays addressed in section 110(2).

As a fundamental premise, the Copyright Office believes that emerging markets should be permitted to develop with minimal government regulation. When changes in technology lead to the development of new markets for copyrighted works, copyright owners and users should have the opportunity to establish mutually satisfactory relationships. A certain degree of growing pains may have to be tolerated in order to give market mechanisms the chance to evolve in an acceptable direction. At some point, however, existing but dysfunctional markets may require adjustments in the law. Timing is therefore key.

The desire to let markets evolve does not mean that the law must remain frozen. Where a statutory provision intended to implement a particular policy is written in such a way that it becomes obsolete due to changes in technology, the provision may require updating if that policy is to continue. Doing so may be seen not as preempting a new market, but as accommodating existing markets that are being tapped by new methods. In the view of the Copyright Office, section 110(2) represents an example of this phenomenon.

The exemptions in sections 110(1) and (2) embody a policy determination that performances or displays of copyrighted works in the course of systematic instruction should be permitted without the need to obtain a license or rely on fair use. The technological characteristics of digital transmissions have rendered the language of section 110(2) inapplicable to the most advanced delivery method for systematic instruction. Without an amendment to accommodate these new technologies, the policy behind the law will be increasingly diminished.

At the same time, it must be borne in mind that existing law was crafted to embody a balance of interests between copyright owners and users of works. In order to maintain a comparable balance, the coverage of an exemption cannot be expanded without considering the impact of the expansion on markets for copyrighted works. If the law is updated to address new technology, the risks posed by that technology must be adequately taken into account.

Updating section 110(2) to allow the same activities to take place using digital delivery mechanisms, while controlling the risks involved, would continue the basic policy balance struck in 1976. In our view, such action is advisable.

Other amendments have been suggested that would go further, and entail varying degrees of change in legislative policy. These include expanding the exemption to cover more categories of works or additional exclusive rights beyond those necessary for digital delivery, and otherwise resolving problems experienced in the licensing process. Here, the elements of timing and burden of proof are critical. From a pedagogical perspective, these suggested expansions are desirable. From a copyright owner's perspective, they endanger primary or secondary markets for valuable works. The question should not be whether users have established a *need* to expand the exemption, any more than whether copyright owners have established a *need* to retain its limits, but rather whether given current conditions, the policy balance struck in 1976 should be recalibrated in certain respects.

We conclude that some policy recalibration may be appropriate at this point, relating primarily to categories of works covered. In other areas, we believe that existing restrictions should be retained and markets permitted to evolve, subject to further review. Critical to this conclusion is the continued availability of the fair use doctrine as a safety valve.

1. Recommendations as to statutory language

In order to accomplish the goal of updating the language and the policy balance of section 110(2), the Copyright Office offers the following recommendations:

(a) Clarify meaning of "transmission." It should be clarified through legislative history that the term "transmission" in section 110(2) covers transmissions by digital means as well as analog.

(b) Expand coverage of rights to extent technologically necessary. Because the exemption in its current form permits only acts of performance and display, digital transmissions over computer networks would not be excused. We therefore recommend expanding the scope of the rights covered, in order to add those needed to accomplish this type of transmission. The rights of reproduction and/or distribution should not be added in their entirety, but only to the extent technologically required in order to transmit the performance or display authorized by the exemption.

(c) Emphasize concept of mediated instruction. An exemption that includes elements of the reproduction right so as to allow a student to access individual works asynchronously raises an unintended problem. If an entire work can be viewed on a computer screen, repeatedly, whenever a student chooses and for an indefinite duration, the performance or display could conceivably function as a substitute for the purchase of a copy. In updating section 110(2), it is therefore critical to ensure that the performance or display is analogous to the type of performance or display that would take place in a live classroom setting. This might be accomplished by amending paragraph (A) of section 110(2), which requires the performance or display to be "a regular part of * * * systematic instructional activities," to focus on the concept of mediated instruction. Additional language could specify that the performance or display must be made by or at the direction of an instructor to illustrate a point in, or as an integral part of, the equivalent of a class session in a particular course.

(d) Eliminate requirement of physical classroom. In its current form, section 110(2) requires transmissions to be sent to a classroom or similar place normally devoted to instruction, or to persons who cannot attend a classroom. The nature of digital distance education, where the goal is to permit instruction to take place anywhere, makes this limitation conceptually and practically obsolete. Eliminating the physical classroom limitation would better reflect today's realities.

At the same time, it is important to retain meaningful limitations on the eligible recipients; the performances or displays should not be made available to the general public. We recommend permitting transmissions to be made to students officially enrolled in the course, regardless of their physical location. Since today's digital and scrambling technologies allow transmissions to be targeted more precisely, the requirement should be added that the transmission must be made solely, to the extent technologically feasible, for reception by the defined class of eligible recipients.

(e) Add new safeguards to counteract new risk. Because the transmission of works to students in digital form poses greater risks of uncontrolled copying and distribution, a broadened exemption could cause harm to markets beyond the primary educational market. It is therefore critical, if section 110(2) is expanded to cover digital transmissions, that safeguards be incorporated into the statute to minimize these risks. We recommend including a number of safeguards as conditions on the applicability of the exemption: First, any transient copies permitted under the exemption should be retained for no longer than reasonably necessary to complete the transmission. Second, those seeking to invoke the exemption should be required to institute policies regarding copyright; to provide informational materials to faculty, students, and relevant staff members that accurately describe and promote compliance with copyright law; and to provide notice to students that materials may be subject to copyright protection.

Third, when works are transmitted in digital form, technological measures should be in place to control unauthorized uses. In order to effectively limit the risks to copyright owners' markets, these measures should protect against both unauthorized access and unauthorized dissemination after access has been obtained. The exemption should require the transmitting institution to apply such measures, described in simple and technology-neutral language. Because no technology is one hundred percent effective, only measures that "reasonably" prevent these acts should be required. In addition, the law should impose an obligation not to intentionally interfere with protections applied by the copyright owners themselves. If copyrighted works are to be placed on networks, and exposed to the resulting risks, it is appropriate to condition the availability of the exemption on the application of adequate technological protections.

(f) Maintain existing standards of eligibility. An educational institution must be "nonprofit" to be eligible for the exemption in section 110(2). There was extensive debate over the appropriateness of retaining the "nonprofit" requirement, and/or adding a requirement of accreditation. In the area of digital distance education, the lines between for-profit and nonprofit have blurred, and the issue has arisen as to how to guarantee the bona fides of an entity that is entitled to the exemption at a time when anyone can transmit educational material over the Internet. The Copyright Office is not convinced at this point that a change in the law is desirable, given the policy implications of permitting commercial entities to profit from activities using copyrighted works without compensating the owners of those works; the

potential inconsistency with other provisions of the Act, including section 110(1), that refer to "nonprofit educational institutions"; and the DMCA mandate to consult specifically with nonprofit educational institutions and nonprofit libraries and archives. This is nevertheless an important and evolving issue that deserves further attention.

(g) Expand categories of works covered. One of the most difficult issues to resolve is whether to expand the categories of works exempted from the performance right beyond the current coverage of nondramatic literary and musical works. On the one hand, pedagogical considerations militate against continuing to limit the types of works covered. On the other hand, the existing distinctions have been embedded in the law for more than twenty years, based on the potentially greater market harm to works such as dramatic works or audiovisual works. The question is why this policy judgment should be altered now.

The main categories of works that could be affected by an expansion are audiovisual works, sound recordings, and dramatic literary and musical works. In terms of primary markets, educational licensing may represent a major source of revenue only for educational videos. The potential effect on secondary markets, however, remains a serious concern for all such works. This concern has been exacerbated beyond the threats perceived in 1976 by the capacities of digital technology. For entertainment products like motion pictures, transmission could well substitute for students paying to view them elsewhere, and if digital copies can be made or disseminated, could affect the broader public market.

The considerations are different for sound recordings than for other categories. Because there was no public performance right for sound recordings when section 110(2) was enacted in 1976, educators were free to transmit performances of sound recordings to students (assuming the use of any other work embodied in the sound recording was authorized by statute or license). When owners of sound recordings were granted a limited public performance right in 1996, there was no discussion of whether sound recordings should be added to the coverage of section 110(2). This issue thus represents a new policy question that has not yet been considered, rather than a potential change in a judgment already made.

It is the exclusion of audiovisual works, however, about which educators express the strongest concern, in part due to difficulties in obtaining licenses for digital uses from motion picture producers. Moreover, as digital distance education uses more multimedia works, which incorporate audiovisual works and may be considered audiovisual works themselves, the failure to cover this category may have an increasing impact.

On balance we suggest a compromise. If audiovisual and other works are added, it should be done in a limited way, with greater restrictions than section 110(2) currently imposes. Thus, section 110(2) could be amended to allow performances of categories in addition to nondramatic literary and musical works, but not of entire works. An expanded exemption should cover only the performance of reasonable and limited portions of these additional works.

It is important to note that under the current language of section 110(2), the portion performed would have to be the subject of study in the course, rather than mere entertainment for the students, or unrelated background or transitional material. This requirement, combined with the limitation on the amount of the work that could be used, should further serve to limit any impact on primary or secondary markets. It nevertheless may be advisable to exclude those works that are produced primarily for instructional use. For such works, unlike entertainment products or materials of a general educational nature, the exemption could significantly cut into primary markets, impairing incentives to create.

(h) Require use of lawful copies. If the categories of works covered by section 110(2) are expanded, we recommend an additional safeguard: requiring the performance or display to be made from a lawful copy. Such a requirement is already contained in section 110(1) for the performance or display of an audiovisual work in the classroom.

(i) Add new ephemeral recording exemption. Finally, in order to allow the digital distance education that would be permitted under section 110(2) to take place asynchronously, we recommend adding a new subsection to section 112, the ephemeral recordings exemption. The new subsection would permit an educator to upload a copyrighted work onto a server, to be subsequently transmitted under the conditions set out in section 110(2) to students enrolled in her course. The benefit of the new subsection should be limited to an entity entitled to transmit a performance or display of a work in digital form under section 110(2). Various limits should be imposed similar to those set out in other subsections of section 112, including the requirements that any such copy be retained and used solely by the entity that made it; that no further copies be reproduced from it (except the transient technologically

necessary copies that would be permitted by section 110(2)); that the copy be used solely for transmissions authorized under section 110(2); and that retention of the copy be limited in time, remaining on the server in a form accessible to students only for the duration of the course. In addition, the reproduction should have to be made from a lawful copy. Finally, the entity making the reproduction should not be permitted to remove technological protections applied by the copyright owner to prevent subsequent unlawful copying.

2. Clarification of fair use

Because there is confusion and misunderstanding about the fair use doctrine, including the function of guidelines, we believe it is important for Congress to provide some clarification. The statutory language of section 107 is technology-neutral, and does not require amendment. But if any legislative action is taken with regard to distance education, we recommend that report language explicitly address certain fair use principles.

First, the legislative history should confirm that the fair use doctrine is technology-neutral and applies to activities in the digital environment. It might be useful to provide some examples of digital uses that are likely to qualify as fair. It should be explained that the lack of established guidelines for any particular type of use does not mean that fair use is inapplicable. Finally, the relationship of guidelines to fair use and other statutory defenses should be clarified. The public should understand that guidelines are intended as a safe harbor, rather than a ceiling on what is permitted.

Although flexibility is a major benefit of the fair use doctrine, the corollary is a degree of uncertainty. This drawback is exacerbated by the context of new technologies, where little case law is available. In the analog world, efforts such as the photocopying and off-air taping guidelines have proved helpful in giving practical guidance for day-to-day decisionmaking by educators. The Copyright Office believes that additional discussion among the interested parties of fair use as applied to digital distance education could be productive in achieving a greater degree of consensus. In the past, efforts to develop guidelines have been successful where a consistent group of participants worked within a structure established under the auspices of a government agency, with some direction provided by Congress.

3. Licensing issues

The fact that digital technologies impose new costs on delivering distance education does not itself justify abandoning or regulating the long-standing licensing system. Digital distance education entails the use of computer hardware and software, and the employment of trained support staff, all of which cost money. Digital distance education may also entail the use of preexisting copyrighted works. This content is at least as valuable as the infrastructure to deliver it, and represents another cost to be calculated in the equation.

The critical question here is whether the markets in which distance educators participate are dysfunctional, and if so, to a degree that calls for a legislative remedy. While the problems experienced in licensing are not unique to digital distance education, they are heightened in the digital context due to factors such as fear about increased risks; lack of certainty as to the scope of pre-digital transfers of rights; and general unfamiliarity with new uses. Many of these factors should diminish with time and experience, and there are some indications that this is already happening. In addition, online and collective licensing for digital uses will increasingly facilitate transactions. Nevertheless, problems will persist for the foreseeable future, as long as risks are perceived as high or benefits low.

One of the problems identified by educators has special characteristics that can block the functioning of the marketplace. Where the owner of the work simply cannot be located, there is no opportunity to negotiate. Particularly because the problem of such "orphan works" may become more acute due to longer copyright terms and the expanded audience for older works made possible by digital technology, we believe that the time may be ripe for Congressional attention to this issue generally.

We have not otherwise seen sufficient evidence of a need for a legislative solution moving away from the general free market approach of current law. Given the state of flux of online licensing systems and technological measures, and the waning influence of the elements of fear and unfamiliarity, problems of delay and cost may subside to an acceptable level. At this point in time we recommend giving the market for licensing of nonexempted uses leeway to evolve and mature. Because the field of digital distance education is growing so quickly, and effective licensing and technologies may be on the horizon, we suggest revisiting the issue in a relatively short period of time.

4. International considerations

In making these recommendations, the Copyright Office is mindful of the constraints of U.S. treaty obligations. In our view, the relevant criteria of the Berne Convention and the TRIP's Agreement are fundamentally in harmony with domestic policy considerations. We believe that our recommendations are fully consistent with these criteria, and would not alter the fundamental balance of either section 110(2) or 112, which have been part of U.S. law for more than twenty years.

The balance struck in U.S. law will have an importance beyond our borders, both through its potential application abroad and as a model for other countries examining the issue. Whether a distance education transmission initiated in one country and sent to a student in another country constitutes an infringement, falls within a collective or compulsory licensing scheme, or is exempted, will depend on which country's law a court applies. This means both that the scope of the exemptions in the U.S. Copyright Act may have an impact on foreign markets for U.S. works, and that U.S. copyright owners and users have an interest in the scope of exemptions or statutory licensing rules adopted in foreign laws.

The CHAIRMAN. With that, we will adjourn until further notice.

[Whereupon, at 10:52 a.m., the committee was adjourned.]

○