Before the
U.S. COPYRIGHT OFFICE
LIBRARY OF CONGRESS

In the Matter of exemption to prohibition on circumvention
of copyright protection systems for access control technologies

Docket No. RM 2011-7

Comment of

• Peter Decherney, Associate Professor of Cinema Studies, University of Pennsylvania,
• Katherine Sender, Associate Professor, Annenberg School for Communication, University of Pennsylvania,
• Michael X. Delli Carpini, Professor and Dean, Annenberg School for Communication, University of Pennsylvania,
• International Communication Association,
• Society for Cinema and Media Studies, and
• American Association of University Professors.

Requested Class of Work for Exemption

Audiovisual works (optical discs, streaming media, and downloads) that are lawfully made and acquired when circumvention is accomplished by college and university students or faculty (including teaching and research assistants) solely in order to incorporate short portions of video into new works for the purpose of criticism or comment.
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I. **Introduction: the Caméra Stylo**

The 2010 DMCA exemption for college and university professors and film and media students has truly aided the field of higher education. Classrooms are no longer completely segregated from our digital age, and professors can now serve their students much better than before, unhampered by restrictions on the fair use of copyrighted material under Section 107 and the application of the educational exemptions under Section 110 of the Copyright Act. Technology is rapidly transforming educational methods, and both teachers and students need to be able to take advantage of the most effective tools. They need the ability to incorporate media clips into their presentations and express themselves with video, just as they can already do in writing. In 1948, French critic Alexandre Austruc predicted the rise of the *caméra stylo*, the camera pen.\(^1\) Every year, Austruc’s coinage becomes more apt: we use video technology as we have long used writing. Being able to express ourselves with video—including quoting from existing video—is an essential element of 21\(^{st}\) century literacy. It helps faculty in the sciences, social sciences, and humanities teach as effectively as possible, and it helps students acquire the skills needed to be competitive in today’s workforce.

The addition of the American Association of University Professors (AAUP) to our list of petitioners testifies to the growing importance this exemption has gained at colleges and universities. The joint petitioners now represent over 54,000 educators—a substantial increase over the 6,600 joint petitioners represented in our 2009 comment. The AAUP is an organization of university faculty whose purpose is to advance academic freedom and shared governance, to define fundamental professional values and standards for higher education, and to ensure higher education’s contribution to the common good. The other petitioners are the International

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\(^1\) Alexandre Austruc, “Naissance d’une nouvelle avant-garde: la caméra stylo” *L’Ecran français* no. 144 (March 30, 1948).
Communication Association (ICA), an academic association dedicated to the study, teaching, and application of human and mediated communication; the Society for Cinema and Media Studies (SCMS), an organization dedicated to the study of the moving image; and Professors Michael X. Delli Carpini, Katherine Sender, and Peter Decherney.

The current exemption has been used to teach courses in subjects as varied as Biology, South Asian Studies, English, History, Art History, Communication, Film, Law, Drama, and Sociology. As a result of this exemption, professors have cut down on the time previously spent switching discs and clicking through menus and advertisements; it has improved the quality of clips that can be used in class; and it has allowed both professors and media studies students to make clips from films, television shows, and DVD extras that are not available in other formats and are extremely valuable for teaching. Most importantly, the exemption has permitted professors and media studies students to take advantage of presentation and editing software that enables them to show clips side-by-side, mix clips with stills and text on the same screen, and annotate clips with voiceover narration and/or hand-drawn notes.

In addition to our request to renew the current exemption, we would like to demonstrate that the exemption must be expanded in two ways in order to meet current educational needs. One advantage of the triennial rulemaking is that it has allowed the Copyright Office and the Librarian of Congress to alter the exemptions to keep pace with technology and the educational landscape. First, for all of the reasons that the 2006 exemption was expanded in 2010 to include faculty across disciplines, the exemption must now include students working in all fields. For reasons that we enumerate below, faculty and students across disciplines require high quality images. Biology students are not well-served by imprecise detail in microscopic images taken from educational videos, and Art History students require the finest detail to observe paint fading
in a documentary about fresco restoration. In addition, we would like to demonstrate that in 2011 it is necessary for faculty and students who are engaged in serious research and teaching to have access to the same technology that most students have in their own homes. Both high-definition optical discs and streaming media are now essential teaching tools, and the exemption should include access to them, as indeed the 2006 educational exemption did.

II. The Need for the Current Exemption’s Renewal

A. Higher Education in America Has Improved as a Direct Result of the 2010 DMCA Exemption

In 2010, the Librarian of Congress granted a DMCA exemption to college and university professors as well as college and university film and media studies students for “[m]otion pictures on DVDs… when circumvention is accomplished solely in order to accomplish the incorporation of short portions of motion pictures into new works for the purpose of criticism or comment…”2 Following the grant of this exemption, professors and film and media studies students have used the exemption to improve their educational environment in many different ways. Renewal of this exemption will allow professors and students to continue to realize the benefit of motion picture DVDs in an academic context. Furthermore, an expansion of this exemption, as proposed in Section IV, will broaden the resources available to professors for use in classroom demonstrations and will facilitate a more active learning environment by extending the exemption to all college and university students in the course of their studies.

The benefit of the 2010 expansion to encompass all college and university professors, as opposed to solely film and media professors, has mitigated the harm across a wide range of faculty. A recent survey of students at the University of Pennsylvania demonstrates the dramatic rise in the level of teaching simply as a result of the exemption. Most obviously, the exemption

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2 75 F.R. 43825, 43827.
allows faculty members to give students quick and direct access to high-quality images illustrating lectures. As one student explained, “In my biology class, we got to see footage of biological processes as they occurred in the cell—that was unbelievable. Real video of something so hard to visual[ize] is unbelievably helpful.”\(^3\) Indeed, the science classroom is one of the spaces to have benefited the most from the exemption, as access to high-quality illustrative images is vital. But do not underestimate the sheer power of the ability to call up images without having to wade through menus and ads—the use of video clips is invaluable in the age-old struggle to keep students engaged. “[V]ideo clips in class,” another student explained, “are engaging and help students remember the concepts in the lesson better.”\(^4\) Another student corroborates this: “When the teacher shows pictures, videos or studies that break up the lecture it keeps the students more attentive. It also gets us more involved.”\(^5\)

**B. The Exemption Creates Parity Across Media: Video is a Stepchild No More**

The 2010 exemption has been used in inventive ways across disciplines, and it has allowed video to take its rightful place both as a medium of study and as a medium of scholarly communication. In one telling example, David Wallace, the Judith Roden Professor of English at the University of Pennsylvania, explains how he compares a passage from Geoffrey Chaucer’s “Pardoner’s Tale” with a clip from the film *Zoolander* to discuss theories of performance.\(^6\) One minute, he has students read the Old English text in its original form and in great detail (“Thanne peyne I me to strecche forth the nekke…”); the next minute, the class watches a sequence from *Zoolander*. As Wallace explains:

> the highly mannered protocols of this performing might usefully be compared with, considered as, *voguing*: a highly stylized dance form that evolved in Harlem before being

\(^3\) Engaging Students Through Technology Symposium 2011, Student Survey Results, 5, Oct. 21, 2011.
\(^4\) Id. at 4.
\(^5\) Id. at 10.
\(^6\) Frank Grady & Peter W. Travis, *MLA Approaches to Teaching: The Canterbury Tales* (2nd ed. forthcoming).
mainstreamed by Madonna’s *Vogue* and by movies such as *Zoolander*. Certain gestures employed in hip-hop and *voguing*, such as momentary but emphatic pointing, loop back to equivalent gestures in Chaucer: to the Pardoner, certainly, but perhaps even to the famous ‘Hoccleve portrait’ (where a painted Chaucer points to a written text attesting to his own ‘lyknesse’). Class can wrap up with the walk-off from *Zoolander*, which sees two white actors deploy a whole battery of gestural and *voguing* techniques. Two questions to end with: how does the film allay homophobic anxieties arising from this camp, male-male encounter (frequent cuts to a blonde girlfriend figure; and David Bowie showing up to declare it ‘a straight walk off’); how does the film both acknowledge and repress the origins of the cultural form it is appropriating (frequent cuts to Ben Stiller’s ‘second,’ or corner man: an African-American in corn-rows). Such questions lead back to those larger discussions of race and gender, or the gendering of race, that form part of any contemporary *Canterbury Tales* class.\(^7\)

If you are a bit lost by this passage, perhaps it is because you do not have access to the Old English version (without a translation) and you do not have the clip before you, which is exactly the point. Students need full access to texts in their best format for close study. English professors have always been able to employ excerpts from literature and examine them closely with students, and faculty likewise need the ability to do the same with audiovisual works.

Law professors too, particularly those in the intellectual property field, have utilized the exemption to prepare law students for the legal analyses and arguments they will have to make as practitioners. Both Professor Jessica Litman\(^8\) of the University of Michigan and Professor Rebecca Tushnet\(^9\) of Georgetown University use the exemption to acquire excerpts of infringed works. As Professor Tushnet explains, “I’ve used the existing exemption to get clips from movies that have been involved in copyright and trademark litigation, showing the parts that are allegedly infringing, which is incredibly useful for students to understand the issues.”\(^10\) Because intellectual property lawyers must closely examine the allegedly infringing work in order to formulate an argument, law students would be hindered without the opportunity to learn from a

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7 Id.
8 Jessica Litman, John F. Nickoll Professor of Law, University of Michigan Law School.
9 Rebecca Tushnet, Professor of Law, Georgetown University Law Center.
10 Email from Professor Rebecca Tushnet, Oct. 22, 2011.
professor who is able to demonstrate such a process. Indeed, many copyright cases are decided on intricate details of the works at issue, and law students would not be able to examine and understand these critical details with lower-quality methods of display that would not require circumvention. Furthermore, the exemption allows professors to compile a number of examples of infringed works for a more holistic lesson on infringement, as opposed to merely one illustrative example. As Professor Litman stated, “The recent exemption has allowed me to put together short clips from DVDs containing copies of the works at issue in the following cases: Burnett v. 20th Century Fox; Bourne v. 20th Century Fox; Effects Associates v. Cohen; Sheldon Abend Revocable Trust v. Spielberg; Sid & Marty Krofft Television Productions v. McDonald’s Corp.”

Liberal arts professors, including film and media studies professors, continue to reap the benefits of the exemption through their classroom uses. Professor Jonathan Gray no longer wastes precious classroom time on unnecessary previews and advertisements. The educational advancements resulting from his ability to extract clips are evident: “…I can not only do close comparisons between two or more scenes (so, for instance, if I want to show how Fistful of Dollars echoes Yojimbo closely, I can play virtually identical scenes from each film back to back), but I can amass greater evidence… Doing the latter in turn allows me to shift focus from one or two specific shows to grander patterns and commonalities. In other words, I can start to make claims about media culture, not just about single films or TV shows.” Professor Gray not only spoke to the specific advantages of the exemption in the classroom, but he also elaborated on the crucial role that the exemption plays in the grand scheme of higher education: “…as

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11 See id.
12 Email from Professor Jessica Litman, Oct. 24, 2011.
13 Dr. Jonathan Gray, Professor of Media and Cultural Studies, University of Wisconsin.
14 Email from Professor Jonathan Gray, Oct. 23, 2011.
professors of liberal arts, one of our key responsibilities is to help hone fully-rounded, critically-enabled citizens. Since so much of an average American’s everyday life involves media influences, messages, and entertainment, we in media studies play an important (perhaps even central) role in that project. Limiting what images and texts we can bring into the classroom, or what we can show our students is tantamount to limiting our ability to do our best possible job.”

The exemption has been employed to teach students in the fine arts as well. Professor Gary Griffin, an award-winning producer and cinematographer, for instance, uses the current exemption to show clips that illuminate the particular theme or topic his students are studying. He states, “Without being able to show these film clips to students, I would not be able to present examples of the high quality work of artists who have preceded the students in the fine art of filmmaking. I must be able to show these examples if I am to survive as a Professor of Film…”

As demonstrated by these stories, professors across a variety of disciplines have not only utilized the current exemption to mitigate the harm that had previously existed but have found it indispensable to their educational mission. Hundreds if not thousands of additional professors have come to rely on this critical exemption, including the many faculty members discussed in the 2011 Comments of the Library Copyright Alliance. And of course, as George Mason University History professor Tom Scheinfeldt has stated, there are many more faculty who are likely unaware that they practice any special exemption; “They would consider this a natural right for education, because it’s something they would do with text!”

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15 Email from Professor Jonathan Gray, Oct. 28, 2011.
16 Gary Griffin, Filmmaker in Residence, School of Communication, American University.
17 Email from Professor Gary Griffin, Oct. 24, 2011.
18 Phone call with Professor Tom Scheinfeldt, Nov. 30, 2011.
C. The Exemption Provides Film and Media Students with Essential Skills

In 2010, the Register and Librarian of Congress also acknowledged the need to extend an exemption to “college and university film and media studies students.”19 As a result, film and media studies professors are realizing the benefit of this exemption by finally possessing the ability to assign the types of projects and undertakings that filmmakers, artists, and media professionals perform as part of their job. As part of his lesson on “Fundamentals of Video Art,” Professor Stephan Hillerbrand20 helps students understand a variety of key components involved in the creative process, including the non-linear editing workflow and environment, the creativity of non-linear editing techniques to create specific emotional reactions, capturing and transcoding media into a non-linear editing environment and establishing good digital file organization habits.21 These skills are acquired directly as a result of the exemption: Professor Hillerbrand instructs students to create a one to two minute video that evokes a visual, aural, or conceptual transition through the compilation of DVD clips.22 His students not only learn what theoretical considerations are involved in appropriation transitions but are also able to actually create a video that demonstrates their lessons learned. Thus, his students gain hands-on, real-world experience in addition to providing Professor Hillerbrand with a work product that allows him to assess his students’ progress.

Students at Alfred University in New York are likewise better prepared to enter the media workforce after taking Professor Chad Harriss’s23 classes in which they learn to create, share, and publish media. Additionally, they are taught how to perform fair use analyses when

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19 75 F.R. 43825, 43827.
20 Stephan Hillerbrand, Assistant Professor of Photography and Digital Media, School of Art, University of Houston.
22 Id.
23 Chad Harriss, Assistant Professor of Communication Studies, Alfred University.
compiling audiovisual clips. Students learn basic video editing through constructing “multi-modal essays,” in which students “blend text, still images, sounds, and moving images” and “use clips from the various media forms in ways that mimic citations in a traditional essay.”

Professor Eric Faden at Bucknell University describes a similar benefit of the 2010 exemption, explaining that his media studies students no longer have to spend fifty percent of their essay describing various scenes. Now they can simply upload the clips and devote their essays to comment and criticism. Thanks to this exemption, film and media students involved in both production and scholarly criticism are no longer harmed by being ill-prepared for employment subsequent to obtaining their degrees.

D. Harm Will Return if the Exemption is Not Renewed

Per the Federal Register’s Notice of Inquiry, the burden of proof falls on the proponents of an exemption to “provide evidence either that actual harm currently exists or that it is ‘likely’ to occur in the ensuring 3-year period.” All of the harms present in the last rulemaking remain in place today, namely, the lack of technological alternatives sufficient to satisfy educational purposes of comment or criticism and thus, the necessity for video fidelity and clarity that only digital video can provide, in addition to the ever-present restraints on classroom time. Given these perpetual harms and the exemption’s expanding positive impact on professors and students, we respectfully request that the exemption be renewed.

III. The Exempted Class Needs to Include All Audiovisual Works

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24 Email from Professor Chad Harriss, Nov. 17, 2011.
25 Id.
26 Eric Faden, Associate Professor of Film and Media Studies, Bucknell University.
27 Phone call with Professor Eric Faden, Nov. 17, 2011.
28 76 F.R. 60400.
As crucial as the current exemption is to higher education, it must be noted that certain provisions are unduly restrictive. We now seek two expansions of the current DMCA exemption. First, we propose including all audiovisual works (optical discs, streaming media, and downloads). Second, we propose expanding the class of users covered by the exemption to include all college and university students, regardless of discipline.

A. With the Progress of Technology Comes New Formats

Format changes have long been inevitable in the distribution of home media. Throughout the years, consumers have had to choose from 77-, 45-, and 33-rpm long-playing records, 8-tracks, cassette tapes, various forms of compact discs, and most recently a slew of static and fleeting digital media formats in satisfying their music needs. Likewise, the home video market has transitioned from 8mm and Super8 to VHS and Betamax to DVD over the years, the latest and greatest coming in the form of high-definition Blu-ray optical, streaming media, and downloadable media. As DVDs were well on their way to ensuring the decline of the VHS market in 2006, high-definition optical, streaming, and downloadable formats are now rapidly beginning to take the place of DVDs. The evolving nature of technology makes it fortunate for content users in this context that the 1201 rulemaking process is ongoing, as evidenced by the similarly evolving nature of the granted exemptions over the last decade.

1. The 2010 Exemption, While Generally Broadening, Took Significant Media Away from Professors’ Repertoire

The exemption granted in 2006 allowed use of “audiovisual works included in the educational library of a college or university’s film or media studies department . . . ,” which, although very helpful, was limited in a number of ways.\textsuperscript{30} Graciously, the Register and Librarian of Congress saw fit to expand the class of works in the 2010 rulings to alleviate notable harm not

\textsuperscript{30} 2008 Comment of Peter Decherney, et al., at 14-15 (asserting that many schools do not even have explicit film and media libraries, etc.).
addressed by the 2006 round exemptions, but the most recent round also narrowed the exemption. While the 2010 exemption made content available to more people, it limited the formats available to potential users. Where in 2006, approved users could choose from audiovisual works in any format so long as they were contained in a media studies departmental library, the most recent round limited the class of works to “motion pictures on DVD…and that are protected by [CSS].” Because of this change, professors found themselves unable to use media previously available to them in several forms, including more than 2500 films released on Blu-ray prior to the 2010 exemptions. As a result, some of the harm ameliorated by the 2006 exemption was restored as a result of the 2010 exemption’s restriction to DVDs.

2. **High Definition Optical Disc Formats Provide Higher Quality Images that are Necessary and Expected in Today’s Educational Environment**

The additional quality of high-definition materials is especially necessary and useful in film and media studies courses, where quality is of great importance to demonstrate the technique and art of media creation. Even outside of the film and media studies courses, however, high definition is becoming the de-facto standard.

As many of us have experienced in our own homes, quality is degraded when displaying low-definition materials on high-definition sources. Much like the pixilation, stretching, artifacting, and distortion that results from viewing analog television on newer digital televisions, lower resolution media such as DVDs suffer negative effects when upscaled to fit new higher-resolution displays and projectors that are increasingly becoming the norm. At Bucknell University, for example, many classes make use of the on-campus theater for viewings and presentations of media. The theater uses a 4k digital projector with a resolution of 4096x2048. Even with high definition media, the work has to be upscaled by a magnification of 4x, and

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pixilation occurs. Not surprisingly, that effect is greatly magnified when lesser materials such as DVDs are used (the typical widescreen DVD has a resolution of only 720x480 pixels), and the result is noticeable even to the untrained eye. Students these days “grew up digital;…they have been doing this for half of their lives.” To remove these high-quality sources from use in education is to ignore technological progress in the one place that should matter most: the classroom.

The need for higher quality does not stop with display; it is also important for archival purposes. Professor Faden remarks of student projects in his classroom, “[it is important to make] sure that what students do is viewable in the future.” A group of his students produced videos commenting on internet advertising and licensing agreements for a class project. They were later approached about having these videos used as Public Service Announcements on Virgin America. Because of limitations placed on the production of these videos, however, they had to be entirely remade to meet broadcast standards for quality. If we do not allow students and professors to use the “format du jour,” they are unnecessarily harmed in their ability to create works that will stand the test of time or even meet current quality standards. The need for quality is perhaps most obvious in the realm of media studies, but it is no less important in other disciplines. In a biology class, clips of cell specimens dividing would be of questionable use if they were fuzzy and pixilated. Video of facial expressions in a psychology class would be of little use if the video was not detailed enough to see the subtle intricacies of the facial movements as the expressions changed.

33 Id.
35 Id.
High quality images are not only important because they allow for the perception of greater detail. High definition images projected on a large screen approximate the affective experience of a movie theater. Recreating theatrical conditions in a classroom allows Communication students to share and reflect on spectators’ emotional responses to violent images; it allows Film History students to feel, first hand, the impact of the “Odessa Steps Sequence” in Serge Eisenstein’s *Potemkin*; and it allows History faculty to draw on the impact of World War II footage to illustrate their lectures with the immediacy moving images can provide. Depriving educators of making non-infringing uses of the latest available format creates an unnecessary drain on educators’ capabilities to provide and use relevant, timely, and powerful examples, and ultimately it hampers the ability of educators to keep up with changing perceptual expectations of students.\(^{36}\)

**3. The Importance of New Formats in the Evolving Marketplace**

In our 2006 comment, we discussed the ongoing shift in media formats as VHS was nearing the end of its lifespan in the market.\(^{37}\) Aside from the great difference in quality between VHS and DVD formats, VHS tapes were becoming increasingly difficult to use simply because they were disappearing from the marketplace.\(^{38}\) This trend may well be beginning again as Blu-ray hardware and content becomes more prominent, encompassing, and affordable. Recent data shows that DVD sales are in sharp decline and have been for some time.\(^{39}\) In contrast, Blu-ray sales rose 91% in the first two quarters of 2009, and have continued to grow steadily since

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\(^{36}\) As an aside, we would add that colleges and universities are a great market for Blu-ray discs. The University of Pennsylvania is currently considering upgrading many of the tens of thousands of titles in its collection with Blu-ray discs. It is a market that copyright holders should embrace, not actively oppose.\(^{37}\) 2005 Comment of Peter Decherney, et al., at 7, 18-19, 20; 2008 Comment of Peter Decherney, et al., at 6-7.\(^{38}\) *Id.*\(^{39}\)“DVD sales fell 13.5 percent in the first half of the year according to Digital Entertainment Group” (2009) [http://www.cnbc.com/id/31969248/How_Bad_is_the_DVD_Decline_and_Who_Suffers](http://www.cnbc.com/id/31969248/How_Bad_is_the_DVD_Decline_and_Who_Suffers).
then.\textsuperscript{40} Though DVD, unlike VHS, is far from extinct, it is difficult not to draw parallels between the switch from VHS to DVD and the current trend toward Blu-ray. For now, the DVD exemption is still very much necessary and widely used by professors and students, but it is foreseeable that within the next three years, DVD may become an increasingly obsolete format.

The market is increasingly populated with media that is only available on newer formats. Where once DVD was an emerging format, Blu-ray is now the format of choice for newly released material. In November, the Blu-ray-only \textit{Fight Club: 10\textsuperscript{th} Anniversary Edition} came out including bonus material not available on any of the previous DVD releases.\textsuperscript{41} Similarly, the most recent installment in the \textit{Terminator} series, \textit{Terminator Salvation Director’s Cut} is only available on Blu-ray.\textsuperscript{42} Lucasfilm recently released “\textit{Star Wars: The Complete Saga}” exclusively on Blu-ray.\textsuperscript{43} The Blu-ray set “contains 40+ hours of bonus content, nearly all of it extremely rare or never-before seen.”\textsuperscript{44} Also included in the set are updated versions of the original trilogy, not available through any other media source. Professor Eric Faden of Bucknell University uses an example in his classes of the differences between the original \textit{Star Wars IV: A New Hope} and a subsequently updated version.\textsuperscript{45} Without the inclusion of Blu-ray in the next round of exemptions, such a classroom example using the latest adaptation of the film would not be possible. These are only a few examples of the growing trend of Blu-ray exclusive material, and

\textsuperscript{40} Id.
\textsuperscript{41} “DVD – \textit{Fight Club} 10\textsuperscript{th} Anniversary” (Oct. 2009) \url{http://hamptonroads.com/2009/10/dvd-fight-club-10th-anniversary} (explaining that the 10th Anniversary Blu-ray edition was released in November 2009 with a number of new features not otherwise available).
\textsuperscript{43} “7 Surprises You’ll Find In ‘\textit{Star Wars}’ Blu-ray Set” \url{http://today.msnbc.msn.com/id/44491069/ns/today-entertainment/t/surprises-youll-find-star-wars-blu-ray-set/#.Tsl94MOIk8k} (Sept. 13, 2001) (“Years in the making, ‘\textit{Star Wars: The Complete Saga}’ makes its Blu-ray debut on Sept. 16. (And only on Blu-ray. There is no companion DVD release).”).
\textsuperscript{44} Id.
\textsuperscript{45} Phone call with Professor Eric Faden, Nov. 17, 2001.
the trend is only likely to become more popular over the coming years. With the exemption as it stands, these and many other titles simply are not and will not be taught.

4. The Fleeting Nature and Range of Exclusive Streaming and Downloadable Content Necessitates their Exemption as the next Emerging Format

Streaming and downloadable video have come to compete with the more traditional sources of audiovisual media in terms of quality. And increasingly, many videos are only available as streaming or downloadable video. As a result, these new content types are as essential for teaching as physical media.

Law Professor Rebecca Tushnet tells of difficulties in her advertising law class: “DVDs are not enough, however, since many issues arise in advertising—both in my advertising law class and in copyright and trademark situations. Usually, these ads are only available via streaming sites.”

Television and Media professor Jonathan Gray needs to use clips of television shows in his classes, many of which are only available online, and only for a short time at that. “At least [The Daily Show] and [The] Colbert [Report] have online archives. If we turn to news and/or pundit programs, they rarely if ever release material on DVDs, and while they often do post material online, they also pull it down quickly thereafter.”

Unfortunately, because many of these streaming sources are encrypted, Professor Gray is forced to show the media in class within a week or not at all, regardless of how it may fit into his syllabi or course plans over weeks, months, or years. The ability to take clips from streaming media would mean that Professor Gray could be sure of the availability of the media he wishes to use. Many professors regularly counsel their students on what they can and cannot use in class projects to take advantage of fair use while staying within the confines of the DMCA exemptions. “[B]elieve it or not,” Eric Faden

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46 Email from Professor Rebecca Tushnet, Oct. 23, 2011.
47 Phone call with Professor Eric Faden, Nov. 17, 2011.
tells his students, “you can capture that from a DVD, but you can’t do it from Hulu!”\(^{48}\) Not only do these distinctions seem arbitrary to students and professors alike, the research landscape for students who work with digital media is considerably limited compared to that of students working with other media. Unfortunately, uncertainty as to the legality of making fair uses of legitimately acquired digital media has a chilling effect on the use of media. Rather than take a chance and deal with potential criminal prosecution, many students and educators choose to play it safe.

B. Alternatives to Decryption are Not Suitable for Instructional Uses

1. Jukeboxes are Prohibitively Expensive and Do Not Eliminate Problems

As discussed in previous exemption comments, the use of jukeboxes is simply not a viable option for the vast majority of professors. Blu-ray jukeboxes are prohibitively expensive. The Kaleidescape company, for instance, offers a system which will store and show content from Blu-ray discs at one location starting at $15,990; add remote players and additional servers and the costs quickly skyrocket.\(^{49}\) Such devices are well outside the budgets of most universities. Still, the machines only allow for a tiny portion of the uses which are necessary in the classroom. Educators need to be able to manipulate the clips; to place them side-by-side for comparison, interpose them with stills, overlay commentary or annotations, and integrate them into presentations. No jukebox comes close to allowing the kinds of transformative uses of material upon which the best and most effective and media literate educators thrive. Jukeboxes are no more a suitable alternative to breaking encryption today than they were in 2006 or 2009. As was

\(^{48}\) Id.

the case in past exemptions, the time taken out of class to switch from clip to clip is unnecessary, disruptive, and a recognized harm. The same logic applies directly to the Blu-ray format.

2. Screen Capture Software Fails to be an Alternative
   
i. Screen Capture is Crippled by Hardware Limitations

Likewise, screen capture software is not a viable alternative to decryption. As discussed in 2009, there is noticeable lack of quality with screen capture software. Because picture quality is necessary in the classroom, an alternative that produces a result with a dramatic loss of quality is not really an alternative for educators. In addition, screen capture software requires significant computing resources. Even if a DVD could reasonably be reproduced with screen capture software, the increase in resolution to Blu-ray quality creates an exponential increase in resolution and thus the computer resources required. In order to use screen capture programs, the central and graphics processing units in a computer must not only playback content, but also record it at the same time. Doing both at a low resolution requires moderate computing power and resources. To capture a DVD at a normal resolution of 720 x 480 and 30hz, the computer must display 345,600 pixels on the screen 30 times a second, and simultaneously read and recreate each of those pixels into a new file in real-time. Frames are lost, images develop noise and artifacts, and, as a result, quality drops noticeably. On the other hand, a Blu-ray disc at 1920x1080 resolution (at 30hz for the sake of argument, though 60hz is not uncommon) must display 2,073,600 pixels and re-record them in that 30-times-per-second window- 6 times the pixels per second, and thus 6 times the computing power. Only a few years ago, many of the computers in the market would have struggled to playback video at Blu-ray resolution, much less simultaneously re-record it. Unfortunately, many professors and students are still using machines

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50 2009 Reply Comment of Peter Decherney, et al., at 4-7.
that are less than new, and screen capture, even if it worked perfectly from a software standpoint, simply remains an impossible alternative on hardware grounds for many.

ii. Screen Capture Causes Unacceptable Loss of Information

Even with top-of-the-line hardware, screen capture software does not fill the void. Though perhaps preferable to simply pointing a camera at a screen, screen capture is still fraught with issues. In the best-case scenario, frames are still lost. As a book would be incomplete with pages, words, and phrases randomly cut out, so would an audiovisual work with missing frames. In audiovisual works, it is not uncommon for single frames to have great importance for the greater meaning and feel of the work. In his 1929 Soviet masterpiece, *Man with a Movie Camera*, for example, filmmaker Dziga Vertov used increasingly shorter length shots culminating in an image that lasts a single frame. When Yale University Slavic Studies Professor John MacCay teaches this clip as an example of Soviet montage theories, he shows it to his students several times, so that they can see the impact a single frame can have. It is almost impossible to see it the first time, but many students are able to appreciate it after repeated viewings. It would be extremely difficult to see the single frame if it were cut off during a screen capture. Having a media professor teach with missing frames is like having an English professor teach Shakespeare with randomly missing and misplaced words, punctuation, line breaks, and spacing. (“To be . . . that is the question;” “If music be the . . . play on;” “Something . . . in the state of Denmark.”) Having to use screen capture software as an alternative would cause more harm than good.

IV. The Exempted Class Needs to Include All College and University Students

College and university students of all disciplines must be exempted in order to realize the crucial role that media plays across the curriculum. There is evidence that under the third factor
of 17 U.S.C. 1201(a)(1)(C), not allowing the exemption for all students “has had or is likely to have an adverse effect on non-infringing uses.” The main purpose of the exemption as it stands is to allow faculty to circumvent the prohibition in order to better educate students; the beneficiaries of the exemption are thus the students themselves, as their educational experience is enriched by the addition of multimedia into their curricula. Under the current exemption, however, non-media studies students are not allowed to circumvent the prohibition and legally create media clips for their own projects, depriving them of a valuable hands-on learning tool. Media availability is essential to disciplines outside of media studies and all college and university students must be given a legal safe harbor within which they can learn to use, edit, and annotate video.

A. Students are Educators in Active, Participatory Learning Environments

Students in most fields now use video in a number of different capacities. For one, college and university students regularly give in-class presentations, when they effectively become teachers for all or part of a class period. In these instances, all of the reasons that the educational exemption was expanded to include faculty across disciplines in 2010 apply to students as well. Active, participatory learning is overtaking the traditional classroom setup in which professors lecture and students passively take notes. History students use archival clips to present their findings, while Anthropology students study the cultural detail of indigenous media. Participatory learning is evident even in the sciences, where large amounts of data need to be imparted to students—data that is often hard to visualize without images, video clips, or some other conceptual aid. During student presentations, students need high quality images as illustrations and as objects to analyze. Chemistry students need to be able to call up videos of a

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52 Phone call with Professor Eric Faden, Nov. 17, 2011.
chemical reaction from a documentary, while veterinary students might use clips from a Discovery video to illustrate an in-class presentation. The above situations show that students need to be able to manipulate images and videos just as much as faculty members do, yet they lack the rights given to faculty members.

B. Students Across Disciplines Need to Use Video to Complete Multimedia Assignments

The prohibition hampers non-media studies students’ ability to effectively make use of video in their studies, because video has become a standard medium for students’ assignments. As Alexandre Austruc predicted, moving images exist alongside writing as a form of personal expression. Faculty in many different fields require students to submit video essays in place of traditional written essays. The University of Pennsylvania has a digital media lab in its Weigle Information Commons (WIC) that facilitates these kinds of assignments, as do many other universities. Whole classes go to the lab to learn how to edit video and manipulate images. Between June 2009 and June 2010, there were 5,611 visits to the media lab alone, including students from elementary German courses, advanced French courses, History courses, Environmental Science courses, and courses like Muslims in the Contemporary World and Medicine and Technology in Modern South Asia. For now, the WIC staff demonstrate screen capture programs for the hundreds of students who are required to do video assignments each semester, but for all of the reasons enumerated above, screen capture images fall short of academic needs.

In our 2009 comment, we listed many examples of media studies professors who use video assignments. Spanish film professor Michael Solomon employs a commonly used

assignment, having students create voiceover commentaries to analyze clips. Since the granting of the 2010 exemption, Professor Solomon’s students can incorporate DVD quality images, and he can now see the details that his students point out in their narration. Co-petitioner Peter Decherney has students in his Copyright and Culture class create video essays that explore fair use or other ways that copyright law impacts the media. Many of his students come from the Engineering school where they are training to be animators and game designers. With the help of the 2010 exemption, they are able to comment on high quality images like those that they are training to create themselves.

But as the WIC data suggests, video assignments are used far outside of the field of media studies. Assistant Professor of South Asian Studies at the University of Pennsylvania, Lisa Mitchell, for example, requires students in her Anthropology course to use a program called Jing that allows them to create mini-documentaries. Teams of students choose a commodity, like coffee or opium, and they trace its circulation from crop to consumer. In some cases, they analyze the representations of their commodity in advertising videos or in mainstream news or entertainment videos.

Another example of non-media studies video assignments falls within the field of law. Nowadays, the potential impact of visual and media education for law students can be measured by looking at how practicing lawyers rely on video editing and media techniques. Lawyers create videos for courtroom use that show firsthand how a crime affected a victim’s day-to-day life, evoking the emotions of jurors and judges. So too does Professor Regina Austin envision her students being able to write about contemporary issues in the media. For her two classes, Advanced Torts and Documentaries in the Law, Professor Austin could see an expanded

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54 2008 Comment of Peter Decherney, et al., at 17.
55 Regina Austin, Professor of Law, University of Pennsylvania Law School.
exemption giving her students the capabilities to make “animated essay[s] with segments of tape and animation.” In past years, her torts students have written about hazing and shunning; it would be useful for them to be able to incorporate real-world experiences and stories taken from news sites. Taking the above examples into account, Professor Austin maintains that in this day and age, “students really need to learn how to tell stories with video.”

Writing instructors are some of the most avid proponents of video assignments, because they recognize the blurring distinction between writing with words and editing video. The WIC annual report notes one such example:

[Writing instructor] Dr. Jacqueline Sadashige and her students used the Digital Media Lab for two final projects. Students in two courses created running commentaries for feature length films. Each class chose one film to work on collaboratively, and each student chose a chapter of the DVD on which to comment. After scripting their commentaries, students used the lab to record their text for playback as an alternative to the film's own audio track … Dr. Sadashige commented, “the multi-media nature of this work has literally shifted the parameters of what it means to think and write.”

Thinking and writing are changing rapidly as a result of technology, and policy cannot lag behind. No matter what their discipline may be, students need the exemption to allow them to gain proficiency in, and develop literacy through, the use and manipulation of media.

Congress and local legislatures continually struggle to create policies that improve the American educational system. The DMCA exemption process has emerged as a shining example of how policy can both improve education and train students for the competitive workforce. We have seen tangible results produced by the DMCA educational exemption, and that exemption now needs to encompass high-definition images and a wider range of students in order to continue to support higher education in the United States.

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56 Phone call with Professor Regina Austin, Nov. 29, 2011.
57 See id.
V. **Conclusion**

For the foregoing reasons, we respectfully seek the following:

- Renewal of the granted DMCA exemption for motion pictures on DVDs when circumvention is accomplished for the purpose of making compilations of portions of those works for educational use in the classroom by college and university professors and film and media studies students,
- An expansion of the same to include audiovisual works on optical discs, or delivered via streaming media, or downloaded, and
- An expansion of the same to include use by all college and university students.

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