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Copyright in the Classroom: Why Comprensive Copyright Education Is Necessary in United States K-12 Education Curriculum

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by Eric Perrott[*]

I. Introduction

In the last decade, educational technology in the American classroom has gone from a novelty to a national norm.[1] Innovative educational technologies, such as digital projectors and broadband Internet, have become affordable and widely distributed in most American classrooms.[2] With this increase in access comes an increased opportunity to engage in unauthorized use of copyrighted materials by both teachers and students.[3] While many educational uses of copyrighted materials are protected under the fair use doctrine of U.S. copyright law, many teachers still use copyrighted materials that may not fall under fair use and are possibly prompting commercial educational resource makers to increase pricing and create expensive additional barriers to access multimedia.[4] Additionally, today's K–12 students have unparalleled access to media and the potential for infringement is monumental as they leave school, and sometimes unwittingly exit the realm of "fair use" and enter the realm of infringement.[5]

Part II of this Article will discuss the history of the technological revolution that occurred in American classrooms, and will then examine the use of educational technology in and outside of the classroom. Part III will look at the tenets of the fair use doctrine, how fair use applies to various uses in the classroom, and how students and teachers are unaware of or misunderstand the fair use doctrine. Part IV will examine the economic and social impact of unauthorized copyright infringement by teachers, students, and recent graduates. Part V will argue that state and local schools should adopt copyright education curriculum through the National Governors Associates and legislation by state governments. Part V will further argue that the federal government should fund the creation and digitizing of high-quality educational multimedia for use by teachers and students. These objectives would help prevent costly copyright infringement, while providing students and teachers with resources to maximize their creativity and productivity in the classroom.

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1. *See* Amanda Lenhart, Maya Simon & Mike Graziano, The Internet and Education: Findings of the Pew Internet & American Life Project, 3–5 (2001), http://www.pewinternet.org/~/media//Files/Reports/2001/PIP_Schools_Report.pdf.pdf (finding that educational technology plays a large role in the classroom); National Forum on Educational Statistics, Technology in Schools: Suggestions, Tools and Guidelines for Assessing Technology in Elementary and Secondary Education 1, 2, 4 (2002), http://nces.ed.gov/pubs2003/2003313.pdf (providing uses of educational technology within the classroom).

2. *See* Cisco Systems, Technology in Schools: What the Research Says 2–6 (2006), http://www.cisco.com/web/strategy/docs/education/TechnologyinSchoolsReport.pdf (concluding that a variety of technology is now available in schools).

3. *See* Victoria J. Rideout, Ulla G. Foehr & Donald F. Roberts, Generation M2: Media in the Lives of 8- to 18-Year-olds, 22 (2010), http://www.kff.org/entmedia/upload/8010.pdf ("67% [of teens have] downloaded music"); John Wells & Laurie Lewis, Internet Access in U.S. Public Schools and Classrooms: 1994–2005, 5–6 (2006), http://nces.ed.gov/pubs2007/2007020.pdf (finding that student access to the Internet has been increasing from 2000–2005).

4. 17 U.S.C. § 107 (2006); *see also* Anna Maffioletti & Giovanni B. Ramello, *Should We Put Them in Jail? Copyright Infringement, Penalties and Consumer Behaviour: Insights from Experimental Data*, 1 Rev. Econ. Research on Copyright Issues 82 (reporting that, while not empirically proven, organizations claim that copyright infringement raises prices). *See*, e.*g.*, Discovery Education, *A Decade Transforming Classrooms*, http://www.discoveryeducation.com/administrators/curricular-resources/streaming/#/Purchase (last visited Mar. 2, 2011) (offering pricing for high quality educational media for $1,570 per year per school building for grades K–8 and $2,095 per year per school building for high school); Smart Technologies, Evaluating Total Cost of Ownership for SMART Board Interactive Whiteboards 4–6 (2006) (pricing a "low-cost" smartboard at $1,399, replacement bulbs at $400); Sylvia Martinez, *Educational Games: How Attitudes and Markets Influence Design* (2006) ("In the past ten years, the retail price of children's computer games has dropped from over $40 (US) to less than $10 (US) due to many factors, including competition from free Internet sites.").

5. *See Privacy Frequently Asked Questions*, http://www.ptc.com/company/piracy/faq.htm (last visited Apr. 4, 2011) (explaining that costs to consumers go up when business have to compensate for piracy); *see*, *e.g.*, Amanda Becker, *Lawsuits Allege Copyright Violations in Posting of Newspaper's Articles on Web Site,* Wash. Post (Sept. 13, 2010), http://www.washingtonpost.com/wpdyn/content/article/2010/09/10/AR2010091006542.html (describing lawsuits against bloggers for unauthorized use of a newspapers articles); Jonathan Bailey, *The Stock Photo Industry's Massive Copyright Campaign*, PlagiarismToday, (Jul. 21, 2010), http://www.plagiarismtoday.com/2010/07/21/the-stock-photo-industrys-massive-copyright-campaign/ (explaining a large scale push by the stock photo industry to stop online infringement of its copyrighted works).

II. Unparalleled Access

Comprehensive copyright education is essential. The combination of increased access to copyrighted materials from the Internet, increased use of technology in and outside of the classroom, and the disparity between the skill levels of most students compared to that of their teachers creates a volatile situation in which businesses may lose the incentive to innovate. Most importantly, the chilling effects of copyright confusion could negatively influence effectiveness in the classroom, stifling creativity. In order to outline the magnitude of technology innovation in the classroom, it is important to know the historical events that led to today's connected classroom. Those historical events should then be juxtaposed to the current uses of technology both inside and outside of the classroom.

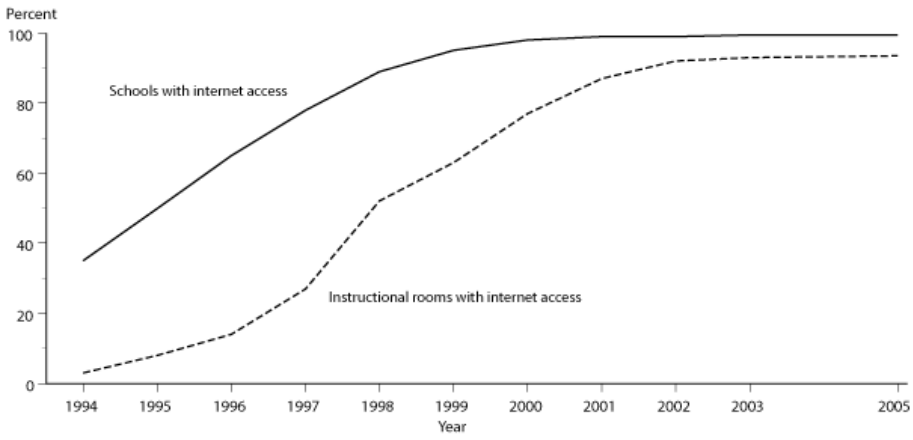

Figure 1 – Internet Access in Public Schools[10]

A. Brief History of Technology in the Classroom

While digital technology, such as the computer, has been used in academic settings as early as 1946, this technology was mostly used for computations at the collegiate level or for administrative functions in K–12 school offices.[6] Educational technology was not widely used by teachers and students as a part of the lesson until the early 1990s.[7] As companies began to create new innovative uses for the classroom computer, including the invention and widespread use of the CD-ROM, the percentage of classrooms with computers rose substantially.[8] While two-thirds of teachers in 1989 reported having access to a computer in the classroom, today almost 99% of classrooms have access to at least one computer within the classroom.[9]

As depicted in Figure 1, 94% of classrooms have access to the Internet through broadband connections, a number that has risen dramatically from 1994 to 2005.[11] This progress has not come without significant challenges, especially within the growing disparity of access within different ethnic and socioeconomic groups.[12] With the late-1990's recognition of the "digital divide," or the gap in technological literacy and access between minority and lower-income individuals versus their more affluent and typically white counterparts, the government focused on providing all students with the skills to operate and ability to access a computer.[13] Because of this effort and the widespread social and entertainment uses of the computer, the traditional "digital divide" began to close.[14] While the digital divide still exists within various demographics, a vast majority of students now have both access to a computer and the basic skills to utilize it.[15]

B. Technology in Today's Classroom

The widespread availability of broadband Internet in the classroom has created new challenges that remain largely unaddressed by computer literacy

6. *See* Everett Murdock, *History of Computers in Education* (Mar. 1, 2007), http://www.csulb.edu/~murdock/histofcs.html (plotting key events in educational technology in a timeline). While the invention of the copy machine is likely the first piece of technology in the classroom that presents a significant threat of copyright infringement, for the purposes of this Article, the starting point will be technology used by both teachers and students within the classroom.

7. Mateo Zeske, *The History of Computers in the Classroom* (Sept. 11, 2009), http://www.ehow.com/about_5403355_history-computers-classroom.html (explaining that, while many schools had computer used by administrative employees, few were actually used in daily lessons).

8. *See* Lenhart, Simon & Graziano, *supra* note 1, at 3–6 (showing an increase in computer usage coinciding with the rise of the CD-ROM).

9. *Id.* at 3–4.

10. Wells & Lewis, *supra* note 3, at 4–6.

11. *Id.* at 4.

12. *See* Richard Rapaport, *A Short History of the Digital Divide,* Edutopia (Oct. 27, 2009), http://www.edutopia.org/digital-generation-divide-connectivity (explaining a shortened history of the digital divide in the United States).

13. *Id.*

14. *Id.*

15. *Id.*

training.[16] Where the CD-ROM opened the door for new uses of technology in the 1990s, broadband Internet access provides students and teachers with a seemingly infinite supply of high-quality images, movies, and other media available immediately and often without any perceived cost.[17] Broadband Internet has fueled innovation in the mechanics of teaching, such as online grade books and lesson plan materials, as well as innovation in creativity, such as the use of multimedia in the classroom.[18]

Both teachers and students use technology in various ways during the school day. Predictably, students use educational technology to complete work that teachers planned, and teachers plan those assignments using various types of technology.[19] While the two groups are using educational technology in different ways, both teachers and students interact with digital media in a way that necessitates copyright education in the classroom.[20]

First, students think of educational technology, particularly the Internet, as being closely tied to the activities and daily tasks that make up their lives.[21] In a 2002 Pew Research study, students described their Internet use as a virtual: textbook and reference library; tutor and study shortcut; study group; and backpack, locker, and notebook.[22] Additionally, in a 2001 survey, 71% of students ages 12–17 said that they used the Internet as their primary source for their last project.[23] In completing projects and in general learning, students use the Internet as an extended library.[24] When comparing the Internet to a community library, students thought that the community library had limited selections of multimedia, while the Internet allowed students to access and download images, video, and other forms of multimedia at any time.[25]

Teachers use technology for a variety of activities, including lesson planning.[26] While planning lessons, more than three-fourths (76%) of K–12 teachers report that they use digital media in their classrooms.[27] A 2009 study concludes that teachers are finding increasing worth and value in digital media.[28] Additionally, teachers increasingly value student-produced digital content and are including activities such as multimedia projects, Websites, and blogs in their lesson plans.[29] While teachers originally used full-length content, such as video or audio, for multimedia processes, they now tend to integrate digital content into their lessons.[30] Teachers are using smaller, more focused digital content that typically streams from the Internet, as opposed to playing from a DVD.[31]

C. Use of Technology Outside the Classroom

Teen use of computers and the Internet has risen from approximately 73% of teenagers using the Internet in 2000 to over 93% using it in 2009, as shown in Figure 2.[32] Fifty-one percent of teenage Internet users say they use the Internet on a daily basis, up from 42% in 2000.[33] While almost 70% of teens use the Internet at school, less than 1% claimed that school was their only access to the Internet,

16. *See generally* Rideout, Foehr & Roberts, *supra* note 3, at 20–24 (2010) (demonstrating how students ages 8–18 use the computer to access media).

17. *See* Mary Madden & Amanda Lenhart, Pew Internet Project Data Memo: Music Downloading, File-sharing and Copyright 5–6 (2003), http://www.pewinternet.org/~/media//Files/Reports/2003/PIP_Copyright_Memo.pdf.pdf (explaining that young people are not concerned about the copyrights of the items they download); Zeske, *supra* note 7.

18. Federal Communications Commission, National Broadband Plan 251 (2010) (discussing broadband Internet's effect on data management in schools).

19. *See* Douglas Levin & Sousan Arafeh, The Digital Disconnect: The Widening Gap Between Internet-Savvy Students and Their Schools ii (2002), http://www.pewinternet.org/~/media//Files/Reports/2002/PIP_Schools_Internet_Report.pdf.pdf (exploring the different ways in which students view technology in the classroom). *But see* National Report on Netday's 2005 Speak Up Event 10 (2005) ("Teachers now use email even more than students (97% of teachers say they email on a weekly basis).").

20. Public Broadcasting Station (PBS), Digitally Inclined: Teachers Increasingly Value Media and Technology 4 (2010), http://www.pbs.org/teachers/_files/pdf/annual-pbs-survey-report.pdf.

21. Levin & Arafeh, *supra* note 19, at ii.

22. *Id.* at ii–iv.

23. Lenhart, Simon & Graziano, *supra* note 1, at 3.

24. Paul Hitlin & Le Rainie, Teens, Technology, and School (Data Memo) 1–4 (2005), http://www.pewinternet.org/~/media//Files/Reports/2005/PIP_Internet_and_schools_05.pdf.pdf

25. Levin & Arafeh, *supra* note 19, at ii.

26. Netday's 2005 Speak Up Event, *supra* note 19, at 10 (stating that teachers are reporting that they use the Internet for research and lesson planning).

27. PBS, *supra* note 20, at 4.

28. *Id.*

29. *Id.*

30. *Id.*

31. *Id.*

32. Amanda Lenhart, Kristen Purcell, Aaron Smith & Kathryn Zickuhr, Social Media & Mobile Internet Use Among Teens and Young Adults 6 (2010).

33. Amanda Lenhart, Mary Madden & Paul Hitlin, Teens and Technology: Youth Are Leading the Transition To a Fully Wired and Mobile Nation 2 (2005), http://www.pewinternet.org/~/media//Files/Reports/2005/PIP_Teens_Tech_July2005web.pdf.pdf.

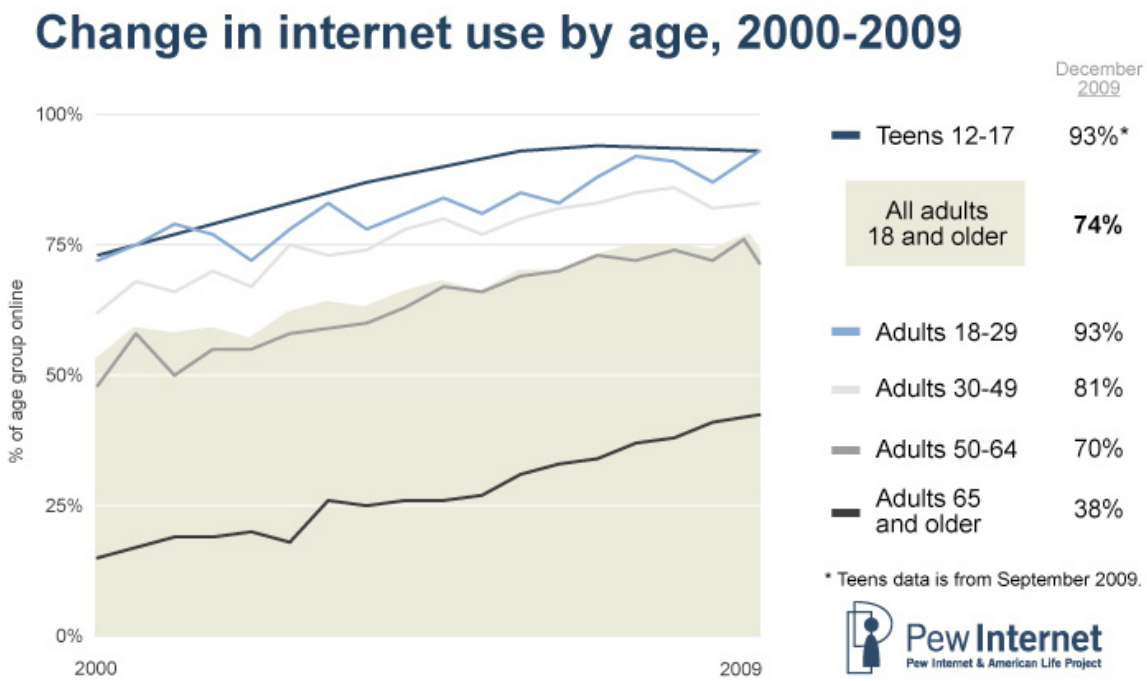

Figure 2 – Change in Internet Use by Age[35]

showing that any digital literacy would likely be applied to students' activities inside and outside of the classroom.[34]

In addition to school-related Internet use, teenagers go online for various other activities, including: communicating with their friends and family through email, instant messaging, and chat rooms; entertainment, such as surfing the Web, playing games, visiting entertainment sites, and listening to music online; learning things largely unrelated to school, such as reading the news or researching a product or service before buying it; and exploring other online interactive or transaction activities, such as expressing their opinions online, visiting sites where you can buy or trade online, or creating a webpage.[36] Additionally, more than half of all students ages 12–17 engage in social networking websites, according to a 2006 survey.[37] Data suggests that this number may have risen in the past five years, with social network Facebook encompassing over 500 million active users.[38] Of the social network users ages 12–17, about 75% have reported to post a public message, link, picture, or video on a friend's profile.[39]

Technology outside of the classroom is not limited only to personal computers. In a 2008 report, 97% of students ages 12–17 play video games, including 99% of boys and 94% of girls.[40] Students play a wide variety of games, and while most are not strictly educational, many games have the potential to increase social interaction and civic engagement.[41]

With the rapid pace of innovation and technology, there exists a disconnect between a teacher's technological knowledge and the technological knowledge of his or her students.[42] However, teachers are becoming increasingly comfortable using technology outside of the educational setting. According to a 2005 report, 98% of teachers report using technology during their free time.[43] While

34. *See* Hitlin & Rainie, *supra* note 24, at 2 (showing that teens use the Internet at home as well as school).

35. Lenhart, Purcell, Smith & Zickuhr, *supra* note 32, at 6 (using a chart to show that children ages 12–17 use the computer more than any other age group).

36. Levin & Arafeh, *supra* note 19, at 1–2.

37. Amanda Lenhart & Mary Madden, 55% of Online Teens Use Social Networks and 55% Have Created Online Profiles; Older Girls Predominate 1 (2007), http://www.pewinternet.org/~/media//Files/Reports/2007/PIP_SNS_Data_Memo_Jan_2007.pdf.pdf.

38. Facebook: Statistics, http://www.facebook.com/press/info.php?statistics#!/press/info.php?statistics (last visited Apr. 4, 2011).

39. Lenhart & Madden, *supra* note 37, at 6.

40. Amanda Lenhart, et al, Teens, Video Games, and Civics, ii (2008), http://www.pewinternet.org/~/media//Files/Reports/2008/PIP_Teens_Games_and_Civics_Report_FINAL.pdf.pdf.

41. *Id.* at vii, viii.

42. Levin & Arafeh, *supra* note 19, at ii.

43. Netday's 2005 Speak Up Event, *supra* note 19, at 10 (reporting different ways teachers use technology outside of the

teachers do not play games or listen to music online as often as their students, they do some similar activities.[44] Teachers talk or email with friends and family members, find out about sports, current events, or weather, research activities and hobbies, and shop online.[45]

With technology becoming ubiquitous in the homes and classrooms of both teachers and students, the need for comprehensive copyright education is important to prevent costly infringement and to protect creativity in education. While many of the uses mentioned above are not illegal and do not facilitate piracy or copyright infringement, the mere opportunity to commit infringement, either accidentally or purposefully, is higher than it has ever been for both teachers and students. However, before one can discuss the costs of infringement, it is important to know exactly how many educational uses of copyright works by teachers and students are protected under the fair use doctrine of the U.S. Copyright Law.[47]

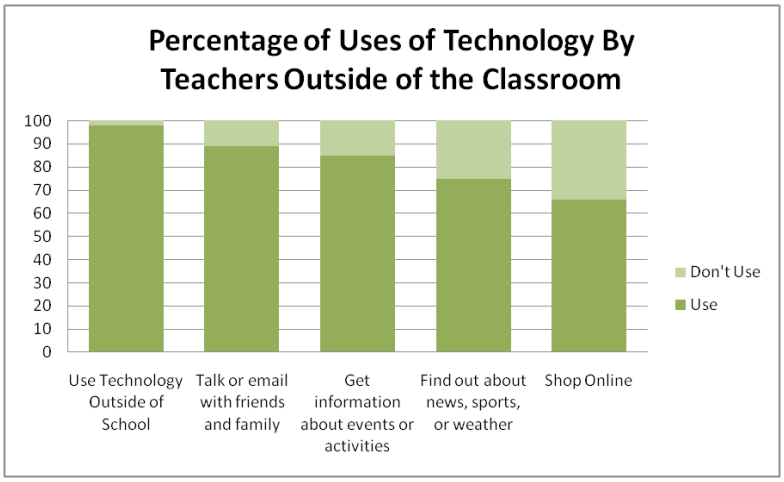

Figure 3 – Uses of Technology By Teachers Outside of the Classroom[46]

III. Copyright and Fair Use in K–12 Education

U.S. Copyright Law is supported in Article 1 Section 8 Clause 8, of the U.S. Constitution, which reads, "To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."[48] This copyright law is codified under several acts, including the 1976 Copyright Act, the authorization of the Berne Convention Treaty, and the Digital Millennium Copyright Act.[49] Copyright protection consists of a bundle of rights given to an author of an "original work . . . of authorship fixed in any tangible medium of expression."[50] Copyright protection is extended to various categories of works and must contain a modicum of creativity.[51] As stated in *Feist v. Rural Telephone Co.*, originality is the *sine qua non* of copyright protection.[52] In exchange for their creativity, copyright holders are given a finite monopoly over their work and are given the right to reproduce, distribute, prepare derivative works, display the work publicly, perform the work publicly, and to authorize others to exercise any of these rights.[53]

If a copyright holder believes that someone has violated one of the above rights, he or she can sue for copyright infringement. In order to succeed on an infringement claim, the copyright holder must prove: (1) the ownership of a valid copyright, (2) an unauthorized copy of the work, and (3) the allegedly infringed work is substantially similar to the work.[54] If successful, the copyright infringer can face injunctions, monetary damages, punitive damages, and more, which is discussed *infra*.[55]

classroom).

44. *Id.*

45. *Id.*

46. *Id.*

47. 17 U.S.C. § 107 (2006).

48. U.S. Const. art. I, § 8, cl. 8.

49. Copyright Act of 1976, Pub. L. No. 94-553, 90 Stat. 2541; Digital Millennium Copyright Act ("DMCA"), Pub. L. No. 105-304, 112 Stat. 2860 (1998) (codified in various sections of 17 U.S.C. (2006)); Berne Convention for the Protection of Literary and Artistic Works, September 9, 1886, as revised by Paris on July 24, 1971 and amended in 1979, S. Treaty Doc. No. 99–27 (1986), *available at* http://www.wipo.int/treaties/en/ip/berne/trtdocs_wo001.html#P138_25087.

50. 17 U.S.C. § 101 (2006).

51. *Id.* ("The categories include literary work; musical works, including any accompanying words; dramatic works, including any accompanying music; pantomimes and choreographic works; pictorial, graphic, and sculptural works; motion pictures and other audiovisual works; sound recordings; architectural works."); Feist Publications, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 346 (1991).

52. *Id.* at 348.

53. *See* 17 U.S.C. § 106.

54. *See* David J. Meiselman & Jeffrey I. Carton, *Successfully Defending Copyright Infringement Suits*, The Metropolitan Corporate Counsel (Feb. 1, 2009), http://www.metrocorpcounsel.com/current.php?artType=view&artMonth=February&artYear=2009&EntryNo=9369 (last visited Apr. 4, 2011) (explaining the necessary qualifications to prove copyright infringement).

55. 17 U.S.C. § 504 (noting possible damages for copyright

While largely unknown to teachers and students, copyright law protects every textbook, video, image, and much other works in and around the classroom.[56] For the majority of items in the classroom, the school paid the copyright holder for the use of the copyright holder's creative work, such as a textbook or a streaming video service.[57] Other works may be in the public domain, such as an electronic copy of Dafoe's *Robinson Crusoe* or H.G. Wells' *The Time Machine*.[58] Additionally, some copyright owners license their work under an "open license," the most popular of which is the Creative Commons license.[59] If the school or teacher properly obtains permission, then the copyright holder cannot claim copyright infringement.[60] However, teachers and students may still be protected from copyright infringement under the fair use doctrine even if permission is not given.[61]

Under many state standards for education, teachers are responsible for teaching students technological literacy.[62] However, with the increased access to the endless depths of information mentioned above, are teachers aware of the laws surrounding the usage of copyrighted materials in the classroom? Largely, the answer is "no."[63] Of teachers surveyed, none reported receiving any formal education on fair use, and only a quarter claimed to know anything about fair use at all.[64] The same is true for K–12 students.[65] The confusion over fair use can make it unclear as to when teachers and students are committing infringement. Moreover, the confusion also has the potential effect of chilling creativity and research in the classroom.[66] While many teachers and students are unaware of copyright law, for the most part their use of copyrighted materials in the classroom remains protected under the doctrine of "fair use" in § 107 of the United States Copyright Code, which states:

> [T]he fair use of a copyrighted work . . . for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright.
> In determining whether the use made of a work in any particular case is a fair use the factors to be considered shall include—
> (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
> (2) the nature of the copyrighted work;
> (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
> (4) the effect of the use upon the

infringement).

56. *See* 17 U.S.C § 107 (stating that literary works are copyrightable materials); Nate Anderson, *Teachers' Lack of Fair Use Education Hinders Learning, Sets Bad Example*, Ars Technica (Oct. 24, 2007), http://arstechnica.com/old/content/2007/10/teachers-lack-of-fair-use-education-hinders-learning-sets-bad-example.ars (explaining that few teachers are aware of copyright law).

57. *See* School Library Journal's Spending Survey, http://www.schoollibraryjournal.com/article/CA6648082.html (last visited Apr. 4, 2011) (showing average school spending on audiovisual materials); Discovery Education Streaming Purchase, *supra* note 4; Lenhart, Simon & Graziano, *supra* note 1, at 3–5 (finding that educational technology is used in various ways in the classroom).

58. After a certain amount of years, copyright protections expire and the work becomes a part of the public domain. Works in the public domain can be freely reused, for commercial and non-commercial purposes. *See*, *e.g.*, H.G Wells, The Time Machine (John Walker ed., 2002), http://www.fourmilab.ch/etexts/www/wells/timemach/html/; Daniel Defoe, Robinson Crusoe (Macmillan & Co. 1868) (1719) http://books.google.com/books?id=XoxYJCwQAoYC&ots=7NdlW7ey3O&dq=Robinson%20Crusoe&pg=PR4#v=onepage&q&f=false. Both books were digitally published by Google Books as a part of the public domain.

59. About the Licenses—Creative Commons, http://creativecommons.org/licenses/ (last visited Apr. 4, 2011). Creative Commons licenses provide the creator of a copyrightable work license language that allows the copyright holder to make certain uses of their work allowable, as to prevent any confusion.

60. *See* 17 U.S.C. § 106 (stating that copyright owners can authorize others to use their copyrighted works).

61. *See* 17 U.S.C. § 107 (outlining the fair use doctrine).

62. *See*, *e.g.*, W. Va. Code R. § 126–44 (2009).

63. *See* Media Education Lab, Temple University, Copyright and Fair Use for Digital Learning Teacher Education Initiative 2010 1 (2010) (presenting the results of a teacher copyright education program, based on the lack of copyright knowledge), http://www.mediaeducationlab.com/sites/mediaeducationlab.com/files/Copyright%20Clarity%20Program%20Evaluation.pdf; Anderson, *supra* note 56.

64. Anderson, *supra* note 56.

65. *Id.*

66. *See* Hall Davidson, *The Educators' Lean and Mean NO FAT Guide to Fair Use*, CopyRight–CopyWrong?, http://www.csus.edu/indiv/p/peachj/edte230/copyright/#article (last visited Apr. 4, 2011) (explaining several different ways that students can violate fair use); *Frequently Asked Questions (and Answers) about Copyright and Fair Use*, Chilling Effects Clearinghouse, http://www.chillingeffects.org/fairuse/faq.cgi#QID825 (last visited Apr. 4, 2011) (asking "Question: I found something interesting on someone else's blog. May I quote it? Answer: Probably."). This question, among others from the Frequently Asked Questions section, illustrates that unclear copyright law can lead individuals to not share some blog information for fear of infringement. *Id.*

potential market for or value of the copyrighted work.[67]

The "fair use" doctrine is decided as a totality of the circumstances, with different courts putting different weights on each factor.[68] While the doctrine specially spells out criticism, comment, news reporting, teaching, scholarship, or research as protected classes, these are not *per se* categories and the courts consider all four factors.[69]

A. Analyzing Factor One: Purpose and Character of the Work

First, the purpose or character of the use is considered in the totality of the circumstances.[70] One of the main purposes of U.S. Copyright Law is to encourage creativity, and this factor looks at whether or not a use of copyrighted material is transformative, or merely derivative.[71] In order for a work to be considered transformative, a work must add "something new, with a further purpose or different character, altering the first with new expression, meaning, or message."[72] In the classroom, this factor will be strongly in favor of the infringing teacher or student if he or she has taken a copyrighted work and changed it in some meaningful way.[73] The more that the work is altered, the more this factor would favor the teacher or student.[74] However, the clearest example of a teacher's derivative use of a copyrighted work would be a photocopy of a worksheet, without editing or changing it in any way and without crediting the original creator.[75]

A subsection of the first factor is "whether such use is of a commercial nature or is for nonprofit educational purposes."[76] In *Sony Corp. of America v. Universal City Studios, Inc.*,[77] the Supreme Court held that it is presumptively unfair "to make copies for a commercial or profit making purpose."[78] On its face, this subsection would seem to strongly favor the educator and student, as most uses of copyrighted materials in the classroom are used for educational and not for-profit purposes.[79] However, this factor does not go in favor of a teacher as a matter of law.[80] In *Marcus v. Rowley*, the defendant, a teacher in a public school, organized a "learning activity package" containing parts of a copyrighted book on cake decorating, which was not considered a fair use *per se*.[81] While the defendant used the copyrighted materials in a non-commercial, educational way, she used it for the exact same purpose as the original copyright holder, who was also a teacher using it to instruct students.[82] Additionally, this factor may become weaker if teachers use copyrighted materials for non-educational, but still important activities, such as a movie day as a reward for good behavior.[83]

B. Analyzing Factor Two: The Nature of the Copyrighted Work

The second factor to be weighed in the totality of the circumstances is the nature of the copyrighted work. This factor can be analyzed by how

67. 17 U.S.C. § 107 (2006).

68. *See* Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 574 (1994) (explaining that each court must weigh the facts against the fair use factors); *see generally* Pamela Samuelson, *Unbundling Fair Uses*, 77 Fordham L. Rev. 2537, 2586–88 (2009) (attempting to separate the fair use doctrine into more clear categories because of the different weights given to different types of media).

69. 17 U.S.C. § 107.

70. *Id.* at § 107; *Campbell*, 510 U.S. at 576–77 (holding that fair use must be decided as a totality of the circumstances).

71. *Campbell*, 510 U.S. at 576–77 (concluding that rap group 2LiveCrew's use of classic song "Pretty Woman" was a parody of the original, and was transformative). *Compare* Mattel, Inc. v. Walking Mountain Prods., 353 F.3d 792, 800–02 (9th Cir. 2003) (finding fair use of Barbie dolls as the subjects of photographs), *with* Rogers v. Koons, 960 F.2d 301, 308–09 (2d Cir. 1992) (holding there is no fair use in a painter incorporating other paintings into his own).

72. *Campbell*, 510 U.S. at 579.

73. *See* The Center for Internet and Society Fair Use Project, *Measuring Fair Use: The Four Factors*, Stanford Copyright & Fair Use, http://fairuse.stanford.edu/Copyright_and_Fair_Use_Overview/chapter9/9-b.html (last visited Apr. 4, 2011) (describing the tenants of transformative use); *Code of Best Practices in Fair Use for Media Literacy Education*, National Council of Teachers of English, http://www.ncte.org/positions/statements/fairusemedialiteracy (last visited Apr. 4, 2011) (explaining best practices in fair use, particularly in how students can create transformative work).

74. *Id.*

75. *Id.* However, crediting the creator does not allow an unauthorized user to use a copyrighted work without additional fair use factors.

76. 17 U.S.C. § 107 (2006).

77. 464 U.S. 417 (1984).

78. *Id.* at 449.

79. Marcus v. Rowley, 695 F.2d 1171, 1175 (9th Cir. 1983) (holding that the use of a copyrighted cake instructional booklet by another teacher for the same purpose did not constitute fair use, even though it was used for not-for-profit, educational cause).

80. *Id.*

81. *Id.*

82. *See id.*

83. *See* Peter Decherney, *Educational Uses of Media: Frequently Asked Questions About the 2009 Exemption to the Digital Millennium Copyright Act*, Annenberg School of Communications, University of Pennsylvania, http://www.asc.upenn.edu/dmca/ (last visited Apr. 4, 2011) (explaining how the educational use of media exception in the DMCA can be used in the classroom).

informational a material is, versus how creative it is.[84] The more informational the use of the copyrighted material, the more likely it is that the factor will weigh in favor of the users, as works with a small amount of creativity, like news reports, need less copyright protection than creative works.[85]

This factor can be difficult for teachers, as every lesson plan is designed to instruct yet engage students at the same time.[86] Teachers use a variety of materials, both entertaining and strictly informative, in their lessons.[87] If a teacher were reproducing a news article for students to read in an English class, then this factor would seem to be strongly in the teacher's favor, as this would be material that is very informational. If the teacher brought in a Disney movie to show to the class for a reward, this factor would go against the teacher, as this is an entertainment use.[88] The gray area would be the use of entertaining material that can be used in the classroom to teach a lesson.[89] It would be unclear as to which way this factor would fall.

C. Analyzing Factor Three: The Amount and Substantiality of the Portion Used

The third factor to be weighed is the amount and substantiality of the portion used.[90] Courts consistently maintain that wholesale copying of copyrighted materials precludes the application of the fair use doctrine.[91] Additionally, this factor can be weighed against the user if he or she used the "heart of the [copyrighted work]," even if it is only a few sentences or paragraphs.[92] In *Harper & Row Publishers, Inc. v. Nation Enterprises*, the court held that while excerpts of Gerald Ford's unpublished memoirs published in the defendant's magazine were very small, the parts published represented important parts of the memoir.[93]

When applied to the classroom, this factor would depend on the material being used. Hypothetically, if a teacher were to use the outline of a copyrighted drawing and have his students color in the picture, then this factor would likely go in favor of the teacher. However, if a teacher were to photocopy a copyrighted worksheet without authorization, then the factor would likely go against the teacher. In *Encyclopaedia Britannica Educational Corp. v. Crooks*,[94] the court considered the issue of fair use in deciding whether a school board's copying of an educational motion picture was allowed under fair use.[95] In the case, three producers of educational movies sued the Board of Cooperative Educational Services of Erie County ("BOCES") for taping several of plaintiffs' copyrighted films without permission.[96] BOCES then distributed those videos to students within the school district.[97] The court rejected BOCES's fair use defense on the ground that although the defendants were involved in non-commercial copying to promote science and education, the taping of entire copyrighted films was too excessive to be considered fair use.[98]

D. Analyzing Factor Four: The Effect on the Market

The fourth factor to be weighed is the effect on the market.[99] This factor takes into account the effect that the use would have on the overall market for the copyrighted work.[100] The Court in *Harper* declared that the fourth factor is the "single most important element of fair use."[101] This factor considers the work in the context of the potential harm to the market, and "whether unrestricted and widespread conduct . . . would result in a substantially adverse impact on the potential market."[102] However, since *Harper,* the first factor, specifically, whether or not a use is transformative, has become increasingly important in the fair use analysis.[103]

84. Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 497 (1984).

85. *Id.*

86. Michael Stephen Bird, *Edutaining: Creating Interest in the Classroom* (2007), http://drmichaelbird.com/edutaining.html (instructing teachers on how to make classes interesting by including entertaining segments).

87. *Id.*

88. *See Fair Use: Remix Culture, Mashups, and Copyright*, Teaching Copyright, http://www.teachingcopyright.org/curriculum/hs/3 (last visited Apr. 4, 2011) (offering a lesson called Fair(y) Use, in which a mashup of Disney movies are examined for copyright issues).

89. *See* Bird, *supra* note 86 (offering several educational entertainment lessons).

90. 17 U.S.C. § 107 (2006).

91. Marcus v. Rowley, 695 F.2d 1171, 1175 (9th Cir. 1983).

92. Harper & Row Publishers, Inc. v. Nation Enters., 471 U.S. 539, 564 (1985).

93. *Id.*

94. 542 F. Supp. 1156 (W.D.N.Y. 1982).

95. *Id.*

96. *Id.*

97. *Id.*

98. *Id.*

99. 17 U.S. § 107 (2006); *Harper & Row,* 471 U.S. 539, 566 (1985).

100. *Harper & Row*, 471 U.S. at 566.

101. *Id.*

102. *Id.* at 585 (quoting 3.M. Nimmer Copyright §13.05[A][4] (1984)).

103. Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 591

While this factor is one of the more important elements to the fair use analysis,[104] it is also the most difficult for teachers to overcome.[105] Millions of dollars are spent each year on supplemental teaching materials, such as workbooks, curriculum, digital content subscriptions, videos, computer programs, and a wide range of other supplies.[106] If fair use covered all uses by teachers and students, many of the companies that create high quality resources would no longer have an incentive to create new ones.

In *Encyclopaedia Britannica*, the corporations involved were for-profit businesses engaged in producing, acquiring, and licensing educational materials.[107] The court ruled that the fourth factor weighed in favor of the plaintiffs because of the economic harm that would come to the businesses because of the use of the copyrighted works.[108] Additionally, several cases deal with teachers reproducing copyrighted tests.[109] In all these cases, economic harm was done to the testing companies, as each test is proprietary to the testing company.[110]

However, in *Marcus v. Rowley*, the Court weighed the four factors against the defendant, a teacher, even though the fourth factor weighed in favor of the defendant.[111] There the fourth factor weighed in favor of the teacher because the plaintiff could not prove that there was an effect on the market, even thought at least one student decided not to buy the plaintiff's book as a result of the defendant's infringement.[112]

IV. Effects of Infringement

As the fourth factor of the fair use analysis highlights, the effect on the marketplace is extremely important in copyright law. Digital piracy, or unauthorized copyright infringement on a digital medium, has risen dramatically in the past ten years.[113] One study suggests that as much as 40 billion files were illegally file-shared in 2008.[114] Additionally, almost half of infringers are between the ages of 18–29.[115] This rise in digital piracy correlated with the increased access of broadband Internet in the American home and classroom, in addition to the increase in educational technology being used in the classroom.[116] With this increase in general access there is also a rising number of students creating and using multimedia on the computer for educational uses. However, what is not provided is comprehensive copyright education in the K–12 classroom, nor do state standards reflect the growing increase of Internet piracy in meaningful and constructive ways.

While a recent report by the Government Accountability Office ("GAO") sheds doubt on the validity of putting a dollar total on infringement, organizations such as the Recording Industry and Artists of America ("RIAA") have cited figures estimating $12.5 billion dollars a year of economic loss from music pirating alone.[117] A trade association claims that 95% of the music in 2009 downloaded using the Internet is pirated.[118] This percentage has not changed when compared to the 2008 numbers.[119]

While the cost of infringement can be high for the U.S. economy, it can also be high for an individual sued for copyright infringement. Copyright infringers can be liable for up to $30,000 per copyright infringement, or up to $150,000 per willful infringement.[120] The average settlement for the over

(1994).

104. *Id.* at 566.

105. *See*, *e.g.*, Encyclopedia Britannica Educ. Corp. v. Crooks, 542 F. Supp. 1156, 1158 (W.D.N.Y. 1982) (holding that even though most of the fair use factors were for the plaintiff, the fourth factor was the deciding factor).

106. *See* Spending Survey, *supra* note 57 (showing average school spending on audiovisual materials); Discovery Education Streaming Purchase, *supra* note 4.

107. 542 F. Supp. 1156, 1158 (W.D.N.Y. 1982).

108. *Id.*

109. Chi. Sch. Reform Bd. of Trs. v. Substance, Inc., 79 F. Supp. 2d 919, 921 (N.D. Ill. 2000); Educ. Testing Serv. v. Simon, 95 F. Supp. 2d 1081, 1083 (C.D. Cal. 1999).

110. *Id.*

111. Marcus v. Rowley, 695 F.2d 1171, 1175 (9th Cir. 1983).

112. *Id.*

113. Madden & Lenhart, *supra* note 17, at 2.

114. *See* IFPI Digital Music Report 2009: Key Statistics 1–3 (2009), http://www.ifpi.org/content/library/DMR2009-key-statistics.pdf

115. Madden & Lenhart, *supra* note 17, at 2.

116. *Compare* IFPI Digital Music Report 2009: Key Statistics 1–3 (2009) (showing an increase in digital music), *with* Wells & Lewis, *supra* note 3, at 4 (showing an increase in both broadband Internet access and digital piracy in the United States over the past 10 years).

117. Government Accountability Office, GAO 10-423, Intellectual Property: Observations on Efforts to Quantify the Economic Effects of Counterfeit and Pirated Goods 2 (2010), http:// www.gao.gov/new.items/d10423.pdf; *RIAA Piracy: Online and on the Street,* http://www.riaa.com/physicalpiracy.php (last visited Nov. 30, 2010).

118. Eric Pfanner, *Music Industry Counts the Cost of Piracy,* N.Y. Times (Jan. 21, 2010), http://www.nytimes.com/2010/01/22/business/global/22music.html.

119. *Id.*

120. 17 U.S.C. § 504(c)(1)–(2) (2006); *see also* William Patry, *Are Copyright Lawyers Worth More Than Other Lawyers?*, The Patry Copyright Blog (Apr. 10, 2008, 9:30 PM), http://williampatry.blogspot.com/2008/04/are-copyright-lawyers-worth-more-than.

30,000 people accused of file sharing has been between $3,000 and $12,000.[121] While the merits of these lawsuits can be argued on the policy level, students should be educated as to how copyright infringement can affect them and their wallets.

While music infringement lawsuits are well publicized and often thrown into the limelight, the largest amount of cease-and-desists letters has been in the area of stock photography infringement.[122] When companies, newspapers, or blogs use stock images without permission, the owner of those stock images can sue for an injunction and monetary damages.[123] As a result, many users received letters with demands to settle for up to $1,000 and the number of users who pay a settlement remains unknown.[124] Comparing this to the RIAA, which has spent more on legal fees than it has currently collected, it seems that this seemingly innocuous use of a photograph should be highlighted to students, who may think they are protected under the banner of the fair use doctrine.[125] Emphasizing the need for copyright education, recent lawsuits brought by the firm Righthaven LLC target bloggers who, in some cases, merely posted a few paragraphs of the original newspaper article.[126] The lawsuits come with offers to settle, causing many to accuse Righthaven of turning consumers' lack of copyright education into a business model and taking advantage of those consumers.[127]

Unfortunately, while there are a lot of copyright hazards targeting young people, they are the least likely to care about copyright infringement, with 82% of file-sharers ages 18–29 saying they do not care much about the copyright status of the files they illegally download.[128]

Finally, and most importantly for teachers and students, the current uncertainty over copyright law causes a "chilling effect" on creative uses of copyrighted works and creative uses of technology in the classroom.[129] For example, teachers who want to use Beatles lyrics to promote literacy would have to pay a $3,000 licensing fee to the copyright owners or face infringement charges.[130] Additionally, copyright concerns forced Amazon to give publishers the option to deactivate the text-to-speech function on its Amazon Kindle.[131] Because this function was disabled, it prevented several universities from providing the Kindle to its students.[132] Thus, it slowed the adoption of the device in academic settings.[133]

V. What is Being Done and What Should Be Done

In order to implement comprehensive copyright education in K–12 schools, collaborative efforts between state and federal government will likely be necessary. Using a streamlined curriculum based on the Media Education Lab's K–12 media literacy materials, the Board of Governors should use a process similar to the adoption of national teaching standards. This should be done to promote these standards and to put pressure on state governments and local education agencies to enact the streamlined copyright curriculum. Additionally, the federal government should adopt several recommendations of the National Broadband Plan.[134] These recommendations focus on both creating high-quality education materials by the federal government and adopting a new narrowly targeted copyright distinction that would encourage private copyright holders to make their work available for use in classroom settings.

A. Copyright Literacy Curriculum

As mentioned above, the majority of teachers and students do not know the tenants of copyright and the fair use doctrine.[135] In order to ensure that all

html.

121. Joel Fights Back: About the Case, http://joelfightsback.com/about-the-case/ (last visited Nov. 30, 2010).

122. Bailey, *supra* note 5.

123. *Id.*

124. *Id.*

125. *See* Debra Cassens Weiss, *RIAA Reportedly Spent More Than $17M in Legal Fees in 2008*, ABA Journal.com, (Jul. 15, 2010), http://www.abajournal.com/news/article/riaa_reportedly_spent_more_than_17m_in_legal_fees_in_2008.

126. David Kravets, *Righthaven Expands Troll Operation with Newspaper Giant*, Wired, (Dec. 7, 2010, 4:36 PM), http://www.wired.com/threatlevel/2010/12/righthaven-expands-trolling/.

127. *See* Righthaven LLC v. Dana Eiser, No. 2:10-CV-3075-RMG (D.S.C. 2011) ("Righthaven's reason for advancing this demand is to take advantage of the legal ignorance of unrepresented individuals so as to aid the Righthaven business model of leveraging cost-of-defense settlements in frivolous lawsuits.").

128. Lenhart & Madden, *supra* note 17, at 1, 8.

129. National Broadband Plan, *supra* note 18, at 248.

130. Renee Hobbs, Peter Jaszi & Pat Aufderheide, *The Cost of Copyright Confusion for Media Literacy*, Center for Social Media at 16–17 (2007),

http://www.centerforsocialmedia.org/files/pdf/Final_CSM_copyright_report.pdf.

131. *The Amazon Kindle Text to Speech Fiasco*, EBooks Just Published (Mar. 26, 2009), http://www.ebooksjustpublished.com/2009/03/26/the-amazon-kindle-text-to-speech-fiasco/.

132. National Broadband Plan, *supra* note 18, at 248.

133. *Id.*

134. *Id.* at 244–45.

135. *See* Anderson, *supra* note 54.

students and teachers gain comprehensive knowledge of copyright, a curriculum should be established that both respects and emphasizes the importance of copyright law in the economy and in the creation of new works.

While several advanced curriculum are available for post-secondary education, including resources at American University's Center for Social Media, one of the most complete and comprehensive sets of curriculum already created is published by the Media Education Lab at Temple University.[136] The curriculum features a book called "Copyright Clarity,"[137] and the lessons focus on the uses of copyright in the classroom, including an in-depth discussion of fair use.[138] The lessons also rely on real-life examples of potential copyright infringement.[139] The lessons and assessments require students to apply critical thinking in order to reason why, or why not, a particular use of a music video, documentary footage, and other copyrighted material is an infringing use.[140] By the end of the curriculum, students should not only be able to know the details of copyright, but will also have the knowledge to find resources that are in the public domain or otherwise available for their use.[141] Additionally, the Media Education Lab also offers materials for staff development, achieving the overall objective of comprehensive copyright education for both teachers and students.[142] All of this information is contained in an easy-to-navigate website, with resources for best practices in fair use, teacher case studies for college, elementary, and high school, and access to an interactive wiki, which is a website any reader can edit.[143]

However, there are limitations and drawbacks to the use of the Media Education Lab's curriculum. First, one part of the curriculum requires the purchase of a $26 book to accompany the lessons.[144] The lack of a digital version of the book, in addition to the general cost of acquiring paper copies of this book, would restrict access by many school districts lacking the necessary funds.[145] One solution could be the federal government's purchase of the copyright for this material and entering it into the public domain.[146] Another solution could be to encourage the Media Education Lab to release the book through the proposed educational mark, allowing schools to use it without jeopardizing their other commercial rights.[147]

An additional resource for copyright education comes from the aptly named "Teaching Copyright" program.[148] The materials found at "Teaching Copyright" are not as complete as the Media Education Lab; however, these resources would be easier to quickly incorporate into an elementary, middle, or high school curriculum.[149] One of these lessons, entitled "Fair(y) Use Tale," asks students to view a mashup of Disney animated clips and analyze the four fair use factors.[150] Ultimately, Congress should commission a research panel to study the best practices for copyright

136. *See Best Practices*, Center for Social Media, http://www.centerforsocialmedia.org/fair-use/best-practices (last visited Apr. 4, 2011); *Teaching Resources*, Media Education Lab, http://www.mediaeducationlab.com/curriculum/materials (last visited Apr. 4, 2011) (presenting curriculum for copyright education and fair use).

137. Renee Hobbs, Copyright Clarity: How Fair Use Supports Digital Learning (Corwin 2010).

138. *Copyright and Fair Use: Lesson Plans for High School, College and Graduate Education*, Media Education Lab, http://mediaeducationlab.com/table-contents-teaching-about-copyright-and-fair-use (last visited Apr. 9, 2011).

139. *Id.*

140. *Id.*

141. *Id.*

142. *See*, *e.g.*, Renee Hobbs, *Copyright Clarity: How Fair Use Supports Digital Learning*, http://www.slideshare.net/reneehobbs/finally-the-end-to-copyright-confusion-has-arrived-presentation (last visited Apr. 4, 2011) (presenting slides with information on planning a copyright policy staff development).

143. *Copyright*, Media Education Lab, http://www.mediaeducationlab.com/copyright (last visited Apr. 4, 2011); *Glossary of Research Terms: W*, Southwestern Oregon Community College, http://www.socc.edu/library/pgs/databases/glossary-of-research-terms.shtml#w (last visited Apr. 4, 2011) (defining the word "wiki").

144. *See* Hobbs, *supra* note 137.

145. National Broadband Plan, *supra* note 18, at 247–48.

146. *See About the Public Domain Mark—"No Known Copyright,"* Creative Commons, http://creativecommons.org/about/pdm (last visited Apr. 4, 2011) (recommending one way to submit work into the public domain); *see also* Copyright Act, 17 U.S.C. § 105 (2006) (stating that federal government works are not eligible for copyright protection, however, the government can still hold copyrights through assignments, gifts, or bequests, so this might not be the strongest way for the government to ensure the book entered the public domain).

147. National Broadband Plan, *supra* note 18, at 248–49 (recommending the adoption of an educational distinction by Congress to be adopted by copyright owners seeking to allow educational uses of their work without sacrificing all rights).

148. *Overview*, Teaching Copyright, http://www.teachingcopyright.org/curriculum/hs (last visited Apr. 4, 2011).

149. *See*, *e.g.*, *Fair Use: Remix Culture, Mashups, and Copyright, supra* note 88 (presenting four different hands-on fair use exercises geared towards having students think critically about fair use).

150. A mashup is an individual work that may or may not include completely original content and combines the works of two or more separate artists. Michael Katz, *Recycling Copyright: Survival & Growth in the Remix Age*, 13 Intell. Prop. L. Bull. 21, 22 (2008) (defining the term "mashup" in the context of the record industry).

education and allow that team of professionals to compile a curriculum to be presented to the states.

B. How to Implement a Copyright Literacy Curriculum

While this curriculum will fulfill the goals of copyright education, the standards will be largely meaningless unless teachers are compelled by law to teach them. While several groups have attempted to establish national standards for the fair use doctrine in the past, the guidelines lacked the power of law.[151] However, the National Governors Association, a group consisting of the majority of governors from each state, successfully adopted the Core State Standards Initiative.[152] The state governors agreed to a set of education standards and pushed their state legislatures to pass these standards with great success.[153] The National Governors Association, or a similar consolidated state-based organization, should adopt comprehensive copyright curriculum in a similar way. If the federal government were to commission studies on the best practices for teaching copyright in schools, the federal government would still be ill equipped to implement the curriculum on a state or local level. The most effective approach to achieving comprehensive copyright education in the classroom would be for the state legislatures to put into law a quality, comprehensive curriculum, approved and agreed upon by the National Governors Association.

Figure 4: National Broadband Plan's Proposed Copyright Notice Permitting Free Educational Use

C. The Federal Government Should Provide High Quality Resources for Use in Education

This Article proposes that the federal government should quickly adopt several recommendations from the National Broadband Plan and create, standardize, and otherwise make available high-quality educational resources. The National Broadband Plan, released on March 16, 2010, is a plan created by the Federal Communications Commission (FCC) that aims to improve broadband Internet access in the United States.[154] One section of the National Broadband Plan focuses on educational uses of broadband technology and makes several recommendations that should be implemented by both Congress and the Executive Branch.[155]

First, the Executive Branch should make digitally available all artistic works under its control, as suggested by Recommendations 11.1 and 11.2 of the National Broadband Plan.[156] The Executive Branch has access to a large library of works that are not currently accessible in the classroom, either digitally or through any other way.[157] Through utilizing an open portal that is easy to navigate by teachers and students, the Executive Branch can provide teachers and students with quality educational media that will be available without the risk of copyright infringement.[158]

Additionally, Congress should adopt a variation of the Recommendation in 11.4 of the National Broadband Plan, which suggests, "Congress should consider taking legislative action to encourage copyright holders to grant educational digital rights of use, without prejudicing their other rights."[159] As the National Broadband Plan states, "copyright law must keep pace as new technologies and media are developed."[160] One way to enact this recommendation would be to use a new copyright distinction, an "educational mark."[161] Through the use of an "educational mark," symbolized in Figure 4, a copyright holder could allow teachers and students to use his or her copyrighted work for educational purposes without sacrificing any other of the copyright holder's rights.[162]

The proposal for an "educational mark" has been criticized for the ambiguous use of "educational"

151. Pamela Samuelson, *Unbundling Fair Uses*, 77 Fordham L. Rev. 2537, 2581, 2586 (2009).

152. *Frequently Asked Questions,* Common Core State Standards Initiative, 1, 2 (Mar. 2, 2010), http://*www.corestandards.org/assets/CoreFAQ.pdf.*

153. *See*, *e.g.*, *In the States*, Common Core State Standards Initiative, http://www.corestandards.org/in-the-states (last visited Feb. 16, 2011) (illustrating the U.S. states and territories that have formally adopted these standards).

154. *See* National Broadband Plan, *supra* note 18, at i (2010).

155. *Id.* at 243–45.

156. *Id.* at 246–48.

157. *See*, *e.g.*, ERIC Collection Development Process, ERIC, http://www.eric.ed.gov/ERICWebPortal/resources/html/about/collection_development_process.html (last visited Apr. 4, 2011) (showing how an Executive Branch agency is compiling and digitizing scholarly articles).

158. National Broadband Plan, *supra* note 18, at 247–48.

159. *Id.* at 248.

160. *Id.*

161. *Id.*

162. *Id.* at 248–49.

within the Recommendation.[163] According to some criticisms, by encouraging rights owners to adopt the "educational mark" the government would just be promoting an additional layer of confusion similar to the confusion already existing within the framework of the fair use doctrine.[164] Educational uses can become subjective, and a consumer's idea of an educational use might be significantly different from the use that the rights holder and Congress conceived.[165]

In order to resolve this confusion, the use of the "educational mark" should be limited to teachers, students, and school officials in preschool, K–12, and secondary education. These rights should be limited to works created in and for the classroom and not be a blanket amnesty for any student or teacher against all copyright infringement. While this recommendation severely limits the usefulness of an "educational mark," it should focus the mark's use and make it easier for companies to adopt the mark without fear of losing their copyright protections.

Next, Congress should adopt Recommendation 11.1 and provide a framework for allowing teachers and students to easily discern whether or not a work is in the public domain,[166] and, if not, who the copyright owner is.[167] Currently, it can be difficult to determine what is in the public domain.[168] First, one must decide what kind of work the copyright work in question is and what law governs that type of work.[169] Next, one would need to look at the publishing date of the work and decide if it could possibly be in the public domain, then confirm that in the catalogue of registered works, which is available online for works since January 1, 1978.[170] Once you find the copyright record in the database, you can see the author of the work and copyright claimant, without any contact information.[171] For example, if a teacher wanted to use a wall chart of the human brain as a decoration for his science blog, the teacher would likely need to obtain permission from the copyright owner.[172] Searching the copyright records, one can see that Ernest W. Beck created it in 1983, and that the copyright claimant is the Anatomical Chart Company.[173] The database offers no other information and from there the teacher would be on his own.[174]

In order to streamline this search and promote creativity and quality work by teachers and students, the federal government should offer this information in a streamlined and centralized online database that is easy to use so that both teachers and students would be able to navigate it. It should feature online training and tutorials, in addition to a search "wizard" that would guide users through the database by asking and receiving answers to a series of question about the work.

Finally, Congress should also provide within this database an easy and cost-efficient way for individuals seeking to use a copyrighted work to obtain licensing.[175] Currently, there is no definite or foolproof method to obtain permission from a copyright holder.[176] A person seeking to license a work would need to first decide what category the work fits into and contact multiple groups until he or she can find the copyright owner.[177] If the work in question is a book or a journal article, the Copyright Clearance Center is a rights management company that allows copyright owners the opportunity to license their books and articles.[178] For images, there are several copyright collectives, including the Artists Rights Society and

163. Timothy Vollmer, *National Broadband Plan Outlines Recommendations to Enable Online Learning: Should Continue to Address Content Interoperability Concerns*, Creative Commons, (Mar. 16, 2010), http://creativecommons.org/weblog/entry/21260.

164. *Id.*

165. *Id.*

166. Or, if the above proposal is accepted, whether the work has an "educational mark."

167. National Broadband Plan, *supra* note 18, at 246.

168. *See* Peter B. Hirtle, *Copyright Term and the Public Domain in the United States*, Cornell University, http://copyright.cornell.edu/resources/copyrightterm.pdf (showing the intricacies of how works enter the public domain); *Search Copyright Information*, U.S. Copyright Office—Search Copyright Records, http://www.copyright.gov/records/ (last visited Apr. 4, 2011) (allowing a user to search copyright status by year of registration or renewal).

169. *See Search Copyright Information*, *supra* note 168.

170. *Id.*

171. Public Catalog, U.S. Copyright Office, http://cocatalog.loc.gov/cgi-bin/Pwebrecon.cgi?DB=local&PAGE=First (last visited Apr. 4, 2011) (search for "the human brain" click on the first entry).

172. *See id.*; *supra* note 83 (explaining how the educational use of the media exception in the DMCA can be used in the classroom); Cathy Newsome, *Copyright and Fair Use Defined*, A Teacher's Guide to Fair Use and Copyright (last visited Apr. 4, 2010), http://home.earthlink.net/%7Ecnew/research.htm#Copyright%20and%20Fair%20Use%20Defined (giving examples of copyright violations that teachers can face).

173. Public Catalog, *supra* note 171.

174. *Id.*

175. *Id.*

176. *Getting Permission*, Copyright Crash Course, http://www.utsystem.edu/ogc/intellectualproperty/permissn.htm (last visited Apr. 4, 2011).

177. *Id.*

178. *See id.*; Copyright Clearance Center, http://www.copyright.com/ (last visited Apr. 4, 2011).

the Media Image Resource Alliance.[179] For musical performance, BMI and ASCAP both offer music licensing for artists.[180] This non-centralized approach to licensing is ineffective and makes it difficult for users to license works even if they wanted to. The government should promote a centralized database using an e-commerce approach. This way, users could easily license the work and not commit copyright infringement.

VI. Conclusion

The educational technology revolution is far from over. While 94% of classrooms now have access to broadband Internet, new technologies are becoming more affordable and both public and private organizations are finding innovative uses for these new machines.[181] The emergence of wireless and mobile technology will continue to stretch the boundaries of students' and teachers' creative expressions on digital mediums and will give everyone the ability to be active users instead of passive viewers. With the creation of new digital media, teachers and students will be able to experience new things, while creating new things themselves. The opportunities are endless, but with these new uses of technology, come the real risk that creativity and innovation may be stifled without awareness of and respect for copyright law.

In order to keep this innovation moving in the right direction, comprehensive copyright education in K–12 schools is necessary. Through an organization such as the National Governor's Association, a comprehensive curriculum should be adopted by all states and implemented in local educational agencies. Additionally, the federal government should adopt several recommendations within the National Broadband Plan that promote the creation and digitizing of government works that can be used in the classroom, in addition to centralization of copyright licensing for all works. Through these proposals, costly infringement cases can be avoided and creativity can be encouraged in both students and teachers.

179. *See Getting Permission*, *supra* note 176 (listing copyright collectives that deal with images).

180. *Id.*

181. Wells & Lewis, *supra* note 3, at 4.