

An Educator's Guide to Intellectual Property

Teachers provide the raw material for intellectual property – young minds with fresh ideas – so it is not surprising that concerns about intellectual property should arise in the classroom. Usually these are pedagogical concerns about the best way to teach students respect for the intellectual property rights of others, both in their academic work and in their use of computer technology. Sometimes, however, there are professional concerns, such as when a teacher wonders about the legality of using Internet content in a homework sheet or sharing a colleague's classroom management software.

This brief guide aims to address both sets of concerns by offering an overview of intellectual property principles and practices as they apply to the classroom. The guide focuses on three areas where teachers and students must be clearly informed about intellectual property rights to avoid potential violation of the law: plagiarism, copyright, and piracy. In each area, the guide provides a framework intended to help teachers evaluate specific situations involving intellectual property rights. But the guide is not intended as a legal advisory and should not be relied on when legal questions arise in the classroom. While the guide may help one recognize such questions, teachers should contact a school or district administrator for help in finding answers.

What is Intellectual Property?

In the broadest terms, intellectual property is any product of a creative mind. An idea, insight, or inspiration does not become intellectual property until it is fixed in some tangible form of expression. Once fixed, however, intellectual property may be protected by patent, copyright, or trademark laws.

In the United States, these laws can be traced to Article One, Section Eight of the U.S. Constitution: “The Congress shall have power...To promote the Progress of Science and useful Arts, by securing for limited Time to Authors and Inventors, the exclusive Right to their respective Writings and Discoveries.” Authors receive this exclusive right through copyright. Inventors receive a similar right through patents.

As the language of the Constitution makes clear, the purpose of intellectual property rights is to promote innovation by giving innovators economic control over their creations. For a limited time, they are the only ones to decide who is allowed to profit from their work. This creates an incentive for originality that serves to keep society supplied with improvements. Remove that incentive, by weakening or ignoring intellectual property rights, and “the Progress of Science and useful Arts” will decline.

Students should be aware that intellectual property rights are one of the foundation stones of American life, a legal and economic principle as basic as any in the Constitution. Admittedly, they may find it a far stretch to connect their personal attitudes toward intellectual property with the economic destiny of American society, but once they make that connection, they will perhaps better understand the rationale underlying the imposition of legal penalties for violating intellectual property rights.

Plagiarism

For educators, plagiarism is the most familiar area of intellectual property concerns. In the classroom, plagiarism involves misrepresenting another person's intellectual work as one's own. Students often reduce this concept to word-for-word copying, which happens to be a nearly correct understanding of plagiarism outside the classroom. There, plagiarism occurs when, for example, an author lifts passages from another book or a musician samples riffs from another recording without permission. The author who merely appropriates ideas, restates facts, and rephrases arguments is not a plagiarist. On the contrary, by putting borrowed intellectual content into his own words, such an author actually creates his own intellectual property.

Within an academic context, however, the rules are much stricter. Academic plagiarism involves not only direct quotation but any use of another's intellectual content without attribution, including facts, data, ideas, arguments, or lines of thinking. The concept springs from respect for the intellectual efforts (not just the intellectual property) of others, and requires that students acknowledge every contribution others have made to their own intellectual

work. In simplest terms, this means that students should learn to credit their sources whenever they consult the work of another.

The accepted format for crediting sources differs, of course, across the academic disciplines, but for elementary school students, any convenient format will serve to help them get in the habit of taking notes on and giving credit to the resources they use in their school work. Developing this habit is especially important as students begin to use CD-ROM and Internet resources, which some people mistakenly believe are exempt from the rules that apply to printed materials. Teach students to give the title of a CD-ROM and the page number or file name they have consulted. Show them how to copy the URL of a webpage and paste it into their research notes. Students can learn the formalities for citing such resources as they advance in school. From the start, however, they should learn the importance of crediting their sources and that it is a sign of intellectual maturity, not a sign of weakness.

At an appropriate age, students should also learn that the consequences of academic plagiarism can be extremely harsh. In college, plagiarism can lead to failure on a paper, failure in a course, or even expulsion from school. These penalties underscore that plagiarism is a serious academic offense, a form of cheating or intellectual theft that rarely goes unpunished – another reason for students to learn the simple precaution of crediting their sources from the start.

Note: For detailed guidelines on documentation and citation, consult *The Chicago Manual of Style* by The University of Chicago Press Staff, 15th edition (Chicago, 2003), or the *MLA Handbook for Writers of Research Papers* by Joseph Gibaldi, 6th edition (New York, 2003). Both include sections on citing electronic sources.

Copyright

Students who have learned to strictly respect the intellectual work of others in order to avoid plagiarism already have a solid foundation for understanding the laws of copyright. These laws are found in the Copyright Act, located in Title 17 of the United States Code, and spell out in considerable detail what can be copyrighted, how copyright is obtained, how long copyright lasts, and how copyright protection is enforced. Here are the essentials:

Copyrighted Works

Copyright applies to any tangible expression of a creative mind. In the United States, according to section 102(a) of the Copyright Act, “Copyright protection subsists ... in original works of authorship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device. Works of authorship include the following categories: (1) literary works; (2) musical works, including any accompanying words; (3) dramatic works, including any accompanying music; (4) pantomimes and choreographic works; (5) pictorial, graphic, and sculptural works; (6) motion pictures and other audiovisual works; (7) sound recordings; and (8) architectural works.”

You may wonder where digital works, such as computer software and websites, fit into this list. By definition, they are included in category 1. Section 101 of the Copyright Act defines *literary works* as “works, other than audiovisual works, expressed in words, numbers, or other verbal or numerical symbols or indicia, regardless of the nature of the material objects, such as books, periodicals, manuscripts, phonorecords, film, tapes, disks, or cards, in which they are embodied.”

Read these statutes carefully and you’ll soon realize that virtually any tangible expression of human consciousness is protected by copyright. However, it is important to remember that copyright applies only to the expression, not to the idea itself. As the Copyright Act explains in section 102(b), “In no case does copyright protection of an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work.” This means, that while a description, explanation, or illustration may be protected by copyright, the idea described, explained, or illustrated is not.

There are some exceptions to the protection afforded by copyright. According to the U.S. Copyright Office, the following generally cannot be copyrighted:

- ◆ Works that have not been fixed in a tangible medium – for example, a dance that has not been recorded or an off-the-cuff speech that has not been written down.

- ◆ Works consisting entirely of information that is common property and containing no original authorship, such as standard calendars, height and weight charts, tape measures and rulers, and tables taken from public documents or other common sources.
- ◆ Titles, names, short phrases, and slogans; familiar symbols or designs; mere variations of type style, lettering, or coloring; lists of ingredients or contents.
- ◆ Any work of the United States government.

Other than these examples, you and your students should assume that any tangible expression of a creative mind – anything in print, on the Internet, on television or radio, on tape or disk – is covered by copyright, whether it carries a copyright symbol or not.

Copyright is also protected internationally, sometimes in slightly different ways, but with most of the same underlying principles, as dictated by several important international treaties and conventions to which the United States is a party.

Securing Copyright

At one time, copyright protection could be secured only when a work was published or formally registered with the U.S. Copyright Office, and it required that a notice of copyright appear on the work itself. This is no longer true.

Now, according to the Copyright Office, “copyright is secured automatically when the work is created” – that is, when it is fixed in a material form that can be read or perceived directly or with some device. This means that words put on paper or typed into a computer are protected by copyright, even if no one except the author ever sees them. Home videos and musical greetings recorded on an answering machine are protected by copyright, even though it is unlikely either will ever do much to “promote the Progress of Science and useful Arts.” And virtually everything students produce in the classroom is protected by copyright, from their crayon scribbles in preschool to a computer presentation completed today.

No copyright notice is required to secure this protection. Most published works, of course, still carry a formal copyright notice, in part as a legal precaution, but the absence of a copyright notice can no longer be taken as an indication that a work is not copyrighted. On the contrary, the mere fact that a work exists probably indicates that it was automatically protected by copyright when first

created and that it should be treated as the intellectual property of someone else.

The Copyright Owner’s Rights

Given the generally comprehensive nature of the copyright laws, it should come as no surprise that copyright owners are granted broad control over their work for a period of time. No one can make any use of the work without the copyright owner’s permission. Specifically, without permission, no one can:

- ◆ Reproduce any part of the work in any medium;
- ◆ Recast, transform, or adapt the work in any way;
- ◆ Distribute copies of the work to others;
- ◆ Perform, display, or broadcast the work publicly.

Those seeking to make uses of copyrighted works should contact the author or other copyright owner and ask to be granted a license, usually in exchange for a small fee.

The laws are deliberately comprehensive to give the creator the maximum right to choose how his or her work is to be used and exploited. And the law regards any violation of these restrictions as an infringement of copyright, whether or not a commercial motive is involved. For example, the following can all be violations of copyright:

- ◆ Taking photos at an art exhibition.
- ◆ Loading a borrowed piece of software onto your computer.
- ◆ Turning a short poem into a T-shirt decoration for your book club.
- ◆ Making copies of a magazine article for your friends.
- ◆ Making a CD of a friend’s favorite songs to give as a birthday gift.
- ◆ Tacking a photocopy of a comic strip on the faculty room bulletin board.

(Note that all these examples involve situations outside the classroom. This is because the law does make some explicit exceptions for educational use of copyrighted works.)

Infringement of copyright, no matter how well-intentioned or seemingly inconsequential, is a violation of federal law, with financial penalties and the possibility of criminal prosecution for willful infringement. In short, as befits a fundamental principle established by the Constitution, the protection of intellectual property afforded by copyright is comprehensive.

Length of Copyright and The Public Domain

The Constitution provides that intellectual property rights shall be granted “for limited Time,” but in recent years these limits have been increased. Copyright in most authored works now lasts until 70 years after the author’s death. For anonymous works and those produced under contract (“works made for hire”), copyright lasts for 95 years from the date of first publication or 120 years from the date of creation, whichever expires first. Some works that were copyrighted before these longer protection periods became law are still on the old shorter schedules, but as a general rule one can assume that any work published after 1923 is still protected.

Works that have lost their copyright protection are said to belong to the “public domain.” They can be copied, distributed, adapted, and so on without restriction. These include all works published before 1923 and, due to changes in copyright law over the years, certain works published between 1923 and 1978 – namely those published without a valid copyright notice and those for which copyright was not formally renewed 28 years after initial publication. (Information about copyright renewals can be obtained from the U.S. Copyright Office.) In addition, works of the United States government, because they are not eligible for copyright, are also in the public domain.

Permissions

While it is important to emphasize the strict nature of copyright protection, it is equally important to realize that most copyright owners want others to make use of their work, because that is one way they can hope to profit from it – by granting permission for a specific use.

Typically, copyright owners charge a fee for granting permission, based on the amount of their work being used and the purpose for which it is being used. A photograph used in a major advertising campaign would likely come with a substantial permission fee. However, a photograph posted on a school website would likely come with a minimal fee or perhaps with no fee at all if the copyright owner felt that exposure on the website or just the satisfaction of supporting education were compensation enough.

Whatever the final arrangement might be, it is always necessary to seek permission before making any use of creative works protected by copyright.

Fair Use

By this point, it may seem that educators and students cannot avoid running afoul of copyright law. However, the law includes a limitation on the copyright owner’s exclusive rights that opens the way to using copyrighted materials in the classroom.

This limitation, called “fair use,” is spelled out in section 107 of the Copyright Act, which states: “The 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 potential market for or value of the copyrighted work.”

The four factors listed in this statute serve as criteria for determining whether the use of a copyrighted work is fair.

- ◆ The first criterion is almost always met in the classroom, since copyrighted material is normally used there only for an educational purpose.
- ◆ The second criterion can be more problematic. In practical terms, it raises questions about the availability of the copyrighted work and its substance. Using excerpts from an out of print book or old magazine is more likely to be considered fair use than using excerpts from a work that students could purchase. Similarly, using excerpts from a factual book, such as a travel guide or biography, is more likely to be considered fair use than using creative work taken from a photo essay or a novel.
- ◆ The third criterion is again fairly straightforward: using a small portion of a copyrighted work is more likely to be considered fair use, using a large part or the whole work is not.
- ◆ The last criterion might seem straightforward as well, because a teacher might think it obvious that exposing students to excerpts from a copyrighted work can only increase its market value. However, if the excerpts are pages from a workbook, or a set of poems from an anthology, providing

students with copies could as easily be seen as an unfair scheme to avoid purchasing texts for each student, especially if copies of the same pages and poems are handed out year after year.

Under fair use, students can use copyrighted material in their school work in most instances. However, a cause for concern may arise when a student's work leaves the classroom and appears in public – for example, as a prize-winning essay in the local newspaper or a presentation on the school website.

Depending on the type of materials students have used and the extent of their use, this change in circumstances might require obtaining a copyright owner's permission.

Teachers can also find their own fair use of copyrighted materials altered by circumstances. After all, handing out copies of a lesson plan that contains copyrighted materials at an educational conference is not much different from unfairly publishing those copyrighted materials as your own, particularly if the materials end up on your school district's website.

Even within the sanctuary of the classroom, teachers are not always automatically entitled to claim fair use. As mentioned above, using copies of materials designed for the classroom instead of purchasing the materials (or paying a permission fee to make copies) is likely an infringement of copyright, unless the use were a spontaneous, one-time occurrence – say copying math problems from various textbooks for a pop quiz. The same principle applies when a teacher shows a copyrighted movie or videotaped television program in class. A one time showing would likely be considered fair use, but repeated showings would infringe on the copyright owners' exclusive right to display their work publicly, as class after class of students begins to add up to an audience. Teachers can also apply this principle when trading software: trying out a colleague's classroom management package or borrowing an instructional program can become an unlawful use of copyrighted material if the software remains installed on your computer and gets used again and again.

One last point on the use of copyrighted works in the classroom. Crediting the source of copyrighted material may satisfy the rules for avoiding academic plagiarism but it does not meet the requirements of copyright law. Giving the copyright owner a credit is not equivalent to getting the copyright owner's permission and, in a legal context, is no defense against a charge of infringement.

Piracy

Intellectual property theft is called “piracy.” It is a concept that goes back to the early years of the printing press when unscrupulous publishers would purchase a book or illicitly obtain a manuscript, set the text in their own shop, and print off a “pirated” edition. Shakespeare is perhaps the most famous victim of this practice, though it continued into the early 20th century.

Now, of course, pirates no longer need their own printing press. Computers have put the tools of piracy into every home, allowing almost anyone to produce illegal copies of text, images, video, audio, video games, and software. It is a temptation that many students, sadly, find it difficult to resist.

One reason for this susceptibility may be that students become accustomed to making fair use of copyrighted materials in their school work and come to think of themselves as somehow exempt from the laws that protect intellectual property rights, as if being a student were license to copy anything at any time. To correct this misconception, it is important to emphasize that students are free to use copyrighted material only in their school work, and then only in the classroom setting. Outside this narrow zone of protection they are subject to the same laws, and the same penalties, as everyone else.

Students can also harbor misconceptions about exceptions in the copyright law for “personal use.” It is legal, for example, to videotape a television program or tape record a song on the radio for personal use, which means watching or listening to it later. But this does not mean, as students might suppose, that copies can be passed from person to person, as on a peer-to-peer website where “personal copies” of music, movies, and video games that people around the world have stored on their computers are made available to anyone. Taking copyrighted material from these websites is piracy, even if one intends to put the material to “personal use.” It is a violation of the copyright owner's right to control the reproduction and distribution of his intellectual property, and is subject to some of the most serious penalties provided in copyright law.

A final possible source of student misconceptions is the natural tendency to think that the right of ownership that comes with purchase of a copyrighted work is comparable to the intellectual property right of a work's creator. This kind of

confusion is especially likely to arise with digital media – CDs, CD-ROMs, and DVDs. Students may believe that they “own” the music, movies, and video games they purchase in these formats. In fact, they own only the digital medium itself and an often strictly limited right to use the intellectual property printed on it. They usually do not have the right, for example, to copy the digital content onto a friend’s computer, or to distribute excerpts of the content by email. Both actions would constitute piracy, because both amount to taking the copyright owner’s intellectual property without permission and using it as if it were one’s own.

Beyond helping students correct these kinds of misconceptions, educators can act to prevent piracy by reminding students of the ethical principles involved in all aspects of intellectual property rights protection. This guide has emphasized the legal issues surrounding intellectual property, but the rules and laws reviewed here all rest on an ethical recognition that it is wrong to take the intellectual property of another person, just as it is wrong to steal material objects that don’t belong to us. Reminding students of this simple axiom, guiding them toward this conscience-touching realization, may be the place to start instruction on the concept of intellectual property, and may be the most effective lesson in the end.



Additional Resources

Some Sources of Content in the Public Domain

U. S. Government websites are usually the most reliable sources of content in the public domain. This is because, by law, “copyright protection ... is not available for any work of the United States Government” (U.S. Copyright Act, §105). In addition, most government websites provide clear guidance on the copyright status of their contents, enabling you and your students to use these resources with confidence. Listed here is a sampling of government websites that hold valuable archives of images, audio clips, video clips, documents, diagrams, and maps for projects in history, literature, science, and geography, as well as content that can be adapted to other subject areas.

Library of Congress American Memory Collections
<http://memory.loc.gov/>

NASA Image Exchange
<http://nix.nasa.gov/>

NASA Multimedia Gallery
www.nasa.gov/multimedia/highlights/index.html

National Archives Archival Research Catalog (ARC)
www.archives.gov/research_room/arc/

NOAA Photo Library (National Oceanic & Atmospheric Administration)
www.photolib.noaa.gov/

US Army Corps of Engineers Digital Visual Library
<http://images.usace.army.mil/main.html>

US Department of the Interior Photo Library
www.doi.gov/gallery.html

US Geological Survey Library
<http://libraryphoto.cr.usgs.gov/>

US Government Graphics and Photos Index
www.firstgov.gov/Topics/Graphics.shtml

Information on Copyright and Intellectual Property

The websites listed here provide additional lessons in copyright and information to help students better understand the concept of intellectual property and the importance of respecting the intellectual rights of others.

A Visit to Copyright Bay
(interactive lessons updated 2004)
www.stfrancis.edu/cid/copyrightbay/

ClassZone Web Research Guide
www.classzone.com/books/research_guide

Copyright Kids
(interactive lessons posted 2001)
www.copyrightkids.org

Copyright Society of the U.S.A.
www.csusa.org
(See homepage for information on annual Copyright Awareness Month.)

Cyberethics for Kids
www.cybercrime.gov/rules/kidinternet.htm

CyberSmart
www.cybersmart.org

The Educator’s Guide to Copyright and Fair Use
(from *Education World* October 2000; updated 2004)
www.education-world.com/a_curr/curr280.shtml

Entertainment Software Association
www.theESA.com

F@CE® (Friends of Active Copyright Education)
www.csusa.org/face

Fair Use Guidelines for Educational Multimedia
www.adec.edu/admin/papers/fair10-17.html

Plagiarism: What It is and How to Recognize and Avoid It (from Indiana University)
www.indiana.edu/~wts/pamphlets/plagiarism.shtml

Reproduction of Copyrighted Works by Educators and Librarians (Circular 21)
www.copyright.gov/circs/circ21.pdf

RespectCopyrights.org
www.respectcopyrights.org

U.S. Copyright Office
www.copyright.gov