

**FOR YOUR INFORMATION/POUR VOTRE INFORMATION**

## Dealing with Digital Copyright Issues in Higher Education: *No* is Not a Helpful Institutional Response

*Lori Wallace*

### Abstract

---

In order for online course delivery to be efficient, digital material such as scanned text, diagrams and graphics, and audio/video clips must be copied and distributed. The policies and processes for copyright clearance of digital materials are, however, poorly defined and cumbersome. As a result, university instructors often have incomplete knowledge of copyright policy and may scan and upload digital materials without copyright permission, placing institutions at legal risk. In this context two institutional issues have arisen: (a) the need to provide instructors engaged in the provision of online courses or resources with information about digital copyright policy and clearance procedures; and (b) the need for resources to facilitate these clearances. The article describes a campus-wide digital copyright project designed to address digital copyright issues in a Canadian university. It includes a discussion of project objectives, policy and procedures development, costs, frequently asked questions, and ongoing challenges that universities face.

### Résumé

---

Pour diffuser des cours en ligne de façon efficace, le matériel électronique (les textes, les diagrammes et les graphiques numérisés, les clips vidéo et audio) doit être copié et distribué. Les politiques et les procédures à adopter dans le domaine du droit d'auteur numérique (le dégageant des droits pour la reproduction et la diffusion) sont, cependant, lourdes et mal définies. En conséquence, les professeurs d'université ont souvent une connaissance incomplète des politiques de droit d'auteur numérique, pouvant les conduire à numériser et à télécharger du matériel numérique sans permission de droit d'auteur, exposant ainsi les institutions à des risques de problèmes légaux. Ce contexte soulève deux questions institutionnelles : (a) la nécessité de fournir aux professeurs qui diffusent des cours ou des ressources en ligne des informations sur la politique du droit d'auteur numérique et sur les procédures pour reproduire et diffuser du matériel; et (b) le besoin de ressources pour faciliter le dégageant des droits d'auteur. L'article décrit un projet sur le droit d'auteur numérique à l'échelle du campus dans une université canadienne afin de traiter ces questions. Il comprend une discussion sur les objectifs du projet,

le développement des politiques et des procédures, les coûts, les questions fréquemment posées et les défis actuels auxquels font face les universités.

---

The instructional use of the Web has exploded over the past decade, and courses with online components have become the norm in many Canadian universities. As a consequence of the increased demand for online resources, the need for distribution of resource material online has grown. However, the mechanisms to allow efficient copyright clearance of these resources have not kept pace.

The disjunction between the demand for provision of online material and the lack of digital copyright policies, procedures, and services creates situations where copyright violations are bound to occur. This not only places instructors and institutions at legal risk for violation of copyright, it also fails to provide students (who often do not recognize instances of intellectual property theft) with an appropriate model.

Universities typically assign responsibility to instructors to ensure that copyright clearance has been obtained for online instructional materials. For example, instructors who use the Web as part of their course delivery or who post material on the library electronic reserve system are usually responsible for obtaining clearance for any copyrighted materials that they wish to provide online as part of their teaching resources. The evidence, however, at the University of Manitoba as well as at other universities, suggests that instructors often have incomplete knowledge of copyright policy and clearance procedures, and therefore scan and upload digital materials without permission, placing the institution at legal risk. This situation can only be rectified if:

1. instructors are provided with complete information about copyright and copyright clearance procedures; and
2. given that the current process for clearing digital copyrights is cumbersome and often expensive, the institution provides resources to facilitate these clearances.

To address these issues, the University of Manitoba funded a one-year pilot digital copyright clearance project. The goals of the project were to develop digital copyright clearance policy and procedures, share the policy and information on procedures, and provide digital copyright clearance services.

### Sources of Confusion

The Canadian Copyright Act is the federal legislation that defines ownership and terms of copyright, moral rights, infringement, exceptions, and remedies of all works used in Canada. Unfortunately, this legislation was created when digital technologies were not in common use, and although the Act is currently under review, it does not yet contain any specific

reference to digital or electronic copyrights. This situation has resulted in a situation where without the guidance of specific policies at universities, instructors tend to believe either that digital copyrights do not have legal protection (and they can scan or otherwise digitize, copy, and upload analog material), or that the exceptions extended in the Act about copying for scholarly and teaching activities extend from analog (print) to digital copying. (The exceptions provided in the Act are *fair dealing* covering, for example, copying for the purposes of research, private study, criticism or review; and for *educational institutions* covering such uses as manual reproduction of a work for the purpose of teaching and the making of a copy to project an image in a classroom.) Understanding of the Copyright Act among academics is generally poor and is not helped by the preponderance of information relating to this topic delivered by United States media outlets. For example, media coverage on recent changes in US copyright law specified in the Technology, Education, and Copyright Harmonization Act (TEACH Act, now codified in section 110(2) of the US Copyright Act) has focused on how fair-use clauses allow greater opportunities for US educators to use digital materials for teaching. This concept is, however, treated in a much more restricted manner in the fair-dealing clauses of the Canadian Copyright Act.

Another area of misunderstanding with respect to digital copyrights arises from failure to realize that the terms of licenses issued to universities by copyright collectives or reproduction rights organizations (RROs) such as Access Copyright (formerly Cancopy) relate only to analog copying. Such licenses cover both *incidental* and *for-sale* copying of analog materials by all publishers not on an *exclusions* list. For example, under the current university Access Copyright license, incidental photocopying allows one copy per student of up to 10% of a work (up to 20% if one chapter/article), unbound with any other work, to be made without royalty payment. For-sale or *course pack* photocopying allows multiple copies to be made for cost-recovery sale of up to 15% of a work (up to 20% if one chapter/article), provided that royalties and usage logs are submitted to the RRO. Although many instructors are familiar with the terms of their universities' RRO license, they often make the mistake of assuming that the licenses cover digital copying and distribution, which without exception they do not.

In summary, misconceptions about digital copyright arise from the following.

- If instructors have some familiarity with the Canadian Copyright Act, they may incorrectly assume that digital rights do not receive protection or that the educational exceptions provided in the Act for analog copying also extend to digital resources.

- If instructors are somewhat familiar with the copying license of their institutions, they may incorrectly assume that the terms of the license cover digital copying and distribution.
- Instructors may incorrectly assume (along with many of their students) that material found on the Web is not bound by copyright because it is in the public domain.
- Instructors may incorrectly assume that a password-protected Web site may be interpreted under the law as a classroom, and therefore functions under policies relating to face-to-face classroom teaching.

### Development of the Pilot Project Proposal

During the 2001-2002 academic year, members of University of Manitoba stakeholder units met to discuss digital content management issues. Representatives of the following units participated: Book Store, Distance Education, Educational Support Services/Information Services and Technology, University Teaching Services, Libraries, Copy Centre, and Students' Union. In the discussions it became apparent that although two units (the Book Store and Distance Education) were involved with copyright clearances, such activities were confined to their own cost-recovery units, and neither could foresee developing campus-wide digital copyright services without additional funding.

Because the Distance Education unit had full-time staff already working in the copyright clearance area, the group suggested that the Distance Education unit might be in a position to begin to address the need for policy and staff development on digital copyright clearance and the provision of digital copyright clearance services. The Vice-Provost (Programs) invited submission of a pilot project proposal outlining how the current processes used by the distance education unit might be expanded to support campus-wide clearance of online content.

The stakeholder group agreed that the development of digital copyright clearance resources would entail generating and sharing policy and procedures, researching contact information for copyright holders, requesting clearances, and tracking and paying clearance charges. Because there were over 800 online course sections in use, as well as another 160 courses using the libraries' electronic reserve service, we anticipated considerable pent-up demand for digital copyright clearance information and services. In order not to overtax the available resources, the proposed pilot project limited workload to a maximum of three clearances each for 100 courses (for total of 300 clearance requests), and a per-course direct clearance expense of \$100. We agreed that that additional clearances beyond these limits would be sought if staff time and budget permitted.

The budget for the one-year project allocated approximately \$18,000 for staff costs and \$10,000 for copyright permissions and royalties. Staffing

included part-time secondment of two distance education support staff at the office assistant and program administrator/administrative assistant levels. The following units also agreed to partner in the project.

- Continuing Education Division/Distance Education Program committed to house the project; cover the Director's 5% allocation to lead the project; and provide office space, furnishings, supplies, computer equipment, photocopying, and funds to cover long-distance telephone and fax charges.
- The Book Store committed to provide copyright clearance services for analog (print-to-print) materials for sale as course packs (for clearances that exceeded the scope of the project).
- University Teaching Services committed to schedule, advertise, and evaluate the copyright clearance workshops.
- Educational Support Services/Information Services and Technology committed to provide supplier contact information to facilitate the clearance of media for streaming via the streaming media server(s).
- The Libraries committed to provide information about the pilot project services as well as information on copyright for faculty members considering placing materials on reserve to interested faculty members and staff. The Libraries also continued to assist faculty members with mounting materials on e-reserve. The responsibility, however, for obtaining copyright clearance continued to rest with the individual making the request.

The proposal for the digital copyright clearance project was circulated for feedback among the stakeholders. A final proposal was presented to the Vice-Provost (Programs) and approved by the Senate Committee on Academic Computing and the University Senate in the fall of 2002. In January 2003 the Vice-Presidents Administration and Academic approved one year of funding, and project staffing was put in place.

### *Project Activities*

During the pilot year project staff undertook three sets of activities: workshops and outreach, policy development, and provision of copyright clearance.

### *Workshops and Outreach*

Over 1,800 brochures describing the services of the project were distributed in hard copy, and hundreds more downloaded in PDF format. All partner units received and distributed the brochures, as did deans, directors, and faculty administrative offices.

Five workshops and a number of information sessions were conducted free of charge to faculty and staff. Presentations were also made at two

local conferences, with participants drawn from the K-12 school system and other universities and colleges. Workshop topics included definitions of intellectual property and copyright, discussion of moral versus economic rights, explanations of relevant sections of the Canadian Copyright Act and RRO license, directions on how to determine whether material is covered by copyright and how to request permission to use copyrighted material in online courses, and information about typical responses from rights holders. Additional funding was obtained to offer in conjunction with the School of Art a conference titled "The Good, the Bad and the Ugly: Art and Copyright," at which copyright experts and artists exchanged views on legal and professional issues.

A Web site was developed (<http://www.umanitoba.ca/coned/DigitalCopyright>), which presents the goals of the project, dates of upcoming workshops, pilot policy and procedures documents, staff contact information, and annotated lists of Web and print resources.

About the time of the inception of the pilot project, an informal group of copyright experts at western Canadian postsecondary institutions began to exchange experiences and information via a listserv. The group met face to face for the first time in May 2003, and the listserv has evolved into a useful tool for project staff to gather and share information.

### *Policy Development*

A working draft of the digital copyright policy was developed and reviewed by the project partners and the University's legal counsel. Although the working draft cannot yet be considered an official policy, it provides guidelines for best practice in the institution. The draft policy is as follows.

No substantial portion of a work may be digitized, uploaded to any University server and distributed online without the copyright holder's express written permission (clearance) for digital use. This policy extends to the scanning of published works (e.g., chapters, articles, or photographs) and the uploading of digitized documents or other digital material (e.g., material copied from websites) on any University server (e.g., libraries electronic reserve, faculty or department websites, course websites such as WebCT, or UMinfo).

It is the instructor's responsibility to ensure that copyright clearance has been obtained for material that is provided to students in digital format. Consequences of failure to follow the Digital Copyright Policy may include, but are not limited to, the termination of an instructor's online rights.

Because the policy articulates instructors' responsibilities with respect to obtaining the appropriate digital clearances for online material, development of campus-wide *terms of use* with respect to digital copyright is also

under consideration. Terms of use are typically documents signed by staff members prior to assigning of computer or online rights, and ensure that staff members are aware of the relevant policies and agree to follow them. The UM Elizabeth Dafoe Library was the first unit on our campus to implement such terms of use and did so for the electronic reserve system. These terms of use require that before being issued access to upload material, a staff member must declare (via an online click-through) that he or she is either the copyright holder or has received the express written digital copyright permission of the rights holder before uploading any document and is furthermore prepared to produce documentation on request.

Although the draft digital copyright policy outlines penalties for violation, the institution will also need to determine if adherence to the policy is to be monitored, and if so, using what mechanisms. Alternatives range from no monitoring but investigation and penalties if violations are brought to the university's attention, to random monitoring of a portion of the material on university servers, to requiring evidence of digital copyright clearance for all material prior to uploading.

Additional policy and procedures material developed as part of the project include brief summaries of the Canadian Copyright Act and the Access Copyright license, an explanation of uses of works allowed by the Copyright Act and Access Copyright License, directions about how Web material may be presented (e.g., linking, external framing), answers to frequently asked questions, and discussion of terms such as *public domain*, *substantiality*, and *copyright clearance*. The most frequently consulted document, *Answers to Frequently Asked Questions*, is included in the Appendix; please consult the project Web site for other material.

#### *Provision of Digital Copyright Clearance Services*

Digital copyright clearance procedures were developed and distributed at workshops, on the project Web site, and incorporated in several faculty handbooks. The following digital copyright clearance services were provided: researching contact information for copyright holders, requesting clearances, and tracking and paying clearance charges and royalties.

With respect to the process of obtaining digital copyright clearances, the costs of obtaining such clearances directly from rights holders were compared with the costs of using a digital permission service offered by the RRO (Access Copyright) with which the University has an analog copy license. The service provided by the RRO often resulted both in higher direct costs (\$10 per permission request, or 10% of the royalty, whichever was higher), as well as higher indirect costs (staff time to complete detailed forms). In addition, the response time using the RRO service exceeded that of direct permission requests to rights holders. For these reasons, pilot

project staff decided to work directly with rights holders to request clearances.

Pro forma digital copyright clearance letters and spreadsheets were developed and shared at meetings and workshops. The clearance letters (samples of which are on the Web site) include details about the intended use of item/work for which clearance is requested (e.g., not sold and no profit realized, uploaded to a password-protected course Web site, or burned onto a CD, etc.), and course details (i.e., title, number of sections to be offered per year, expected enrollment). Replies from rights holders state the terms and conditions of use, royalties, and a preferred copyright clearance statement to be added to the copied work.

To date over 200 digital copyright clearances have been requested, one third of which were for scanning and uploading of analog works such as articles, graphics, and diagrams. Of these requests 88% received permission, 2% were denied, 10% were cancelled, and one remains outstanding. Clearances were obtained at no charge for 136 requests, and royalties were charged for 48. When royalties were charged, the range was from \$3 to \$780, with a mean charge of \$64. The mean cost per clearance across all permissions was \$17. The average turn-around time for rights holder response to clearance requests was 25 days.

The workshops and other outreach activities generated many enquiries from university staff members, but digital clearance requests were submitted for only seven courses during the pilot year. As a result, we extended the maximum number of clearances per course. Although the number of courses for which clearances were requested was much lower than the maximum of 100 set for the project, we expect that as the digital copyright policy and procedures become better established, requests for clearance will increase dramatically.

### Recommendations

The feedback received during the pilot suggests that the project has been successful in generating and distributing digital copyright policy and procedures as well as providing efficient digital copyright clearance services. On the basis of this feedback, the following recommendations were made by the stakeholder group: (a) that the institution formalize a digital copyright policy and, because a digital copyright policy that is not enforced may invite abuse and liability, also consider developing a policy on how compliance will be monitored; and (b) extend the Digital Copyright Clearance Project for an additional year, then consider permanently relocating digital copyright clearance services in a proposed Teaching and Learning with Technology Centre.

## Conclusion

The greatest challenge that we faced in the project was addressing the widespread misunderstanding of digital copyright. The reasons for this confusion are understandable and are discussed above: universities are just beginning to develop digital copyright policies, the federal legislation is out of date, much misinformation or information based on the US legislation is circulating, and instructors tend to generalize from print to digital on the basis of their understanding of the RRO license.

The lack of clarity in legislation and policy, coupled with widespread misunderstanding of digital copyright, and abetted by the ease with which digital materials may be copied and distributed, have resulted in a situation in which the scanning and uploading of uncleared material on university servers is probably more commonplace than it ought to be. It will require the ongoing efforts of institutions to develop and disseminate digital copyright policy.

Although many staff members and instructors are concerned about respecting copyright, they are often discouraged when they learn about copyright restrictions. Instructors are sometimes understandably frustrated to learn that they are restricted with respect to what materials they could provide in digital format to their students, and see this as yet another bureaucratic barrier to the true mission of teaching. Because the current process for clearing digital copyrights can be cumbersome and sometimes expensive, providing clearance services can facilitate copyright compliance. Instructional use of digital material will only increase, and because it will be some years before RRO digital copying licenses will be in place, universities will need to consider at what level they can support provision of digital copyright services and payment of royalties.

In summary, universities will have to balance two emerging issues: the need for institutions to have in place effective protection from copyright infringement liability and the need for instructors to use digital resources in their teaching. Putting policy in place provides only part of the solution because placing the work of obtaining digital copyright clearances for teaching resources and the expense of royalty payments on instructors is unrealistic and invites noncompliance. The provision of digital copyright clearance services meets the needs of the institution and instructors, but places yet another resource burden on the institution. Our experience with the Digital Copyright Project suggests, however, that such services can perhaps be provided at lower than expected direct and indirect costs.

## References

*Access Copyright license:* [www.accesscopyright.ca](http://www.accesscopyright.ca)

*Canadian Copyright Act:* <http://laws.justice.gc.ca/en/C-42/>

*Teach Act:* [http://www.lib.ncsu.edu/scc/legislative/teachkit/teach\\_fairuse.html](http://www.lib.ncsu.edu/scc/legislative/teachkit/teach_fairuse.html)

University of Manitoba Digital Copyright Project:  
<http://umanitoba.ca/coned/DigitalCopyright>

---

Lori Wallace is the Associate Dean (Degree Programs) and Director, Distance Education in the Continuing Education Division at the University of Manitoba. She led the University of Manitoba Digital Copyright Project. She can be reached at [lwallac@Ms.UManitoba.ca](mailto:lwallac@Ms.UManitoba.ca).

## Appendix: Answers to Frequently Asked Questions

The following items outline the most common instances of incorrect assumptions and frequently asked questions regarding digital copyright. Answers developed by the Project staff accompany each question.

### *1. If the © symbol is not on the work, am I free to scan or copy digital material?*

Canadian copyright law protects works from the point of creation in fixed form (print, CD, Web, etc.). Therefore, neither registration of a work nor display of a copyright symbol is required for the work to be protected by copyright.

### *2. Are there restrictions on copying material located on the Web?*

Since the Web (or other forms of digital copyright) is not covered in the Copyright Act, there is some debate as to whether anything on the Web is covered by copyright law. Although it is clear that, if a copyright owner has posted material on the Web, he or she has done so with the intention that others view the material, access to the material cannot be construed as an invitation to infringe copyright. The Web may be seen as analogous to a public library, in which books are available for people to read and copy for study purposes, but where material cannot be copied for distribution without the author's permission. Therefore, the copyright clearance policies of most universities place material on the Web in the category of copyright-protected works and, hence, proscribe any copying of material on the Web (e.g., photocopying the material, or copying and posting on another Web page).

If you wish to copy material from the Web and place it within your course Web site, you must seek copyright clearance from the rights holder. (Please note: While it is always good academic practice to cite sources, such citing does not substitute for acquiring copyright permission.) As an alternative to copying material from the Web, we recommend that you create links to Web pages and send your students directly to the material. Please note the following guidelines:

- **Deep-linking.** If you are planning to place a link at a point deeper than the home page of a Web site (deep-linking), you should check the home page of that Web site under sections such as "Copyright," "About Us," or "Legal Notices" to ensure that the site does not prohibit deep-linking.
- **External framing.** Please also avoid framing an external site within your course page. Instead, open the Web site in a separate window.
- **Copyright-cleared material within a Web site.** If a Web site owner has obtained permission to use someone else's copyrighted content, that permission does not extend to your use, and clearance is required.

*3. May I scan material and make it available online to my students without copyright permission?*

When you scan a work (e.g., a hard-copy document) and mount it on any University server (e.g., your course/department Web site or electronic reserve), you are creating and distributing a copy-an activity for which you must receive permission of the copyright holder. There is no agreement with Access Copyright that allows University staff to scan and mount articles online (i.e. any University server, e-reserve or WebCT); therefore, the right of the copyright holders to create and distribute copies of their works governs any activity in this area. Since you are allowed to make a copy for in-class teaching, you may place digitized material in your Power Point presentations. Without obtaining digital copyright clearance, you cannot, however, then upload the Power Point file containing the copied work.

Please note that clearances obtained in the past for print-based course materials do not extend to the digital use of these materials, nor does the Access Copyright license give you the right to convert print course packs to digital format. Separate permissions allowing these uses must be sought.

*4. Are there differences between the digital uses of text and images (e.g., photographs, graphics)?*

Images, photographs, tables, figures, and graphics are viewed as stand-alone works. Therefore, while a table or figure may constitute only a small portion of a published work, it requires clearance.

*5. Does password protection define the use of a work as "classroom"?*

No. Neither the Copyright Act nor the Access Copyright license makes provision for virtual classrooms or the digitization of a work and the subsequent multiple distribution of copies. Therefore, the only material that you may mount on a UM server, regardless of password-protection, are those to which you own copyright, or for which you have obtained digital copyright clearance.

*6. Which works are in the public domain?*

While material in the public domain is not bound by copyright, the concept of public domain is, unfortunately, widely misunderstood. The vast majority of material published in print or on the Web is not considered to reside in the public domain.

- *When does a work enter the public domain?*

Regardless of where a work was created, it is protected by copyright in Canada for the life of the creator plus 50 years after his or her death (or, in the case of multiple authors, the last author's death). After this period, the work enters the public domain. Although this rule may seem straightforward, confusion results when the work is re-published. When a work enters the public domain, it may be used without royalties by a publisher to create a work that is subsequently copyrighted to that publisher. The manner in which this usually occurs is that a publisher adds original material to the work (e.g., prefaces, introductions, tables of contents, footnotes, commentaries, bibliographies, or biographies), or presents the work in a different form (typeface, spacing, or layout). Hence, Shakespeare's Hamlet in its original form remains in the public domain, but copyright to the

version of *Hamlet* published by Penguin is held by that corporation. In summary, numerous publishers may hold copyright for their versions of *Hamlet*, but none holds copyright to *Hamlet* itself. If you are planning to copy a portion of a published work, it is most likely that it is not in the public domain.

- Government documents

With the exception of Federal and Ontario legislation and judicial decisions, documents issued by the federal or provincial governments in Canada are not in the public domain and therefore require clearance. Government offices rarely require fees for permission to copy such material, and are often helpful in alerting users that more up to date material is available.

#### *7. What is a substantial portion of a work?*

Section 3 of the Canadian Copyright Act states that the copyright holder has the sole right to reproduce the work or any substantial portion thereof. Therefore, permission must be acquired to copy a “substantial” portion of a work. The term *substantial* has not been defined by the Act, and case law illustrates the reluctance of the courts to quantify a question that includes consideration of both the quantity and quality of the portion. By way of example, half a page of text in an article may serve as a useful guideline in terms of quantity but complications may arise when the seemingly “insubstantial” quantity is deemed integral to the work, such that without it, the work loses value.

When determining substantiality, therefore, it is critical to look at the work as a whole and take into account both the quantity and quality considerations. While half a page of text may be insubstantial in a work that is 300 pages long, that portion will, in fact, be substantial in a work that is only two paragraphs long (e.g., a poem). Similarly, case studies, executive summaries, graphs, diagrams, and tables, etc., are considered to be stand-alone works and, therefore, permission must be obtained to digitally reproduce them.

#### *8. Can't I modify the work that I plan to use, and avoid the whole copyright clearance process?*

Modifying a work is, in effect, creating an adaptation, a right held only by the creator or copyright holder. If you wish to modify a work, you must receive permission from the copyright holder. As obtaining permission to adapt a work is often more time consuming than simply acquiring permission to copy it, we recommend against this practice.

It is important to recall that copyright protects the expression of an idea, rather than the idea itself. Therefore, being inspired by an idea expressed by another individual and creating your own work as a result is acceptable, and is the reason why more than one work on any given topic exists. Taking someone's expression of the idea, however, and slightly modifying it is intellectual property theft. This is a topic you regularly deal with when grading your students' papers—the same interpretations apply to digital copyright.

*9. Clarify the notion that facts can't be copyrighted. I own my data. If I publish an article with my data, does that mean that those data (facts) are not copyrighted to me?*

You cannot hold copyright to your data (facts) after they have been published. Copyright protects the expression of an idea or fact (e.g., a table in which your data are presented), but not the idea or fact itself.

*10. May I scan and post a chapter or an article that I've written and had published?*

It is important to remember that "authorship" does not equal "ownership." Most commonly, unless you have negotiated your ownership of copyright as part of the publication agreement, copyright has been assigned to the publisher as a condition of acceptance of the piece for publication. You must, therefore, obtain permission to copy, digitize, or upload a portion of it. The critical question is not who wrote the piece but who owns the copyright.

*11. I've heard that uploading an article to the Web in order to invite comment and criticism by colleagues sometimes creates problems when the article is later submitted for publication? Why?*

If a piece that you submit to a publisher (e.g., an article) has been available on the Web, that publisher may deem the work to have been previously published, and reject the article. Whether a publisher will react in this way depends to some extent on the academic discipline. We advise you to check with publishers of periodicals in which you hope to publish regarding their policies in this respect.

*12. What is the difference between intellectual property and copyright?*

Intellectual Property refers to creations of the mind: inventions; literary and artistic works; symbols, names, images, and designs used in commerce.

Intellectual property is divided into two categories: industrial property and copyrights. Industrial property includes inventions (patents), trademarks (registered words, symbols, pictures associated with products, services or companies), industrial designs, and geographic indications of source. Copyright includes literary and artistic works such as articles, novels, poems and plays, films, musical works, drawings, paintings, photographs and sculptures, software codes, and architectural designs. Rights related to copyright include those of authors to their works, performing artists in their performances, producers of their recordings, and those of broadcasters in their radio and television programs.