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Abstract

Abstract: Issues of copyright infringement are contentious for academia in the online environment. The educational community on campus must carefully consider how digital materials are used, created and disseminated online given that present laws that regulate these actions are not well developed. It can seem like anyone's guess on how to proceed in order to avoid copyright infringement. This paper offers current descriptions of intellectual property, copyright laws, infringements, and plagiarism in a Canadian context with a view on creating, using and disseminating digital works. The impact of copyright infringement on students and faculty in higher education is explored and some suggestions are made for protective practice.

Résumé: Les questions de violation de droits d'auteur sont litigieuses pour le monde universitaire de l'environnement en ligne. La collectivité de l'enseignement des campus doit examiner attentivement de quelle façon le matériel électronique est utilisé, créé et distribué en ligne puisque les lois actuelles qui régissent ces actions ne sont pas bien élaborées. On ne peut se fier au jugement de chacun pour décider de quelle façon agir pour éviter qu'il n'y ait violation des droits d'auteur. Le présent article donne des descriptions actuelles de la propriété intellectuelle, des lois sur les droits d'auteur, des violations et du plagiat dans un contexte canadien tout en abordant la création, l'utilisation et la distribution de travaux électroniques. Nous examinons les répercussions des violations des droits d'auteur sur les étudiants et sur les établissements d'enseignement supérieur et nous formulons quelques suggestions afin de prévenir le tout.

Introduction

This paper explores copyright infringement in the higher education realm of Canada, with a view on intellectual property in digital environments. Members of a university, such as faculty and students, are subject to act with full integrity in their work and to avoid academic misconduct at all costs. The move into digital environments becomes complicated with outdated laws on what is infringement of property rights, and what is not. This paper reviews current laws for digital materials, and the related implications for learning and teaching.

Ownership and Rights

In order to address the ownership and rights of material, along with the consequences of infringement, a review of intellectual property, and current copyright laws and issues, is needed. This review sets a context for the discussion on implications for higher education. Presently, the Canadian copyright laws do not completely deal with the number of publishing activities that regularly take place within digital environments. This gap often leaves authors and users of digital works uncertain of their rights and responsibilities. Thus, in this paper, the copyright dilemma is addressed.

Intellectual Property

The underlying premise of copyright infringement is violating property. Therefore, a good approach in analyzing infringement consequences is to consider what exactly can be violated. Intellectual property is defined as "any form of knowledge or expression created with one's intellect" (Canadian University Intellectual Property Group, n.d., p.1). Intellectual property lies on the basis of value in general, and what society values in particular. This can be any form of creation. For example, The Canadian Intellectual Property Office (CIPO) of the Government of

Canada (2004a) values ideas and designs as well as creativity. They find creations are vital to a healthy economy and go as far as to state that “a brisk and orderly exchange of ideas is as important to our economy as the flow of money or goods and services” (2004a, p.1). This statement broadens our interpretation of what is valued, and what should and can be protected.

The CIPO (2004b), in association with Industry Canada (2005), has the responsibility for administering the protection of intellectual property in Canada. As an official agent, they protect inventions through patents and symbols, designs through trade-marks, artistic and literary work through copyrights, and shapes and patterns through industrial designs. These rights protect property, considered as intangible human creations, from being used by others (Intellectual Property Institute of Canada, 2004a). This paper focuses on intellectual properties protected through copyrights as opposed to other forms of protection. Copyrighted properties include artistic as well as dramatic and musical works, literary works, and even computer programs, and are automatically protected once placed in a fixed form. The discussion now moves to the protection of intellectual property.

The Canadian Copyright Act

The body of law in Canada protecting the theft of intellectual property is enforced through the Copyright Act. Understanding the intent of this act will increase awareness of infringing actions. One important clarification to make is the forms of expression in a work, not the ideas or content, are protected under copyright (Intellectual Property Institute of Canada, 2004b). There is a reason for this distinction. The copyright law has defined work in different levels of abstraction, or expression (Khong, 2004). For instance, common abstractions in work would be alphabet letters and punctuation. However, higher levels of abstraction would be more complex, such as the arrangement of ideas in a completed piece of work, as in a book or essay. These works take considerable effort to create—a factor considered in determining the level of expression. Copying the higher levels of abstraction, or expression, of a work without permission is illegal. Khong clarifies this by stating:

The upshot of the creativity requirement is that an author has to contribute something unique in his work, which, in the terms of abstraction, means something with low likelihood of coincidental similarity. Hence, under the creativity requirement, only elements in some high levels of abstraction will be protected, and the lower levels of abstraction with elements of high commonness will be excluded. (p.6)

The Copyright Act, through copyrights, gives the owner of the property the right to produce, reproduce, perform, publish, and be paid for any part of the work (Intellectual Property Institute of Canada, 2004b; Canadian Council of Ministers of Education, 2005). Basically, copyright is the right to copy, and to transfer that right to others by giving permission. The owner can do this through different legal forms such as direct permission or copyright collective agencies (Canadian Council of Ministers of Education, 2005). Furthermore, the author of the work is the first owner of the rights, lasting 50 years past his or her death (Department of Justice Canada, 2004). Interestingly, formal registration is not required to copyright one’s work in Canada, as newly created work, like this paper, is automatically protected once it is in a fixed form. This automatic process, as stated under the Canadian Copyright Act, only applies to Canadian citizens, a citizen of a country with which Canada has a reciprocal copyright treaty, or if the works were first published in Canada (Intellectual Property Institute of Canada, 2004b).

A vast percentage of the North American population does not realize the full implication of copyright, whether the property rights are registered or not (Public Interest Advocacy Centre, 2004). This can be seen in the copious number of items illegally taken through the digital environment, such as text, graphical objects, and music files. These actions are carried out by both adults and children (Rockafellow, 2005). More so, because something is publicly displayed, as in a Web site, many feel they can freely use it—which is wrong (Ishizuka, 2004). That is, the act of taking copyrighted material without permission to use as one wishes (i.e., copy, reproduce and distribute) is copyright infringement. The owner of the rights must be paid or must grant permission for the use. Basically, it is an infringement of copyright to do with the intellectual property what the owner is able to do. This includes reproducing the works for the purpose of claiming ownership, reselling it, publicly displaying it, or distributing it for trade (Department of Justice Canada, 2004).

Another infringement stated in the Copyright Act, per the Department of Justice Canada (2004), is altering any works. This infringes on the author’s moral rights. Altering a work is considered lessening the integrity of it through acts of distortion, mutilation, and modification. One example of altering is the modification of digital images that are so readily available online, be it clipart, graphics, or photographs. Even by changing the colour, size or shape, the value, intent and integrity of the copyrighted work is lost, and is considered illegal.

Exceptions for Educational Institutions

There are exceptions to copyrights for educational institutions; these exceptions fall under two separate regulations: the Copyright Act of Canada and a licensing body called, Access Copyright (2005). Under the Copyright Act of Canada, a copyright exception for an educational institute is fair dealing (Department of Justice Canada, 2004). It is considered fair dealing, and not a violation of copyrights, to use another's materials in the pursuit of research and study without first obtaining consent from the creator or submitting payment (University of Toronto, 2000). This permission is granted so long as the source is mentioned (i.e., cited), and only if less than a substantial portion of the work is used. Another exception in the Act grants libraries amnesty from copyright infringement when they produce single copies of works for the purpose of education. These can be copies of published literature, performances, sound recordings, or current news programs (Department of Justice Canada, 2004). Such copies can be handwritten, in typewritten print or electronic form, and delivered locally or over a network (Canadian Heritage, 2005a). However, the Copyright Act is stricter with educators. Teachers can produce only single copies of copyrighted materials to display during lectures, or during examinations. A broader use of protected material in education is done through a licensing contract with Access Copyright (2005). This is a Canadian agency representing the works of artists and authors by transferring copying rights to license holders, such as a university, for a fee. The collective license is a contract settled between Access Copyright and the paying educational institution. In general, it allows multiple copying, but restricts copying to no more than 10% of a piece of work, and declines permission if the work is available commercially in an appropriate form for education (University of Calgary, 2005). The license gives institutions copying rights without having to seek permission from the owners every time.

The Internet and Digital Material

In the digital world, new forms of intellectual property are constantly emerging which pressures the Government of Canada to modernize the Copyright Act for works situated in a global and technical world (Government of Canada, 2001). The Intellectual Property Institute of Canada (2004a), an association of professionals specializing in intellectual property, provides an example of the complexity of digital works. For instance, the various parts of a Web site include the registered domain name, trade-marks presented on the Web pages, copyright protected content and services, and patented inventions or industrial designs. As well, there may be copyrighted databases, music, or text included on the Web site. Keep in mind the high accessibility of Web sites; each form of property is protected differently, yet has the same impact if illegally used or freely borrowed.

Copyright laws and issues regarding digital resources is an ongoing process that is taking too long to guide current authors and users. The confusion about properly using digital resources, and the potential of liability for infringement of copyrights in everything from music to online content, leaves many Internet users immobile (Hughes, 2005). However, a long-awaited bill was introduced to update laws in the existing Canadian Copyright Act. Co-written by the Minister of Canadian Heritage and the Minister of Industry, Bill C-60 was introduced on June 20, 2005 (Canadian Heritage, 2005b). The recommended amendments were to be passed in the spring of 2006, but expired when the Liberal government collapsed in 2005 (Online Rights in Canada, 2005). A quick review of the intent of Bill C-60 will show issues still left unaddressed by the current Copyright Act.

Most of the amendments in Bill C-60 deal with meeting the copyright "challenges and opportunities of the Internet" (Canadian Heritage, 2005b, p.1). For the most part, the Canadian government is moving to ensure that digital works are protected against unauthorized use and that the "legislation strikes a balance to serve both our artists and users" (p.1). Having pursued public input and consultation, the federal government aimed to make necessary amendments to Canadian copyright laws in order to sustain a new economy, stimulate the production of cultural content, enrich learning opportunities, and encourage a strong Canadian presence online (Government of Canada, 2001). Though currently on hold, the Government of Canada had recommended the following amendments to the Copyright Act (Canadian Heritage, 2005a):

1. The amendments comply with two World Intellectual Property Organization (WIPO) treaties addressing new digital environments;
2. Authors have the right to control the availability of all types of works on the Internet;
3. The extension of the term of protection for photographs and sound recordings is 50 years past the life of the artist;
4. Performers are assigned moral rights in their live and fixed works, therefore disallowing modifications to the works;
5. It is disallowed to circumvent technical security devices or rights management information on online products;
6. Internet Service Providers are not liable for what is published on their hosted Web sites, but must give notice to

- customers who publish Web pages that they may have infringed on the rights of others;
7. Copyright exception for educational institutes has been extended to delivering copied material to students in remote locations via a networked system; and
 8. Educational libraries can distribute interlibrary material electronically, so long as the institute adopts safeguard measures to overcome the misuse of these materials.

Only the last two recommendations mention educational institutions, which leave most issues regarding digital work and digital rights in higher education unaddressed. The second recommendation acknowledging authors and their work has some implication for faculty and students posting their work online. Along with the issues outlined above, a newer focus on digital rights management and lawful access is being discussed among authorities and public advocates (The Canadian Internet Policy and Public Interest Clinic [CIPPIC], 2006).

In response to the pending recommendations, public advocacy groups, such as the CIPPIC, Digital Copyright Canada, and the Public Interest Advocacy Centre, complained there are a number of areas not covered, leaving many authors and users in a restricted position. More important, they reminded legislators that copyright laws in Canada make every Canadian a rights-holder, and to consider that most works online are not of a commercial nature. Public advocacy groups find the current definition of copyright infringement narrow and limiting, and ask that the real authors and users be considered in a more user-friendly set of laws, not just large content owners as in publishers. Current laws, they state, are stricken with too many liability traps for the common user. In short, "the Bill would delete current rights of Canadians to access and use copyright works and add numerous new and stronger rights for copyright holders" (CIPPIC, 2005, p.2).

Protecting Digital Rights

The reaction to protecting works in digital environments has led to rapid innovations. Aggressive moves to protect owners and their copyrighted material come under the banner of digital rights management (DRM). DRM refers to:

every aspect of knowing what the rights to specific digital content [are], who holds the rights and under what circumstances, how unauthorized people can be prevented from using the content, [and] how the content can be served to the authorized individuals. (Calhoun, 2005, p.2)

Following this, technological protection measures, better known as DRM technologies, attempt to restrict unauthorized use of copyrighted electronic material. The technologies control access ranging from "simple password protections to complex cryptographic protections and copy-control protections" (CIPPIC, 2005, p.3). The recent focus of DRM is on those who try to circumvent security to obtain unauthorized works.

Calhoun (2005) states DRM is "not the 'management of digital rights', but the 'digital management of rights'" (p.2). Some copyright interpreters, such as lawyers, see works in the digital environment as merely another format. For example, they extend ownership rights of music to their copy on tapes, CDs or MP3 files. However, Petrina, Volk and Soowok (2004) argue the "extension of copyright is one thing; protection is something entirely different" (p.193). They are concerned with the uncontainable nature of digital property and the ease of recopying it; this is offset by their concern for the heightened sense of rights around intellectual property. Another complication is the ownership rights of Internet Service Providers, whether operated by a post-secondary institute or by an outside service (Braman, 2005b). Hundreds of government officials, policy experts and companies discussed the DRM issue at a recent gathering in Rome (Geist, 2006). They argued for DRM technologies to lock down content that sets specific limitations on use. As well, they discussed the newer phenomenon of user-generated content such as with Flickr™, a Canadian photograph sharing site, and Web logs (blogs). Geist points out the mixed message from this core group. On one hand, the group is alarmed at the increased amount of created online works and the need to secure content. On the other hand, they desire to protect consumers from burdensome DRM restrictions.

Underlying the confusion about new forms of digital work is their definition. The line between physical objects and symbolic expression is becoming blurred, such as with computer software and learning objects; objects falls under patented rights, whereas symbols are protected under copyrights (Braman, 2005b). More so, the distinction between print and electronic materials can be defined in the way in which material is presented (Rao, 2003). For instance, viewing a printed book and viewing Web site information is different. The latter requires a download to a desktop computer, thus implying it is copied—illegally. This difference poses a problem for copyright laws. Again, there are contradictions among main copyright players on what is digital property, such as who owns the material, what are their rights, and what is and is not infringement of those rights. These

uncertainties, interpretations and protective measures both aid and hinder the creation and sharing of digital information.

Impact on Higher Education

Given the uncertainty with the description and legal status of intellectual property in digital forms, educational institutions are not well prepared to deal with this type of material as users or creators. This section addresses the impact of copyright and property ownership on teaching and learning in higher education, as well as the consequences from the infringement of digital copyrights.

Learning

The uncertainty and restrictions of copyright laws hinders both access to information, and the created expression of students. First, through standard copyright licenses, Canadians are giving up their rights to deal fairly with many works. Hughes (2005) states the recommendations for changes to the Canadian copyright act could place "the role of intellectual property above the public interest of information sharing, collaboration and innovation" (p.2). For example, the current license with Access Copyright is not legitimate as it disallows readers of digital material the same rights as those with print material (McOrmond, 2005b). This refers to the rights that come with the first sale of a book; that is, when purchasing a book in print owners have the right to reread, loan or sell it (Rao, 2003). With the implementation of digital rights management technology there are increased restrictions such as only being able to load purchased software once, not being able to share electronic books, and being subjected to surveillance by copyright controllers (CIPPIC, 2005; McGreal, 2004). An example of this is ebrary, an electronic book technology and service company catering to libraries. This service monitors and restricts the reading, copying, and printing of their materials to small amounts; these restriction fall under the fair use regulation in the United States (ebrary, 2006). Though the issue of DRM technologies and U.S. regulations deserve further review, its mention in this paper provides an example of the impact on learning in a digital era. Furthermore, Canadians lack access to public domain works that have been paid for by tax dollars, such as authors whose copyrights have expired and cultural heritage materials; much of 20 th century culture is locked up (McGreal, 2004). Bill C-60 recommendations will continue the tradition of governments "slicing up the public domain – our common heritage – for private gain" (Online Rights Canada, 2005; CIPPIC, 2005).

Second, Braman (2005b) states that students outside of the classroom typically select and use digital products, such as music, imagery and text, to express their identities and to share this through communication with others. However, McOrmond (2005a) warns that there are limits to what students can do with copyrighted works. Educational policies need to explain that derivatives of works cannot be performed without permission, which challenges how students "incorporate text or images in assignments, beyond what is covered in fair dealings" (p.1). Yet, Jenson and De Castell (2004) argue that students have grown up in the computer age and view knowledge production differently. Today's students look for ways to minimize their inputs to produce maximum output, thereby repurposing existing information. This repurposing can appear as copyright infringement (Rao, 2003).

Another concern is that students are being unduly discriminated against with services that detect plagiarism, such as Turnitin (Jenson & De Castell, 2004). If a student's paper is uploaded to this Web site by faculty to determine if there are plagiarized passages, the service retains a copy and uses it again for future searches, thus unlawfully using the paper without the student's consent. As an example, there was an incident at McGill University where a student refused to submit his paper to Turnitin, as required, and received lowered marks because of this (Fine, 2004). He argued that the requirement deemed him guilty before being proven innocent. The Canadian Federation of Students supported his decision, and argued that submitting papers to such a service was a violation of intellectual property. Additionally, the invasive and pervasive nature of technologies, such as Turnitin and DRM technologies, directly affects individual, human, and moral rights of Canadians (Petrina, Volk & Soowook, 2004).

Teaching

Two key concerns for faculty are the proper use of copyrighted works in their online materials and courses, and the final ownership of those materials. First, the current Canadian copyright act prevails over protected materials in all forms; however, it gives limited reference to using digital works and works used digitally. Additionally,

Access Copyright (2005) only refers to broad licensing for analog, not digital, copies. That is, the license held with Access Copyright does not cover any works in digital form (Association of Universities and Colleges in Canada, 2002). Therefore, one has to interpret these laws in light of using and creating new digital works.

Wallace (2004) states, that one of the biggest misunderstandings is that information found on the Internet is considered public domain and free to use. She suggests the materials on the Web be considered the same as those in a public library, which are for viewing and can be singly copied for study purposes. The Canadian Council of Ministers of Education (CMEC) (2005) has created a guide for educators on using copyrighted digital resources. CMEC encourages all educators and students to follow these guidelines when copying from the Internet:

Most material available on the Internet is protected by copyright. This includes text (e.g., postings to newsgroups, email messages), images, photographs, music, video clips, and computer software. ... Therefore, reproduction of any work or a substantial part of any work on the Internet would infringe copyright unless you have the permission of the owner. (p.16)

Notice the implication for online communications, such as private email messages and online discussion postings. These are personal communications that are considered copyrighted material (American Psychological Association, 2002). The Canadian Copyright Act states that in any fixed form, work is protected against the wilful use of others (Department of Justice Canada, 2004). Harris (2005) agrees that by using or forwarding an email message without consent from the author can infringe on their rights. She likens these actions to photocopying a letter and freely distributing it. It violates rights, and therefore it is illegal. There is a cautionary note to this ongoing discourse. The laws expressed above are quite critical if one is to distribute their work outside of an educational premise through public means, such as over the Internet. The issue about the place of presentation is discussed later.

The second copyright concern for faculty is the ownership of online teaching materials (Braman, 2005b; DiRamio & Kops, 2004; Gasaway, 2002; Manzo, 2000; McGee & Diaz, 2005). There are a number of arguments that support the intellectual property rights of the institution, and those that support faculty's rights. On one hand, online work requires the support of technologists, instructional designers, administrative guidance, and network server time. These additional resources to create digital works shifts property rights to the institution; administration argues that online work is not a single endeavour. On the other hand, faculty is concerned about their intellectual rights to the work, and their academic freedom; they are concerned about repeated use of their work by institutions without their permission.

There is a great deal of debate on the issue of copyright as the ownership of content tends to become blurred. There is concern for interpreting "who or what are the press, non-media and media, [as] the definitions of 'public' and 'private' are changing" (Petrina, Volk & Soowook, 2004, p.187). For instance, a further complication to creation of academic works is its funding source; publicly funded works, such as with a federal grant, implies it is considered public domain and not the property of the authors. It remains to be seen how ownership and copyright concerns will be sorted out in higher education and through what means.

Place of Presentation

Both learners and instructors can be hindered by one more concern—where they place or publish their digital works. For instance, historically, most formal educational activities took place within a classroom or in the library of an institution. However, with more courses and programs moving online, the digital environment is becoming an alternative place to learn and to share materials. Per the Canadian Copyright Act, copyrighted materials can be used for private study, research activities, and limited educational purposes (Department of Justice Canada, 2004). Normally, students' work would fall within this copyright exception. That is, by privately submitting work assignments to instructors, and by participating in class discussions, fair use of another's work is allowed if properly cited. However, in light of new virtual educational structures, a question remains whether an online environment is considered a classroom, or a public setting, even with restricted access. There is ongoing confusion with regard to this concern. Wallace (2004) seems to think an online learning environment is not a classroom, and that institutions wrongly assume that a password-protected environment can be interpreted as such. On the other hand, the recommendations for Bill C-60 suggest:

The current exception that permits the performance or display of copyright material for educational purposes within the classroom is modified to enable students in remote locations to view a lecture using network technology, either live or at a more convenient time. (p.2)

Unfortunately, there is little written or offered to address this dilemma further. If the online environment is not

considered a contained educational premise, then could it be considered a public Web site? The Canadian Copyright Licensing Agency (2005), which grants licenses for educational institutions to use copyrighted digital works, counters:

It is an infringement of copyright to post material on a Web site, for example, without the consent of the copyright holder. This applies whether the site is on an intranet, accessible only to members of an organization, or the Internet. (p.1)

The ramifications of this policy greatly affect educational institutions, faculty and students. If password protected sites could be considered the same as public spaces, then it would leave creators outside the educational exemptions offered by the copyright act and licenses. Creators may have to directly obtain copyright permission from content owners; once more, properly citing Web-based material is not the same as obtaining copyright permission (Wallace, 2004). If copyright permission is not sought from authors, faculty and students may be liable for infringement of rights (Department of Justice Canada, 2004).

Even more alarming and something that is done more often, is the presentation of work online that has been previously published, which infringes on publisher's copyrights. Having authorship is not the same as ownership. That is by submitting one's paper to a scholarly journal the author usually transfers the copyright of that work to the publisher; therefore, it may be problematic to link to a draft or a finished version of the paper as most authors state they have not published a previous version nor will they in the future (Gasaway, 2005; Wallace, 2004). Gasaway (2005) states authors are confused about whether including copyrighted works "in a coursepack, posting it on a course Web site, making copies available to departmental colleagues and others within the institution or delivering copies to attendees at a conference were permitted" (p.1). Usually one cannot do so freely, but this depends on the publisher's policies which vary in the types of rights, such as reproduction, dissemination, print or electronic; it is noted that publishers today try to obtain all rights (Gasaway, 2005). Unless the author has retained the copyright, linking to or self-archiving a published article online may need to be negotiated with the publisher (Braman, 2005b).

There are grey areas left unanswered by legislation, leaving organizations and individuals uncertain of how to create and protect their work in a digital world. It is clear that current copyright laws are ill-fitted for new ways of accessing and creating information (Seadle, 2003).

The Consequences

Overall, it is difficult to determine the consequences arising from copyright infringement. The current laws are outdated, the collective licenses do not address digital works, interpretations vary, and the lines are blurred between who is to police the activities of copyright infringers—content owners, institutions or faculty. The following section initiates a discussion about these issues.

For Students

Two consequences that students may face in light of the present discussion are plagiarism and copyright infringement. Both are punishable. First, plagiarism is a long-time battle in education. The standard definition for plagiarism is presenting another's work as your own (Jenson & De Castell, 2004). Though plagiarism is a challenging concept to define, the Canadian Library Association categorized plagiarism in four activities: patchwriting, failure to cite, failure to quote, and cyber-plagiarism (Oliphant, 2002). Patchwriting is the use of unacknowledged words and phrases by others patched together in new sentences. Failure to cite and quote ignores the intellectual rights of others and implies the student created the idea. Cyber-plagiarism is the downloading of entire papers from the Internet. Of these activities, patchwriting and cyber-plagiarism are more accessible within the digital environment through copying and pasting.

The Canadian Library Association suggests that students may plagiarize for a number of reasons: they may not know how to cite properly or fail to understand the difference between paraphrasing and quoting; they may consider online work as public knowledge; or they may turn to plagiarism when under stress from deadlines and failing marks (Oliphant, 2002).

It is becoming easier to detect plagiarism by typing in a phrase from the suspected paper into a search engine, or submitting the entire paper to an online service such as Turnitin. Both these services will find other work presented online that have the same string of words as the student's paper, therefore detecting possible plagiarism (Jenson & De Castell, 2004; Oliphant, 2002). However, as the example of the McGill student

demonstrates (Fine, 2004), online detection services are not value-neutral solutions.

Distinct from plagiarism, copyright infringement involves using or disseminating a portion of or an entire document, research finding or statistics, still or moving images, software or computer programs, and/or sound files or recordings without the originator's permission or authorization (It should be noted that plagiarism may or may not infringe on the copyright of a certain property, depending on the portion in question). (Bugeja, 2004, p.1)

The consequences for plagiarism and copyright infringement can be harsh for students. Reviewing the Web sites of most universities in Canada reveals an unreserved lack of tolerance for academic misconduct. Most universities have penalties ranging from lowered marks for the papers in question to suspension from the university. In the event of copyright infringement, the abuser could be sued by the rights owner.

For Faculty

Students are not the only ones at risk from copyright infringement, or plagiarism, for that matter. Faculty can overstep the rights of others, too; recently, there has been a rise in these incidences (Paterson, Taylor & Usick, 2003). As stated throughout this paper, there are no clear boundaries for digital works. Faculty members who produce online materials and courses face the legal ambiguities, yet are subject to the consequences of infringement (Seadle, 2003). For instance, some faculty hope that copyright infringements may go undetected behind password protected sites (Seadle, 2003). Whereas, McGee and Diaz (2005) reveals these online premises can be entered by those authorized to look over the content and reading materials that may be devoid of copyright permission. This invasion is disturbing but does not stop there. Braman (2005a) reveals a number of IT-related privacy issues. Those in authority can monitor student, faculty and staff use and content within the campus network, and they can access personal data in the institutional database. The question is whether they have permission; in the United States under the U.S. Patriot Act, law enforcers are permitted to observe networked communications (Braman, 2005a). Braman concludes even peer reviewing and evaluating each others' work can be a privacy issue.

Another complication, proposed by the copyright act recommendations in Bill C-60, is that educators can more readily use copyrighted materials online, but only if they destroy it within 30 days after the completion of the course (Online Rights Canada, 2005). As well, educators are expected to implement restricted access and copy controls of this material. This imposes an unnecessary burden on staff and faculty and if not done, suggests a violation of the copyright exemptions given to educational institutions.

The consequences for copyright infringement and plagiarism for faculty can vary and could include an informal discussion, suspension of tenure, dismissal or a lawsuit (Kussrow, 2000; Paterson, Taylor & Usick, 2003).

Discussion

This section is intended to provide basic, not legal, advice for protection against copyright infringement. It takes into consideration the information provided throughout this paper. Following the discussion, some new views on copyright issues are proposed for further inquiry.

Protective Practices and Policy

It becomes obvious that studying the various exceptions within the Copyright Act and Access Copyright licenses is vital for educational institutions in order to avoid infringements, bad practices, and displaying poor modeling to members of the educational community. A number of Web sites provide copyright guidelines for using and creating a variety of works in Canada (AMTEC, 2005). In lieu of more appropriate laws for digital works, conforming to current legislation is best practice.

Protection of Students

For the most part, higher education students turn to scholarly published works to inform their studies. These are available online in large numbers (Webber, 2004). Usually, a university's library will have purchased access to most journals that are online, and take steps to restrict access to students, faculty and staff. The proper approach to using this information for research and study purposes, per the Canadian Copyright Act, is to cite the author and all relevant information (Department of Justice Canada, 2004). This approach falls under the fair dealing stipulation. Overall, it is best to consider such electronic sources of literature, including electronic books, as though they were in print. However, it is important to cite electronic sources differently than print versions; the appropriate citation format is given by the various documentation systems (Claerhout, 2004). As a warning, it is a copyright infringement to copy and paste, or scan large parts of a work into one's product, unless permission

has been given—therefore, it is best to rewrite the information in one's own words, thereby avoiding any liability (Wallace, 2004).

The copyright guidelines created by the Canadian Council of Ministers of Education (2005) caution that Web-based materials which are freely offered may come with conditions that need to be honoured, such as: not using it for commercial purposes; using it in its entirety and not out of context; or, not editing or reformatting the material. The only works that can be used without violating any rights are those in the public domain. These works either are deliberately placed online with notification of being public domain property, or are intellectual property of an author who died more than 50 years ago (Claerhout, 2004). Proper citation is still required for public domain material.

Protection of Faculty

For faculty producing online learning materials, a number of suggestions can aid in avoiding infringements. Unless a work is in the public domain, consider all works in digital form to be copyright protected. Gather and use this data as though for a classroom. Overall, copyright cues include checking the dates for works that are public domain; not copying letters to editors or newspaper advertisements; and, not changing a piece of work in any way while copying. Government publications, such as federal laws and judicial decisions, can be copied without charge or permission (Association of Universities and Colleges of Canada, 2002). Properly citing and gaining permission for copyrighted works, whether under the current institutional licenses or directly from authors, is recommended considering the debate on whether closed networks systems are public spaces.

If online material is linked to an outside Web page, ensure it is not deeply linked (Rao, 2003). That is, ensure the hyperlink accesses the main page of the external Web site, and not a page deep within the site. This would require permission. The need for permission also applies to locking other Web sites or pages within a frame of the online course. Rao adds that linking to graphic images on another's Web site is considered a derivative of that work and is not allowed.

Another suggestion is to reconsider how peers will evaluate each other's work. Current practice may be an infringement of their privacy. Consider gaining written consent from these participants for sharing their work. Additionally, all communications in posted discussion threads, chats or emails are copyrighted materials and the property of those who created them. In order to use these, permission is needed. A last consideration relates to work done in collaboration. Ensure that clear expectations for ownership and use are discussed and agreed upon prior to starting a project. Institutional policies may help with these arrangements.

Policy

Some institutions, such as the University of Manitoba, are devising their own internal digital copyright policies based on their best interpretation of current laws (Wallace, 2004). However, few institutions have done this (DiRamio & Kops, 2004; McGee & Diaz, 2005). Institutional policies for digital work are desperately needed as more staff, faculty and students use technologies to produce knowledge (Braman, 2005b). First, policy is needed to protect the users of copyrighted materials. This requires clear and useful instructions on how to access, reproduce, copy and present digital material. This would require a framework on how to apply fair dealing to copyrighted materials, mitigate risks, and obtain permission, if required. An important tip for users is to document the arguments and evidence used when making a judgment about material use (Braman, 2005b). More so, users of these policies will need to consider how they interact with the policies of Internet service providers (Braman, 2005b). <

Second, policy is required for the creators of digital content along with implications for ownership. The purpose of policy should "encourage research, scholarship and the dissemination of knowledge; thus, the ownership model the school adopts should further this purpose" (Gasaway, 2002, p.1). Institutions need to determine who will own online materials before faculty commence with those creations. When creating policy, it is wise to ensure that it addresses the different activities when using material such as reproducing and copying, creating derivative versions, and presenting public performances (Braman, 2005b). Braman states "since these rights are severable, it is possible for a college or university to have policies that treat each of these activities differently" (p.3). Policies must be created with the collaboration of all stakeholders, including instructors, students, librarians and legal counsel (Gasaway, 2002).

Third, students are rarely mentioned in discussions about intellectual property rights, and should be given special attention in institutional policies (Braman, 2005b). More important, students are frequently creating work in various forms of presentation, including digital formats (i.e., Web pages, digital imagery, PowerPoint slides). These works need to be protected and students need to be informed about how to do this (Braman, 2005b). Students usually place these works online for viewing, either within the institution's closed networked system, or through an outside Internet hosting service. Care needs to be taken as posting in such places may be considered redistributing work publicly and outside of educational exemptions; therefore, any inclusion of copyright works must have been formally permitted (Wallace, 2004).

Reformed View on Copyright

Trends indicate the transformation to digital material is happening faster than the "traditional pace of change in higher education" (McElroy & Beckerman, 2003, p.2). Given the fast pace of this change, ongoing discussion is evolving on how to change the perspective and handling of copyrights. First, McGreal (2004) states that universities are places where learning should be available to anyone and anywhere. The restrictive nature of current copyright laws does not provide what he considers a knowledge commons. He sees copyrights being wrongfully converted to property rights; that is, the public is persuaded to view the status of cultural products, such as movies and books, to be the same as a house. This is a shift from the original intent of copyright—it was meant to promote the sharing of resources for learning purposes. Now, those who infringe on copyrights are considered to be stealing, though nothing is taken away. Only a copy was made.

Second, producers of content and materials can change the language of their copyright agreements (Braman, 2005b). They can negotiate with publishers for permission to privately post or link to their work online. As well, they can design their own copyright conditions on unpublished materials. A non-profit group, called Creative Commons, offers free legal and technical tools for creators to protect, share and disseminate their work more readily. The intent of this self chosen service is to provide flexibility and overcome an 'all rights reserved' protection (Garlick, 2005). This licensing option may appeal to those who develop and disseminate their own multimedia products or other works, such as with content and papers (Gasaway, 2005). In the case of open-source licensed software, the intent of those open rights is to be carried on with the new modified product, thus not requiring any new licensing (Open Source Initiative, 2006). These alternative copyright initiatives put more flexibility and rights into the hands of the authors.

Third, students should be able to easily access licensed digital content through virtual libraries, work with faculty-produced content, or directly purchase learning materials from publishers. This calls for new mechanisms to support the acquisition and dissemination of such materials (CIPPIC, 2005; McElroy & Beckerman, 2003). McElroy and Beckerman suggest the development of a different business model for managing digital content. Contrary to a business management model that reacts to change, a proactive model utilizes a system that shares services within an open interface. It can provide tools for licensing Web-based content; a portal for faculty to evaluate many different digital materials; a portal for learners to access these materials; a market place to sell institution-owned content; a system to track royalty fees; and a place for content creators and publishers to promote their work. This would require a change in how academia acknowledges the diverse range of publishing outlets beyond peer-reviewed, academic journals; as well, it would require the development of "a model copyright transfer agreement that permits the faculty author to retain some rights" (Gasaway, 2005, p.4). McOrmond (2005b) echoes the need for a change in business models as the current Access Copyright licenses do not apply well to the Internet; he suggests providing a full spectrum of services such as per-access royalty fees, and pre-paid work that is openly shared by authors.

Conclusion

It becomes increasingly frustrating to remain current on how to create, use and publish works in the digital environment in ways that respect copyright. The current Canadian laws and licenses on digital rights are lacking, and are currently hindered by a slow process for developing new recommendations. At stake is the integrity and reputation of educational institutions, libraries, educators and students. The consequences for copyright infringement, whether intended or not, are out of proportion to the need for open access for learning and knowledge creation. As educational practices and materials change in an online world, so should the attitudes towards copyright and the laws that govern the use, creation and dissemination of materials. Some owners are

becoming very protective of their property while others openly share it. With the growth of online access, education is becoming a sophisticated and desired commodity, which in turn changes the purpose and value of informational materials. Exactly who will emerge victorious from the current copyright struggle is yet to be seen. It may be the content owners, or it may be the users. In the end, educators can hope it is those who create and share new knowledge.

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